

Support Material for Staff and Students

GES App Report O7

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Executive Summary

The aim of this Intellectual Output is to provide guidance to support students to plan, record and evidence the acquisition and development of Graduate Employability Skills throughout their university journey. Graduate Employability Skills are skills that students acquire during their study period, that are in addition to their academic knowledge and skills, and that would help in their career. The mobile application GES App is designed to help students recognise, document and articulate their skills to their prospective employees. It is a convenient way of documenting and obtaining a quick overview of their skills and evidence of the skills. Through a crowdsourced skills repository and an overview of job profiles and relevant skills for the jobs, it helps to increase students' knowledge about GES and market needs and helps them plan their careers effectively. It provides access to curated Learning Resources relevant for the specific skills. It also provides a means for targeted career planning through the concept of Dream Jobs. Furthermore, it could help students plan for their job interviews and provides convincing means of communicating their skills to potential employees. This Intellectual Output describes the functionality of the GES App as a user guide. It contains use case scenarios and a best practice scenario to help students, and staff, in particular teachers and Career Advisers, appreciate the benefits of the GES App and to illustrate how they could use the GES App effectively for skills acquisition and career planning.

PART 1: Introduction and GES App Overview

1 Introduction

The Global Employability Skills App (GES App) is a mobile application to support students to plan, record and evidence the acquisition and development of Graduate Employability Skills throughout their university journey. GES are skills that students acquire during their study period, that are in addition to their academic knowledge and skills, and that would help in their career. The GES App is designed to help students recognise, document and articulate their skills to their prospective employers.

Students are engaged in their university studies and are motivated to do well in their exams by focusing on their academic studies. The skills they acquire both at university and elsewhere, through various experiences, are often under- or over-estimated, and therefore not communicated to their prospective employers [1]. Employers on the other hand, are looking for skills that are complementary and that go beyond the academic and theoretical knowledge gained at universities, and these are key factors for a young graduate to be attractive for a prospective employee.

The Self-Determined Learning Model of instruction (SDLMI), in literature, has been proven as an effective intervention [2, 3], scholars have advocated its wider adoption in teaching and learning practice, as well as in career development. Self-determination develops throughout the study period as students have opportunities to build skills and attitudes associated with self-determined actions, including choice-making, decision-making, problem-solving, goal setting and attainment, planning, self-management, self-advocacy, self-awareness, and self-knowledge.

1.1 Objectives of this Intellectual Output

The aim of this intellectual output is to provide guidance to support students to plan, record and evidence the acquisition and development of Graduate Employability Skills throughout their university journey. In addition, support for teachers and career counsellors are provided as user scenarios and best practice examples. The document describes the user interface and functionalities of the GES App mobile application and demonstrates the usability through user experience and different scenarios.

The main target group for this Intellectual Output are the students and teachers. The most relevant student groups are graduates and undergraduates at universities or other educational institutions that are planning their careers and anticipating employment in the near future.

The key tasks for this Intellectual Output are:

1. to develop the support material for the GES App
2. to evaluate the effectiveness of this support through use cases.

1.2 Context of the Document

This deliverable, Output O7 – Support material for students and teachers, takes input from the Intellectual Outputs O1, O5, O4 and O6 and is a relevant input for the work in O8. This is shown in Figure 1.

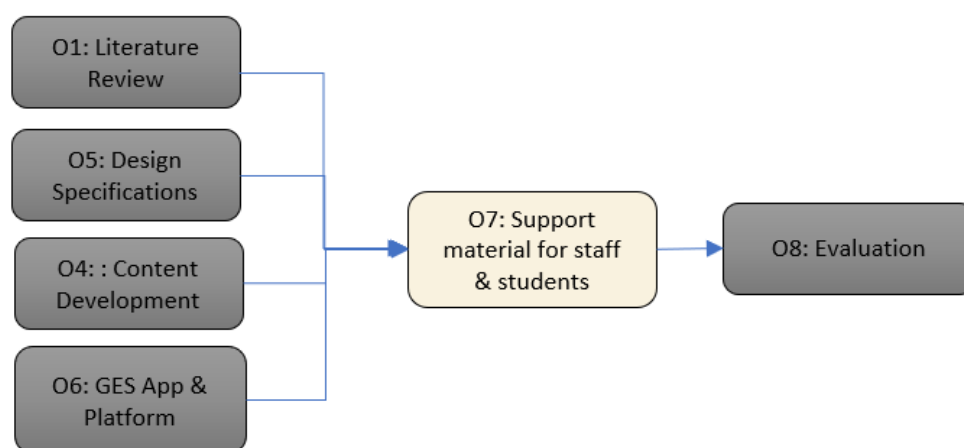


Figure 1: Context of O7 and other Intellectual Outputs

1.3 Structure of the Document

The contents of this deliverable are structured into three separate parts, which are described in Table 1.

Chapter	Overview of Contents
Part 1: Introduction	
Chapter 1	Provides an introduction to this Intellectual Output and an overview of the GES App.
Chapter 2	Provides an overview of the theoretical foundations and the key concepts.
Chapter 3	Provides an overview of the main activities supported by the GES App.
Part 2: User Guide	
Chapter 4	Describes the GES App user interface.



Chapter 5	Describes the GES App functionalities and provides step-by-step guidance to using the app.
Part 3: Use Case Scenarios	
Chapter 6	Provides an introduction to the use case scenarios and provides an overview of all the use case scenarios.
Chapter 7	Describes 6 uses case scenarios from the students' perspectives.
Chapter 8	Describes 1 uses case scenario from the staff's perspectives.
Chapter 9	Describes 1 use case scenario from multiple perspectives
Chapter 10	Describes 1 best practice scenario, use of the GES App by Psychology students
Chapter 11	Summarises the document.

Table 1: Document structure

2 Theoretical Foundations and Key Concepts

This section of the document provides an overview of the theoretical foundations and key concepts that have guided and influenced the design of the GES App. A complete overview is beyond the scope of this document. The literature on GES was studied as a part of the Intellectual Output 1 and is reported in the document IO1.

2.1 Key Concepts

There are several concepts and terms that appear in this body of literature. Of particular interest to this project are the concepts, skills, competences, attitudes, and abilities. For the purposes of developing the GES App, we proposed to distinguish between the concepts of skills, competences, and abilities, and to adopt the term “Employability Skills”, because it deals with transferable skills needed by students to make them employable. These are also what employers look for in an employment process. Employability skills is also a term used by both employers and employees. A detailed discussion of the literature and the numerous definitions of these concepts are provided in the literature review (O1).

The literature review identified a number of studies that have shown that employers often complain about graduates' work-readiness along with the level and extent of their skills (e.g. [4]), suggesting that epistemic knowledge, practical/workplace skills (e.g., organisation, leadership, and planning), and the ability to apply skills in non-academic settings in general may be indeed key factors in

graduate employability. Furthermore, the role of interdisciplinary knowledge and consideration of learning in the local, societal and global context is seen as important [5]. Finally, to find employment, graduates must acquire and evidence a wide array of skills and attributes/attitudes. This implies that generic skills are more important to employers and graduates than technical, discipline-specific skills (e.g., [6, 7]), and that employers seek graduates with a myriad of different skills and attributes who can ‘hit the ground running’ when joining their business (e.g., [8, 9]).

Two important outcomes of the literature review, that has influenced the design of the GES App and the contents of this Intellectual Output are:

- First, knowledge, skills, or attitudes cannot guarantee employability on their own; rather, it is the combination of the three.
- Second, it does not suffice to possess these; graduates must be able to successfully apply these in the workplace and everyday life, thereby demonstrating competence to themselves and others.

Taken together, it appears that the GES App should not only consider users’ knowledge, skills, and attitudes/attributes, but also offer means to evaluate and evidence these. This is particularly important since students often struggle or do not know how to apply what they have learnt in the ‘real world’, once they are in employment.

2.2 Self-Determined Learning Model of Instruction (SDLMI)

The Self-Determined Learning Model of instruction (SDLMI) [10], is a heutagogical approach that emphasises not only the development of a learner’s competencies, but also the learner’s capability and capacity to learn [11]. The SDMI model can be utilised for instructing them on skills associated with self-determination and providing them with opportunities to practice and use those skills. This will prompt reflective learning and help them achieve goals they set for themselves, improving academic and social-emotional outcomes [12]. It is about getting students to set a goal, plans a set of activities to achieve the goal and to revise and adjust the plan to achieve the goal, as shown in Figure 2. The role of teachers is to provide opportunities to students to practice self-determination and to explore and understand the goals and to work towards achieving their goals.



Figure 2: Self-determined Learning model of Instruction (SDLMI) developed by [10]

2.3 Identification of skills and reflection

Reflections are central to raising awareness around what is learned, and identification of skills are challenging for students. A model to support the reflection process, whereby students may also raise their awareness of their skills and identify their skills have been proposed by Rolfe et al. [13]. This model is based upon a set of guidance questions which are adapted to the goal and the purpose of the reflection. Based on the approach proposed by Rolfe et al.'s model, the GES App has been designed to promote reflection about the experiences of the students and to identify their skills and the needs for skills development through this process. Similarly, the concept of a "Dream Job" is included in the design to help students focus on their career development goals by identifying a desired employment opportunity and the desired set and level of skills associated to that job opportunity, i.e., the dream job.

2.4 GES App Skills Framework

The GES App is designed around the concept of achieving goals related to the development of skills, such as improving the current level of a skill or acquiring a new skill. The documentation of a student's or a user's skills profile or overview is a central activity supported by the GES App. A conceptual framework for the design of the GES App was developed in the early stages of this project, which is described in detail in [14, 15]. The concept "Skill" is the central component of the skill framework, which is shown in Figure 3.

A user's profile includes a set of **Skills**, and a **Goal** is associated to a set of skills of a desired levels. To make it easier for students (users)¹ to identify skills, a repository of skills, obtained from literature and other relevant sources (from the Intellectual Output IO2), are provided in the GES App for the users to select from. In addition, users are also able to add new Skills to the repository, making the complete skills Repository a crowdsourced and dynamic set of skills. The **crowdsourced repository of skills** not only enables the storing of the list of employability skills from literature, but also allows users to contribute and share with other users. The **Skill Level** is used to allow the user to define the proficiency of their skill. Skill level is included so that the user can perform a self-assessment of their skills through reflection and define one's level as a novice, advanced beginner, competent, proficient, or expert [16].

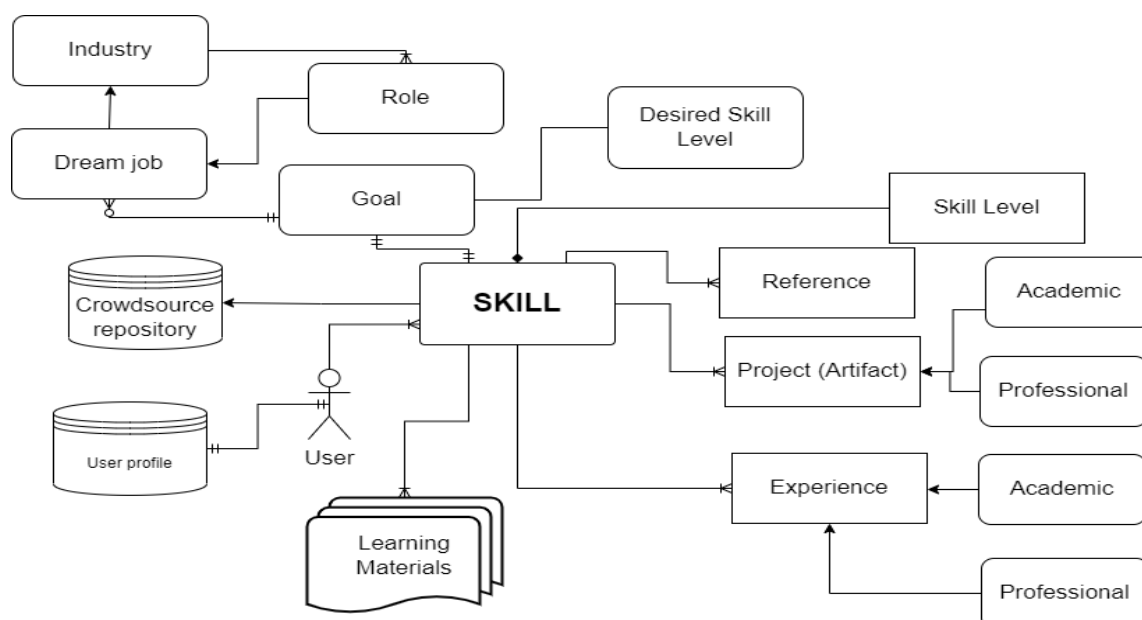


Figure 3: The Conceptual Framework, Skills Framework, of the GES App

The evidence of possessing a skill is documented in the form of **Experiences**, **Artifacts** and **References**. An Experience indicates the process through which the user either has gained the skill or practiced it, which could be through academic or professional activities, e.g., through working in a project or a summer job. The assessment of the Experience reflects upon the skill acquired during any activity, which may or not be related to the academic studies. A Skill can be acquired through one or more Experiences, e.g., good communication skills could be acquired through working in

¹ «Users» are used instead of students as (i) it is more natural to refer to users of an app or a system, (ii) for most of the contents in this document, students are the primary users.

teams as well as through sports activities. Similarly, a single Experience can support many Skills, e.g., a group-based project could contribute to teamwork skills and communication skills.

An **Artifact** represents the output achieved as the result of the application of one or more Skills. An artifact can be associated with academic or professional experience. Examples of artifacts are a report, a model or an application.

The concept **References** has been included to incorporate the common practice to use references in a resume or CV, which is an important part of the career development and employment processes. One Skill can have multiple References to support the evidence of the skill.

Skill Development is also an integral part of career development and the employment processes. Self-assessment and reflection of the skill in the light of the user's desired job could stimulate the skill development behaviour of the user. To support this, the concept **Dream Job**, in relation to a Goal and Skills are included in the Skill framework.

The concept Dream Job facilitate users to identify the need for skill development by defining the job or role, they want to attain in the future. Every Dream Job requires a skill set as defined by the industry or the specific employment sector or organisation. This enables users to compare their current skill set with the required skill set for the Dream Job, which leads to the identification of a **Skill gap**.

Learning Resources are provided to support the users enhance their Skills. These are learning material, which could help the users to learn a new Skill or improve their current Skill set. Learning resources are a collection of material, such as documents, games, links to online sources, that could be beneficial for the development of GES. They are related to relevant Skills and Dream Jobs, or specific activities supported by the GES App.

3 Getting to know the GES App and Activities in the app

The functionalities in the GES App are based on 5 main activities, that support the development of students' GES. These activities were identified through the requirements gathering and analysis process, which is described and documented in the Intellectual Output O3. The main activities that have been identified to support students are listed below:

- **Activity 1: Self-reporting GES.** In this activity, users are able to add one or more Skills to their skill profile, assess their Skills level, set a Goal and relate the Skills to their Goal. As a part of the self-assessment of their Skills, they can reflect upon how and what activities have helped them



acquire the Skills and document the evidence of the Skills by adding Experiences, Artifacts and References.

- **Activity 2: Dream job.** In this activity, users are able to define a Dream Job, relate to the desired list and level of Skills for the Dream Job.
- **Activity 3: Practice selected skills.** In this activity, users are able to access learning resources that can help them to enhance their Skill set by learning a new Skill(s) or by enhancing the level of an existing Skill, e.g. by playing a game, reading an article.
- **Activity 4: Networking and Ethics.** In this activity, users are able to connect to other users and share their experiences and communicate through the GES App.
- **Activity 5: Employment readiness.** In this activity, users are able to generate content for their CVs through the GES App, by accessing the Skills, Experiences, Artifacts and References documented in the GES App. In addition, users are able to practice for employment related activities such as learn about creating a CV and prepare for an interview.

An overview of the main activities is shown in Figure 4.

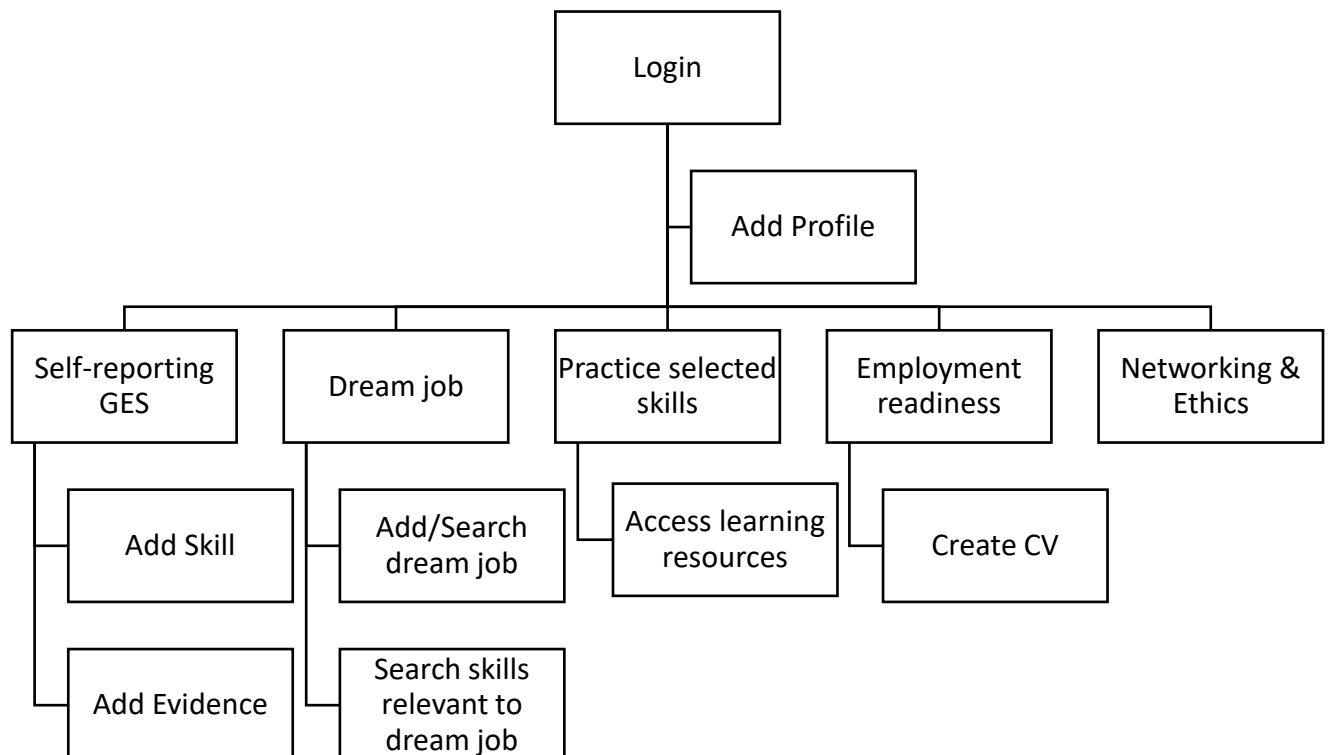


Figure 4: Activities of GES-APP

3.1 Main Activities and the SDMI Model

The main activities that were identified were analysed using the SDMI model to identify specific functionalities and features of the GES App. An overview of the results of this work is provided in Table 2.

Activity	SDMI Feature	Learning Outcome
Self-Reporting GES	Self-Initiation- Observe, Record, Reflect and Evaluate	Self-Organisation, Self-Reflection; Self-realisation encouraging self-regulation; knowledge of new skills through the skills repository
Dream Job	Self-Direction- Goal Setting, Critical Thinking	Choice making Skills, understanding of different skills set related to their field of study and their desired roles, skills development planning via external learning resources. Exposure to the labour market demands encouraging self-development.
Skills Practice via learning resources and mini-games	Problem-solving, critical thinking	Skills Enhancement, Goals adjustment, Re-planning
Networking & Ethics	Sharing, decision making, critical thinking, Self-Realisation	Self-advocacy
Employment Readiness (CV development, Interview Practice, goal setting)	Self-advocacy, Empowerment	Self-Scheduling, Goal Setting, Self-regulation

Table 2 GES-App Activities and SDMI model [12]

3.2 Video of the GES App prototype

A video of the GES App is available at <https://ges-app.com/wp-content/uploads/2022/05/GES-App-student-perspective-1.mp4>. The video shows a student's perspective and the main activities supported by the GES App. It serves as a good introduction of the GES App to the users and highlights the potential benefits of using the app to students. The video also shows the user interface of the app and illustrates the basic functionalities to interact with the GES App and how to access content and add content to the app.

PART 2: GES App User Interface and Functionality (User Guide)

This part of the document is designed as a user guide and describes the GES App user interface and the basic functionalities included in the app.

4 GES App User Interface

The user interacts with the GES App through the mobile screen interface. In this section, the screen of the GES App that include the main functionalities are explained using figures of screenshots.

The contents presented here are based on the perspectives of students and thus the main user group is students.

The GE App can be installed on an Android phone and users can log in or sign into the app. The login screen is shown in Figure 5 (a). User can login to the app using an email and a password. Users may also use the app without signing in, without an email or a password. In this case, no data will be recorded in the app.

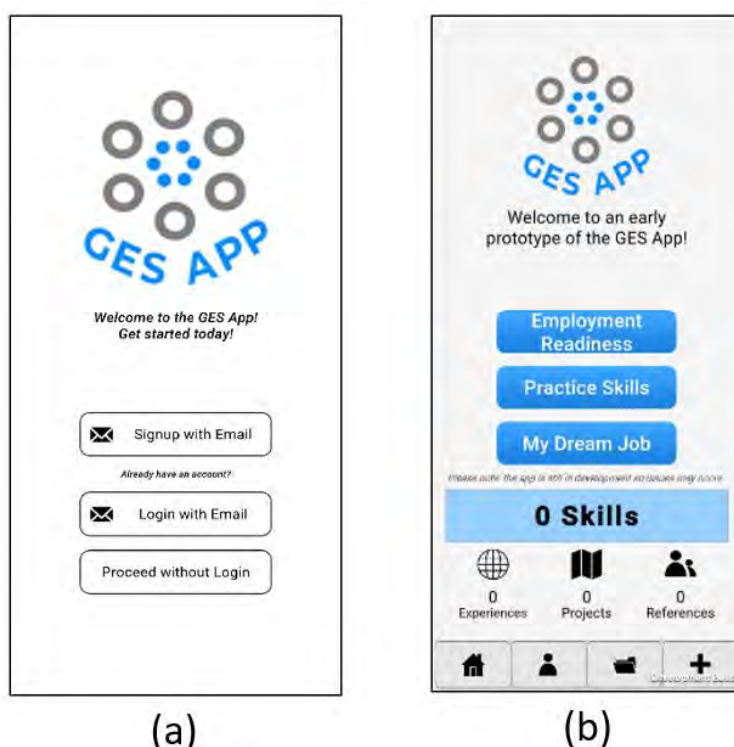


Figure 5: Login and main screens of GES App

The home screen or the main screen of the GES App is shown in Figure 5 (b). Through the main page of GES App, a user can access the main functionalities of the app and an overview of the main functionalities, and an explanation of the user interface are provided in Figure 6. The main functionalities are listed below:

- Access the functionalities for the five main Activities listed in Chapter 3.
- Obtain an overview of the Skills.
- Obtain an overview of Experiences, Artifacts, References.

In addition, general functionalities are made available at the bottom of the screen and these are available from all screens. These functionalities are:

- To add any content, e.g., to add a Skill, Experience, Artifact, Reference.
- To access the overview of Skill.
- To create a user profile.
- To return to the main page from screen in the app.

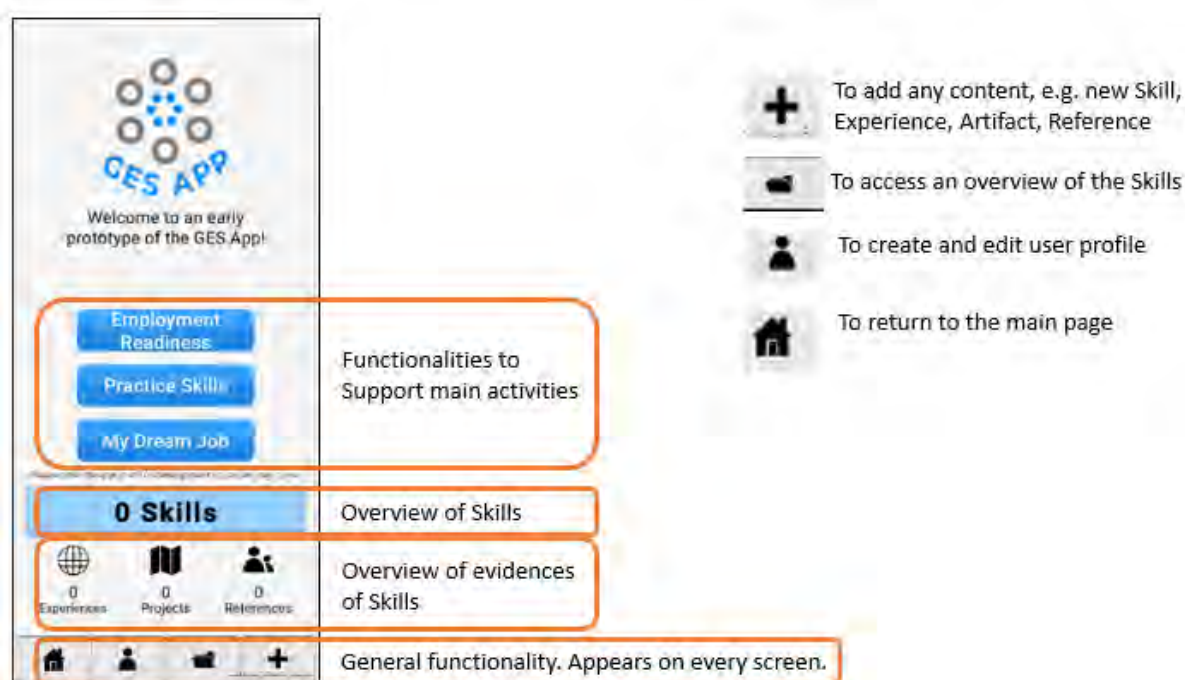


Figure 6: Functionality available on the main screen of GES App

5 GES App Functionalities

The main functionalities of the GES App are described in this chapter.

5.1 User Login and User Profile

User login, as shown in Figure 5 (a), allows a user to login to the GES App on an Android phone.

Users can create a user account and login using an email address and a password. If the user already has an account, the app indicates this as shown in Figure 5 (a). Users may also use the app without an account. In this case, the content added by the user will not be saved in the GES App.

To create a user account:

- ➔ Start the app. The login screen appears as shown in Figure 5 (a).
- ➔ Select “Signup with Email”. A new screen appears.
- ➔ Enter relevant information. Click “Save” to create an account.

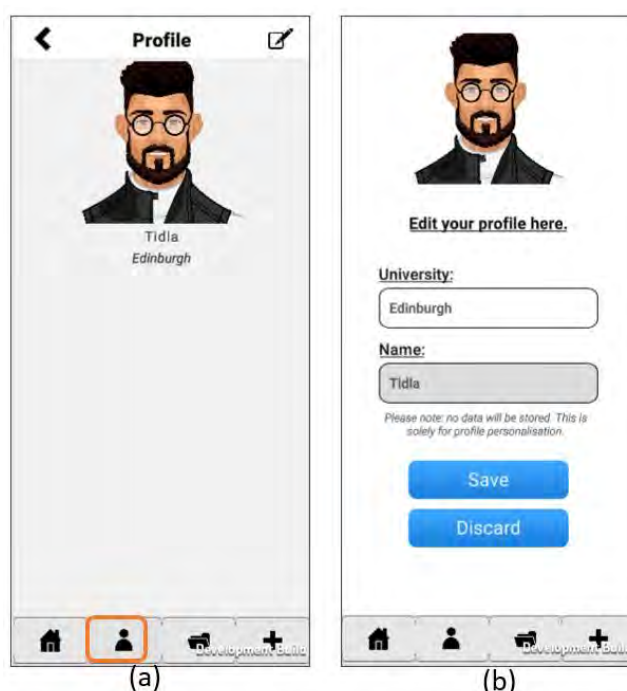




Figure 7: Login and account creation in GES App

When the user logs in to the GES App, the main screen of the app is displayed, as shown in Figure 5 (b). From the main screen or any screen, users can access all major functionalities of the app and user profile is one of them. User profile allows user to create a profile with the personal information that include login credentials. This functionality supports personalisation of the app by adding personal information such as the user’s name, academic affiliation, and academic records.

To view the user profile:

- ➔ Go to the main screen, or on any screen, click the “user profile” icon  as shown in Figure 7 (a). An overview of the user profile is presented.

To edit the user profile:

- ➔ On the user profile screen as shown in Figure 7 (a), click the icon , which appears on the top right of the screen. A new screen appears with the details of the user profile as shown in Figure 7 (b).




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➔ Edit the information as desired. Click “Save” to update the user profile.

5.2 Add Skill

“Add Skill” functionality, , is accessible from the main screen as shown in Figure 8, and is also accessible from most screens. The Add Skill functionality can be used to add Skills and document evidence of skills by adding Experiences, Artifacts and References.

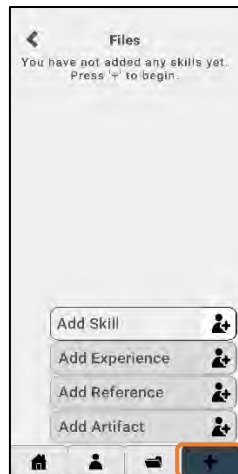



Figure 8: Add Skill functionality

To add a Skill:

- ➔ Go to the main screen, or on any screen, press the “Add Skill” icon  as shown in Figure 8. Menu options to add Skills, Experiences, Artifacts and References appear.
- ➔ To add a new Skill, select “Add Skills”.
- ➔ To add a new Experience, select “Add Experience”.
- ➔ To add a new Artifact, select “Add Artifact”.
- ➔ To add a new Reference, select “Add Reference”.

When the menu option “Add Skills” is selected, a list of Skills is presented as shown in Figure 9 (a).

- ➔ To browse through the list of Skills or to search for a Skill in the repository: type a name of a Skill in the search field on the top of the screen.
- ➔ If the desired Skills is in the list, select the Skill from the list.
- ➔ If the desired Skill is not in the list, enter a new Skill, as shown in Figure 9 (b). A new screen appears prompting the user to add the new Skill to the crowdsourced repository, as shown in Figure 9 (c).
- ➔ Once a Skill is selected or a new Skill is added, a button saying “Continue” appears at the bottom of the screen. Click on this to save the new Skill in the GES App.

A new screen appears, where the user is prompted to select the level of the Skill, (by doing a self-assessment of their skill level) as shown in in Figure 9 (d).

➔ To assess a Skill, select the appropriate Skill level and continue. A new screen appears, displaying an overview of all the Skills and the Skill levels as shown in Figure 9 (e).

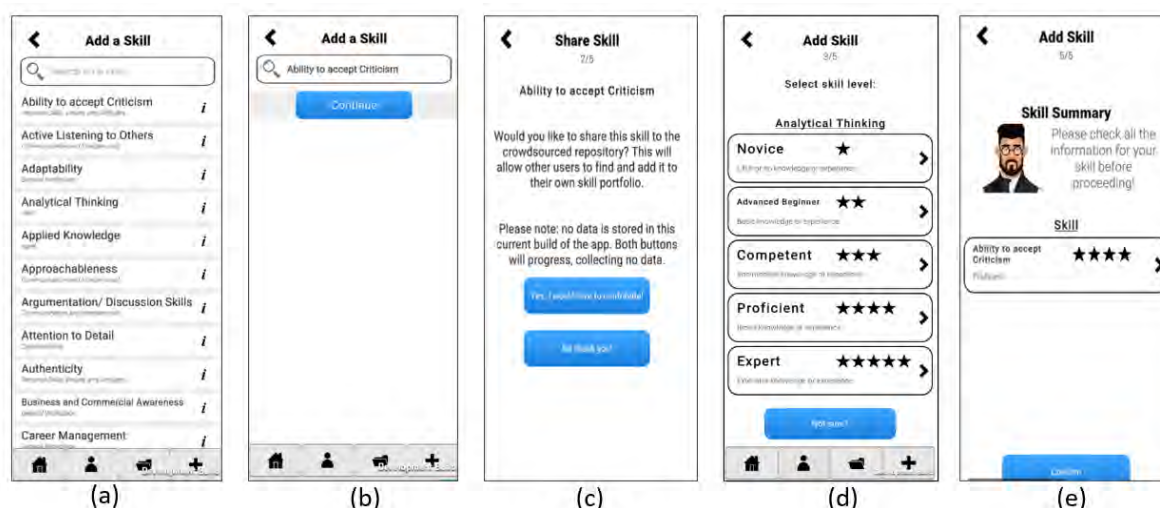


Figure 9: Functionality to add and assess Skill level

As a help for the user to do a self-assessment, the functionality is supported by definitions of the Skills level, as shown in Figure 10.



Figure 10: Skill level definitions

5.3 Add Evidence of a Skill: Experience, Artifact, Reference

Evidence of having a skill can be added as Experience, Artifact and Reference, as shown in Figure 11. When the menu options “Add Experience”, “Add Artifact” or “Add Reference” are selected, a screen appears, and the user is able to type their input.

Once the user has selected or entered the new content, a button saying “Continue” appears. Press this to save the new content in the GES App.

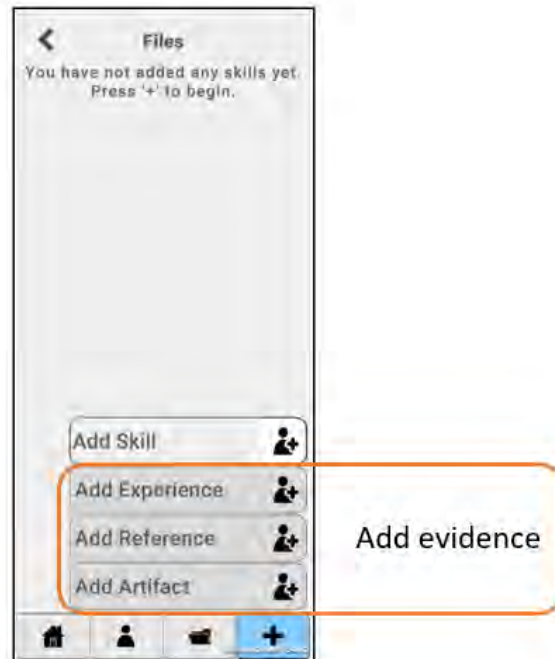


Figure 11 Add evidence of Skills

5.3.1 Add Experience

The “Add Experience” functionality allows a user to add a new Experience as shown in Figure 12 (a). An Experience is documented by stating a time period in which the Experience is gained, by linking it to one or more Skills and by assessing one’s level of commitment during the Experience.

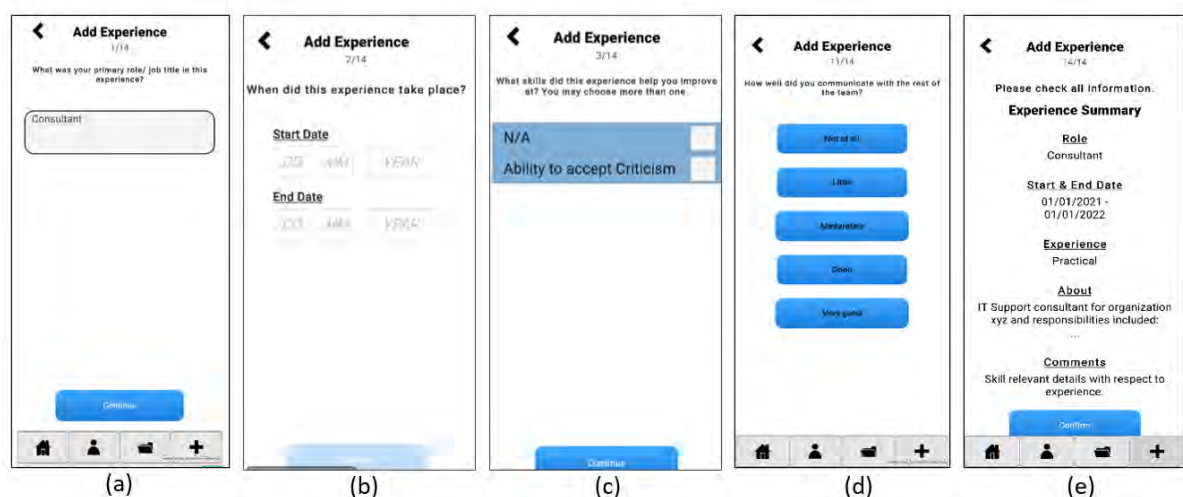



Figure 12: Functionality to add and assess Experience

To add an Experience:

- ➔ Go to the main screen, or on any screen, press the “Add Skill” icon  as shown in Figure 8. Menu options to add Skills, Experiences, Artifacts and References appear, as shown in Figure 11.
- ➔ Select “Add Experience”. A new screen appears to add an Experience, as shown in Figure 12 (a).
- ➔ Type in an Experience and press “Continue”. A new screen appears, prompting the user to enter the time period for the Experience, as shown in Figure 12 (b).
- ➔ Enter the start and end date for the Experience and press “Continue”. A new screen appears with a list of the user’s Skills, prompting the user to link the Experience to one or more Skills, as shown in Figure 12 (c).
- ➔ Select the relevant Skills from the list and press “Continue”. A new screen appears, prompting the user to enter the level of commitment during the Experience (Not at all, Little, Moderately, Good and Very Good), as shown in Figure 12 (d).
- ➔ Select an option and press “Continue”. The summary of the experience is displayed, as shown in Figure 12 (e). Press “Confirm” to save the Experience.

5.3.2 Add Reference

Along with Experience, another evidence that can be recorded through the GES App is “Reference”. The “Add reference” functionality enables a user to add a Reference who could verify that the user has the Skill(s). Users can add details of the Reference, which includes Name, Position and Email address as shown in Figure 13 (a). However, to add the reference of person it is compulsory to ensure the consent of the Reference person.

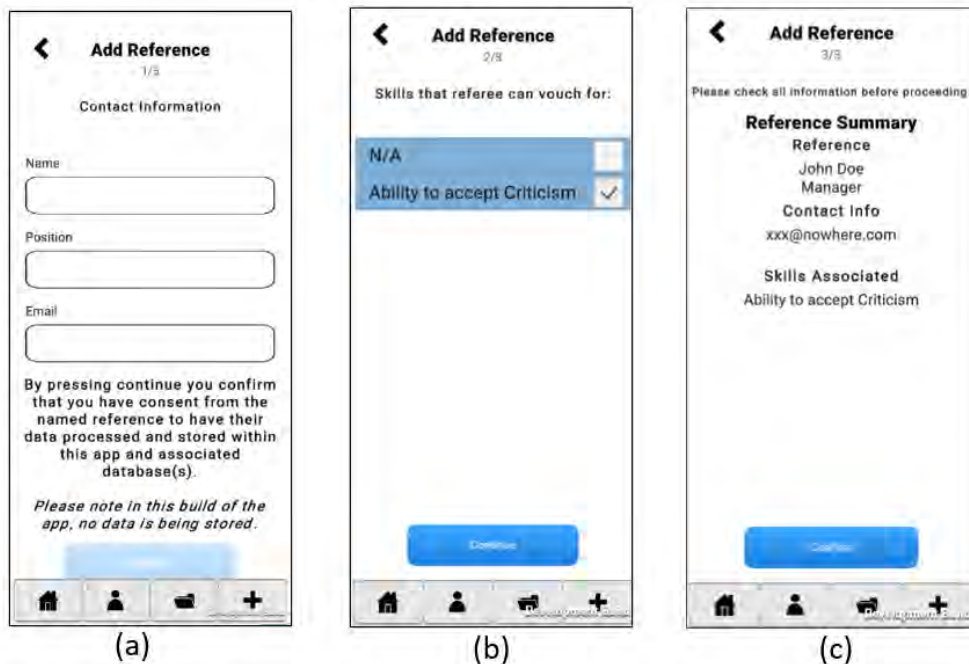



Figure 13: Functionality to add a Reference

To add a Reference:

- ➔ Go to the main screen, or on any screen, press the “Add Skill” icon  as shown in Figure 8. Menu options to add Skills, Experiences, Artifacts and References appear, as shown in Figure 11.
- ➔ Select “Add Reference”. A new screen appears to add the Reference, as shown in Figure 13 (a).
- ➔ Add the required information using the appropriate fields and press “Continue”. A new screen appears with a list of the user’s Skills, prompting the user to link the Reference to one or more Skills, as shown in Figure 13 (b).
- ➔ Select the relevant Skills from the list and press “Continue”. A new screen appears, displaying a summary of the reference. Press “Confirm” to save the Reference.

5.3.3 Add Artifact

The “Add Artifact” functionality allows users to showcase their work portfolio, by including the tangible output of a project or an Experience as Artifacts i.e., evidence to the skill. As shown in Figure 14 (a), user can showcase their work in different digital formats that are either a digital document, image, link, repository, video and a note. When the medium of the file is defined, the functionality enables adding relevant details of the Artifacts. For example, when adding a video as an

Artifact, users can input information such as the URL of the video, Video Title, and any additional information as shown in Figure 14 (b).

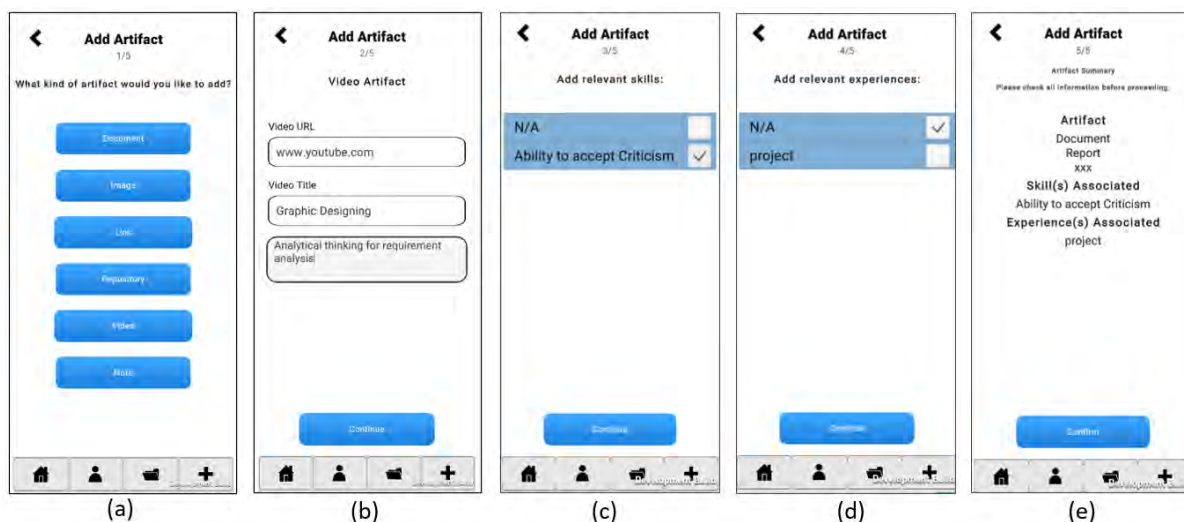




Figure 14: Functionality to add Artifact

To add an Artifact:

- ➔ Go to the main screen, or on any screen, press the “Add Skill” icon  as shown in Figure 8. Menu options to add Skills, Experiences, Artifacts and References appear, as shown in Figure 11.
- ➔ Select “Add Artifact”. A new screen appears with several options for types of Artifacts, as shown in Figure 14 (a).
- ➔ Select the type of the Artifact (e.g., video) and press “continue”. A new screen appears prompting the user to provide information about the Artifact, as shown in Figure 14 (b).
- ➔ Add the information and press “continue”. A new screen appears with a list of the user’s Skills, prompting the user to link the Artifact to one or more Skills, as shown in Figure 14 (c).
- ➔ A new screen appears with a list of the user’s Experiences, prompting the user to link the Artifact to one or more Experiences, as shown in Figure 14 (d).
- ➔ Select the relevant Experiences from the list and press “Continue”. A new screen appears, displaying a summary of the Artifact as shown in Figure 14 (e). Press “Confirm” to save the Artifact.

5.3.4 Get Skills overview

“My Data” or an overview of a user’s Skills can be obtained by clicking the Skills Overview icon  on the main screen or from any page of the GES App, as shown in Figure 15. The overview of a single Skill is displayed as the name of the Skill, the Skill level (as stars to the right of the Skill) and the

numbers. of Experiences, References and Artifacts linked to the specific Skills as shown in Figure 15 (a).

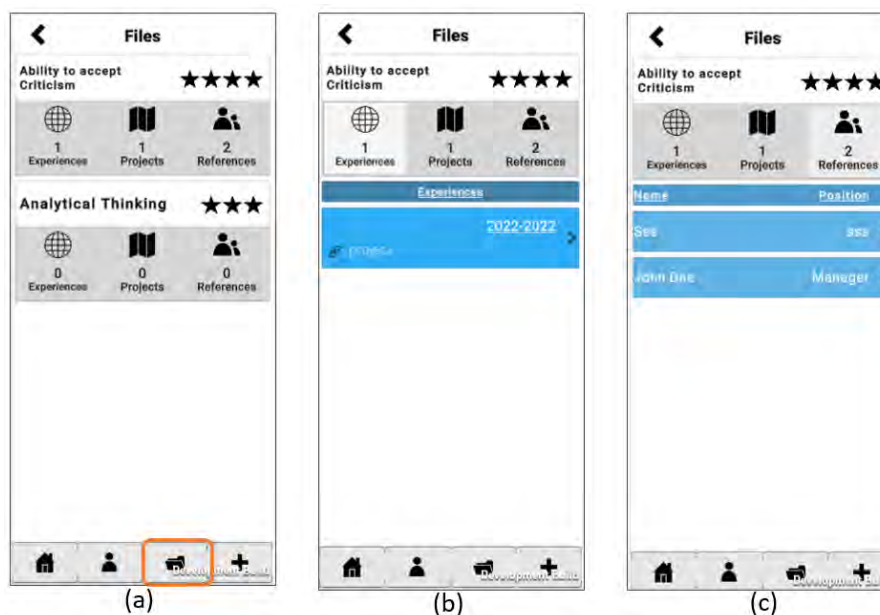



Figure 15: Overview of Skills

To obtain an overview:

- ➔ Go to the main screen, or on any screen, press the “Skills Overview” icon  as shown in Figure 15 (a). An overview of all the Skills is presented, where the Skill names, levels and the Experiences, References and Artifacts are presented. The overview shows the numbers of each element that evidence the Skill.

To view the details of the evidence – Experience, Reference, Artifact:


- ➔ On the Skills overview screen shown in Figure 15 (a), click on the desired element, e.g., “Experiences” or “References” or “Artifacts” for the Skill “Ability to accept criticism”. A new screen appears with the details of the selected evidence: an example of the details of Experiences are shown in Figure 15 (b) and an example of the details of References are shown in Figure 15 (c).

5.4 Dream Job

The main objective of the “Dream Job” functionality is to encourage students to plan their careers and to acquire specific skills required for a achieving a specific career goal such as a dream job.

To create a Dream Job:

- ➔ Go to the main screen.

- ➔ Select the option “My Dream Job” as shown in Figure 16 (a). A list of Dream Jobs included in the GES App are presented as shown in Figure 16 (b).
- ➔ To view the description of a single Dream Job, click on the symbol  to the left of each Dream Job.
- ➔ To browse through the list of Dream Jobs or to search for a specific Dream Job in the repository, type a name of a Dream Job in the search field on the top of the screen.
- ➔ If the desired Dream Job is in the list, select the Dream Job from the list. A list of Skills related to the Dream Job are presented as shown in Figure 16 (c).
- ➔ Select the Skills that you want to add to the Skills list related to the Dream Job.

To add a new Dream Job to the list of Dream Jobs in the GES App repository:

- ➔ If the desired Dream Job is not in the list, as shown in Figure 16 (b), select the option “Not seeing your dream job +” at the bottom of the list to add a new Dream Job.
- ➔ Add a Dream Job.

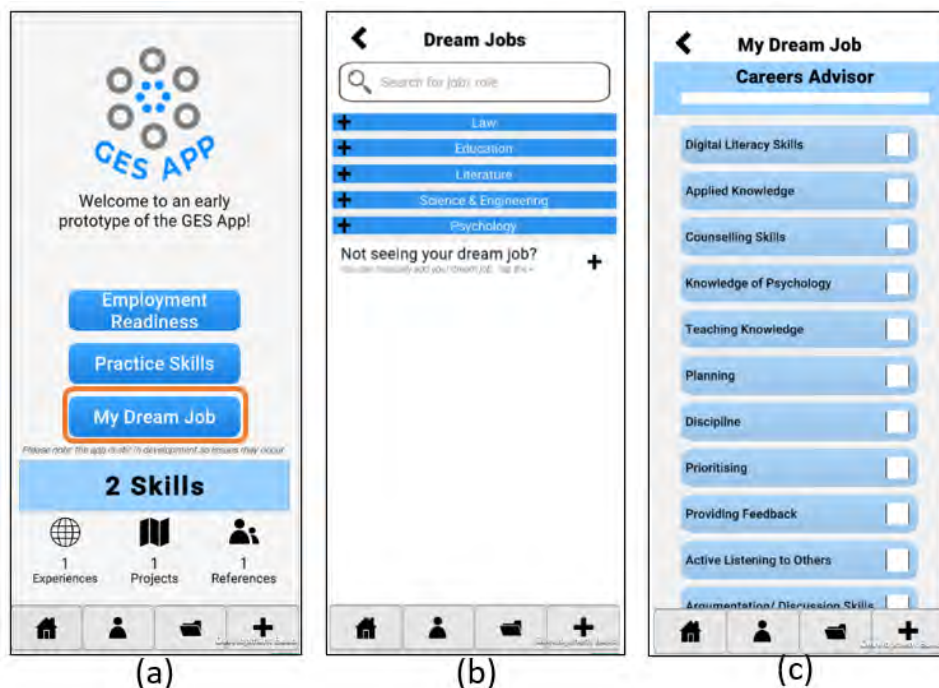


Figure 16: Functionality to add Dream Job

5.5 Practice Skills

The Practice Skills functionality provides access to Learning Resources within the GES App, which can help users to learn new Skills and improve their Skills through different online resources, which helps users to practice Skills through a variety of means.

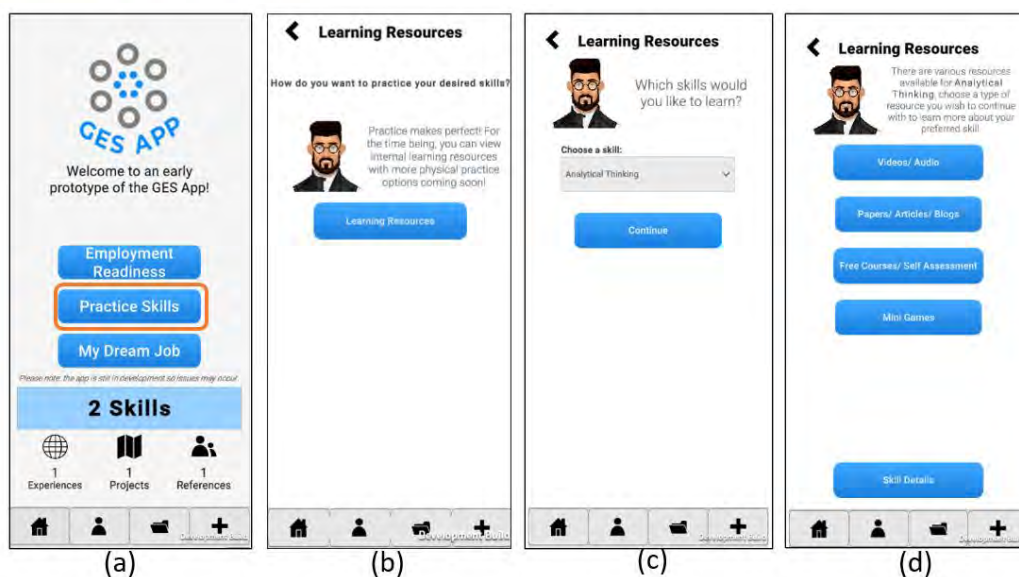


Figure 17: Functionality to practise Skills

To Practice a Skill:

- ➔ From the main screen, select the option “Practice Skills” as shown in Figure 17 (a). A new screen appears.
- ➔ Select the option “Learning Resources” as shown in Figure 17 (b). A new screen appears with a list of Skills that have Learning Resources related to them as shown in Figure 17 (c).
- ➔ Click to expand the dropdown list of Skills. Select a Skill. Click “Continue”. A new screen appears displaying the different types of online resources, as shown in Figure 17 (d). The different types are Video/Audio, Papers/Articles/Blogs, Free Courses/ Self-assessment and Mini-Games.
- ➔ Select an option to access the links to the Learning Resources.

To obtain a description of the Skill that is selected:

- ➔ From the Learning Resources screen shown in Figure 17 (d), select option “Skill Detail”, at the bottom of the screen. A description of the Skill is presented.

5.6 Employment Readiness

The activity of Employment Readiness aims to help student get ready for job seeking in the market. The functionality of “Employment Readiness” enables users to showcase the information they have stored in the GES App, for example by exporting the content to their CV or practise for a job interview.

To create a CV:



Erasmus+



- ➔ From the main screen, select the option “Employment Readiness” as shown in Figure 18 (a). A new screen appears, listing the options, as shown in Figure 18 (b).
- ➔ Select the option “Create CV”. A new screen appears, listing the Skills, Experiences, References and Artifacts recorded for the user, as shown in Figure 18 (c).
- ➔ Select the Skills, Experiences, References and Artifacts desired to be included in the CV. Click “Add” at the bottom of the screen. A new screen appears with an overview of the selection as shown in Figure 18 (d).
- ➔ Select option “Return” to return to the list of Skills, Experiences, References and Artifacts shown in Figure 18 (c).
- ➔ Select option “Export” to export the selected contents out of the GES App (for example to be included in the CV, which may be created using another application).

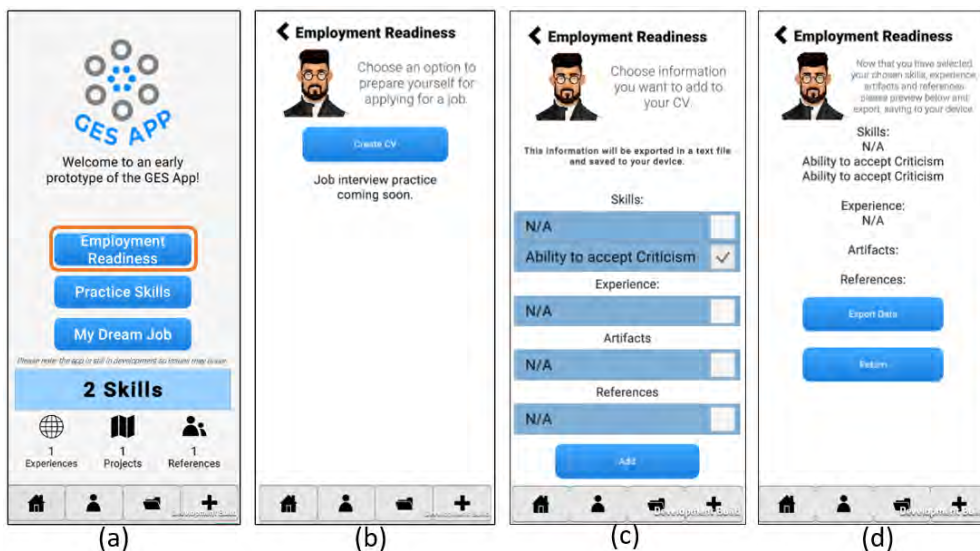


Figure 18: Employment Readiness functionality

5.7 Access to the GES App

The GES App should run on most Android devices and is available for download on Google Play:

https://play.google.com/store/apps/details?id=com.UniversityOfTheWestOfScotland.GESApp&hl=en_GB&gl=US

Updates to the app are available through the mobile device.

PART 3: Use Case Scenarios

6 Introduction to Use Case Scenarios

Use Case scenarios are included to show different stakeholders how best to use the GES App for their purposes. Use case scenarios can help to explain why the GES App is useful for students and teachers and they can provide ideas for how the app could be used effectively. They are narratives that describe how a user may interact with the GES App to perform specific tasks and accomplish specific goals. Use case scenarios are often described for a specific user or user groups who would benefit from using the app. Use case scenarios are an important means to communicate the benefits of the GES App to users as they can describe the needs and desires of users and foster empathy. It is also an important means to communicate the correct contexts in which the GES App could be used and those that would yield the desired results.

The aim of the use case scenarios is to provide additional examples of how the GES App and the support material provided in Part 2 of this document could be used.

6.1 Contents of Use Case Scenarios

The use case scenarios are described using the template described in Table 3.

Element in the use case scenario	Description
Introduction	Short introduction to the use case scenario. References to the theory are included where relevant.
Aim(s)	Aims of the use case scenario.
Persona	An insight into the type of user and to understand why they might have a need for the GES App. The personas will include user's educational and work contexts, their hobbies and interests, their relation to technology, their concerns and who they are influenced by. Personas are a means of highlighting the user's perspective. Personas are not used for the use case scenarios from the perspectives of the teachers and other staff, such as Careers Advisers.
Perspective of the user	What needs and desires the user may have that would drive them to use the GES App and how they may use the app.
Context	The context in which the user may use the GES App.
Relevance	The relevance of this use case scenario for the specific user group.
Steps in using the GES App	Detailed descriptions of how the GES App can be used in the use case scenario, including screen shots from the GES App. (This is



	provided for illustrative purposes only and only for some of the use case scenarios.)
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Table 3: Template to describe Use Case Scenarios

6.2 Overview of Use Case Scenarios

The use case scenarios are created to highlight the benefits of using the GES APP from the perspectives of the students and staff. An overview of the use case scenarios is provided in Table 4. Some of the use case scenarios are also examined from multiple perspectives such as the student and a Careers Adviser (Use Case Scenario: plan a specific career path, Section 7.3) or a student and a potential Employer (use case scenario: student meets a potential employer, Section 7.4).

Students' perspectives	
Use Case Scenario 1	Raise awareness – keep records of my GES by noting them when I think I have a skill
Use Case Scenario 2	Make a note of why I have a skill (reflection on skills)
Use Case Scenario 3	Plan a specific career path (Dream job related)
Use Case Scenario 4	Student meets a potential employer (skills overview)
Use Case Scenario 5	Create a CV
Use Case Scenario 6	Group of students discussing their career plans (group)
Staff's perspectives	
Use Case Scenario 7	Reflections about skills after a project-based activity (classroom- based)
Combined perspectives – students, staff (career adviser), employer	
Use Case Scenario 8	Student preparing for a specific job

Table 4: Overview of use case scenarios

7 Use Case Scenarios – Students' Perspectives

This chapter presents descriptions of use case scenarios created from the perspectives of students.

7.1 Use Case Scenario 1 – Keep records of my GES

Introduction: This use case scenario takes the perspective of a student that would like to be able to note her skills when she feels that she has acquired a new skill or improved a skill. The student is aware of gaining some skills but is unsure of how to make a note of that and perhaps, often forgets that she has some of the skills that may be relevant for her future.

In the layers of learning that lead to GES, there are several invisible skills that are relevant for employability, both for the students and employers [17]. An under-regulated aspect of employability research is to get the students involved in their employability skills during education [18]. This scenario is focused on getting students involved in identifying GES and recording them as they acquire them.

This use case scenario focuses on the benefit of having a means of keeping a note of one's skills when one feels they have acquired a skill.

This use case scenario takes the perspective of an individual user, who is a student at a university.

Aim: The aims of this use case scenario are to increase students' awareness of their GES, show students a way to note them regularly and to motivate and encourage them to make it a habit to note their skills.

Persona:

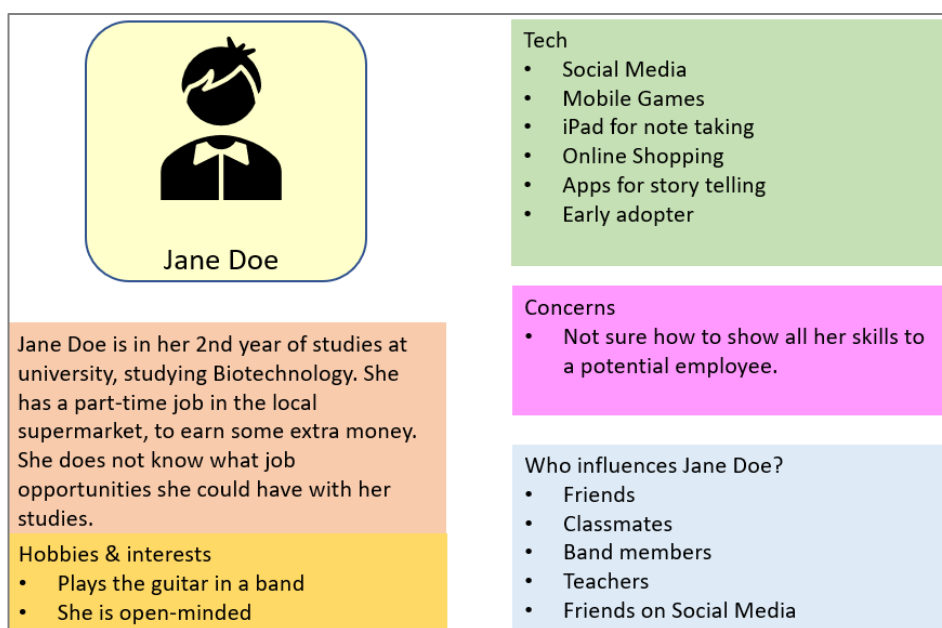


Figure 19: Persona for Use Case Scenario – Keep records of my GES

Perspective of the user: From the Persona description presented in Figure 19, the student, Jane Doe, may wonder if there was an easy way to keep notes of her skills, perhaps triggered by an event at work. She usually shares her experiences and photos from her music shows with her friends and colleagues on Facebook and Instagram. Jane Doe is always keen on exploring new technologies, mobile apps and games. If she knew of a way to use her mobile to make notes of her skills, she would most likely do it.

Context: Jane Doe is on one her short breaks while doing a late-night shift at the supermarket. Jane Doe felt that she had learnt so much during the last few days at work, which would surely be useful for her future employers. She had learned how to handle difficult customers and improved her communication skills. If only she could make a note of these so that she could use the information later when she prepares to apply for jobs.

While drinking her coffee in the backroom of the supermarket, she searches on Google Play for apps that might help her, and she find the GES App. She became curious and downloaded and started exploring the GES App.

Jane Doe noticed that she could create a profile as a user and add skills to her profile. The app had a list of skills that Jane Doe could select from. She started browsing through the skills and found that she could add “Communication Skills” to her profile. She started searching for other skills that she could add. Jane Doe found the list of skills in the GES App very helpful as it helped her identify many skills that she believed she had and so she started adding more skills.

She soon discovered that once she has added a skill to her skills profile, she was prompted to assess the level of skill she had. She had not quite thought about this before. But it intrigued her, and she started thinking more about it. She was modest and thought that she would consider herself as a novice or a beginner for most skills. But it gave her some inspirations to improve her skills and what activities could help her improve her skills.


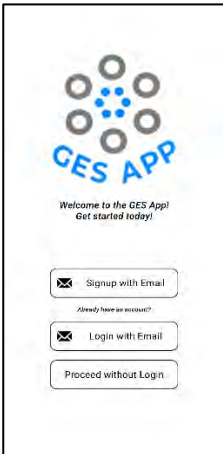
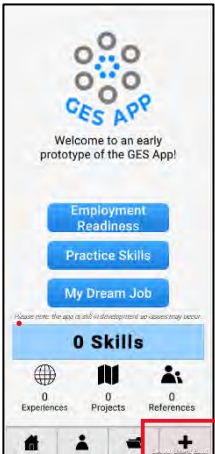
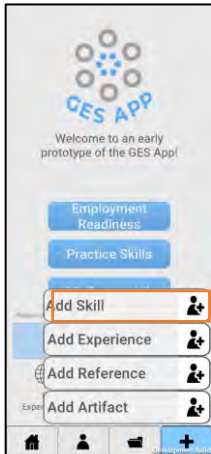
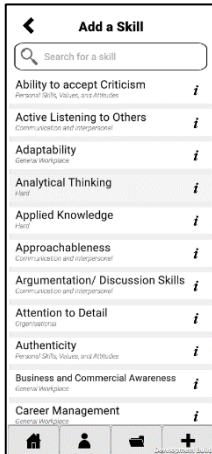



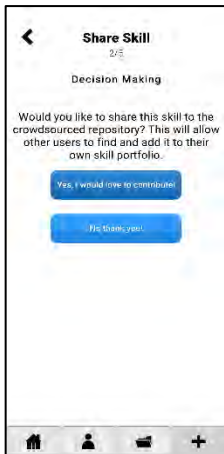
Jane Doe realised that using the GES App was easy and it was a quick way to make a note of her skills, browse through her skills and think of how to improve them. Most importantly, she liked the fact that it was a mobile app that she could use anytime and anywhere and was always accessible as long as she had her mobile phone with her, which was most of the time. So, whenever she was alone in the breakroom at the supermarket or sat on the bus on her way to and from the university, she often uses the GES App and adds skills or browses through her skills.

After a week, Jane Doe is so happy with using the GES App that she decided to tell her friends and colleagues at work about it.

Relevance: The use case scenario is relevant for students to appreciate that it is useful to make a note of their skills in a timely manner and regularly so as not to forget them. It is also important to do it regularly.

Steps in using the GES App: The sequence of steps to be performed in the GES App are shown in Table 5, to illustrate how the user’s needs are supported in the GES App. Note that the detailed

steps also show how the user could share the skills and skills profile with other users through the crowdsourced repository, although it is not the focus of this use case scenario.

1. Login to app	2. Select  from the main menu.	3. Select “Add Skill” option from the pop-up menu.	4 a. Select skill from the list of skills shown from Crowdsourced repository.
			
4 b1. If skill is not in the list, select  to the right of “No result found”.	4 b2. Enter the skill name into the input field and select “Continue”.	4 b3. Application prompts user for confirmation if user want to share added skill to the repository.	
			
5. Select “Continue” for adding skill to user profile.	6. App displays option for adding skill to repository if not present before. Or user can choose to continue without adding it.	7. Application shows option for user to assess their skill level.	8a. User can select “Not Sure” option if need information regarding the levels.


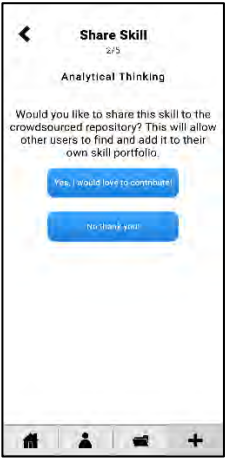


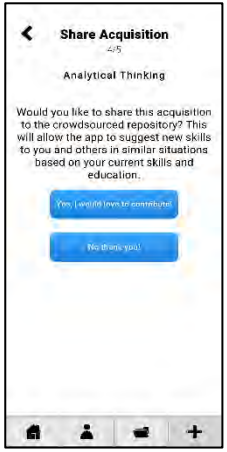

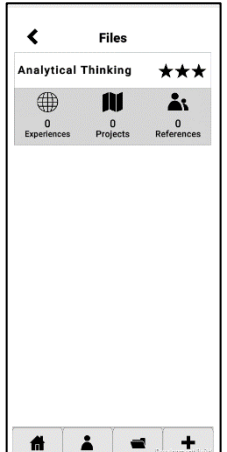
			
<p>9. User selects the level as per own competency in the skill and app will confirm for sharing the acquisition and continue to collect for more information.</p>	<p>10. Skill summary is displayed by the application for the user along with skill level.</p>	<p>11. Once skill summary is confirmed by the user, the application displays the overview of the skill.</p>	
			

Table 5: Use Case Scenario 1 -Steps to record GES

7.2 Use Case Scenario 2 – Make a note of why I have a Skill

Introduction: This use case scenario takes the perspective of a student that would like to be able to note her skills when she feels that she has acquired a new skill during her everyday life in a variety of activities. The student reflects on her activities and tries to identify if some of her activities, such as part-time jobs or sports activities, help her acquire skills that may be relevant for her future employment possibilities and her career. The student is aware of gaining skills but is unsure of how

to make a note of that, in particular, to document why she believes she has the skill and what helped her acquire the skill.

Reflections are central to raising awareness around what is learned, but to identify skills, students will have to move into, through, and out of learning experiences [19]. Guiding questions to support reflection about what is learned has been discussed in the literature [13], and this work has influenced the design of the functionality in the GES App. The questions identified for the critical reflection in the model by Rolf et al (2001) provides references to determine components of the skill that focus on reflection and can be saved as evidence. For example, experience is identified as the component of a skill that enables a student to reflect what part of an experience or on how an experience contributes to a skill. The suggestions and prompts that are incorporated in the GES App to record Experiences, Artifacts and References as evidence of a skill is designed to trigger a reflection process that would stimulate the user to ask questions such as “what has helped me acquire the skill?”, and “how can I show a potential employee that I have actually done something that has helped me acquire a skill?” [14].

The benefit of this use case scenario is that it can stimulate students to reflect about their experiences and also about how and what kinds of experiences lead to skills acquisition and improvement.

This use case scenario takes the perspective of an individual student, but it can also take place among a group of students.

Aim: The aim of this use case scenario is to increase students’ awareness about GES that they acquire in a variety of activities, which may be from activities within academia as well as more informal activities outside of academia, such as part-time work or sports activities.

Persona: For this use case scenario, the persona presented in Figure 19, Jane Doe, provides insights about students who are keen to understand how they acquire skills and would like to make a note of why they believe they have the skill.

Perspective of the user: From the persona description, Jane Doe consciously tries to make a note of her skills and regularly goes through her skills and updates them. She is keen to document her skills and justify that she actually has the skills that she claims she has so that she could present them to a potential employee in a convincing manner.

Context: Jane Doe is on one of her breaks at work and starts using the GES App, as she has now made it a regular activity and makes sure that she looks at her skills profile at least once a week. A week ago, she had entered “Communication Skills” as one of her skills. Earlier in the day, she had been working with some of her university classmates on a group project. The group had been


brainstorming about the solution to a problem and several interesting ideas were proposed. The challenge was to decide on one idea that every member of the group could agree upon and contribute to solving. This is easier said than done since one of the group members was more vocal than the others and had a way of dominating the group. Jane Doe had listened carefully to everyone's ideas and realised that it was possible to put forward an idea where everyone felt that their ideas were included. She had been able to make everyone agree to the idea and motivate everyone.

Jane Doe thought about the experience with the group work and thought, *"hmmm, that was an interesting experience. Surely that must contribute to enhancing some of my skills. Could that be Communication Skills? Or could that be Teamwork?"*

Today, she was feeling very inspired to make a note of her experience as something that has contributed to her skills. Jane Doe remembers that the GES App had an option to add Experiences and she had not been quite sure how to use that functionality. She decided to explore the functionality and to try and add an Experience to her skills profile.

Relevance: This use case scenario is relevant to raise students' awareness about their skills and what contributes to their skills acquisition and enhancement. It highlights the importance of reflecting upon one's activities and how they may contribute to skills acquisition. It also highlights the importance of recording skills regularly and documenting why they believe they have the skill.

Steps in using the GES App: The steps in the GES App are described in detail in Table 6. The pre-conditions for these steps are that the user must login to the GES App and must have added one or more skills to the skill profile. Once an Experience has been added, the user can also reflect more about the Experience (self-reflection) and add more information related to the Experience through the different prompts provided by the GES App, as described in Table 7. Similar to adding an Experience, References and Artifacts that explain why the user has a skill can also be added: the steps to add References are shown in Table 8 and the steps to add Artifacts are shown in Table 9.

1. Select  from the main menu.	2. Select "Add Experience" option from the menu.	3. Add Experience (e.g. details of role / job title) in the input field and select "Continue".	4. Add "Start Date" and "End Date" for the Experience.
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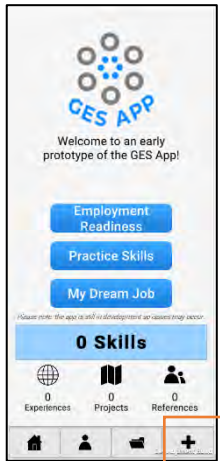
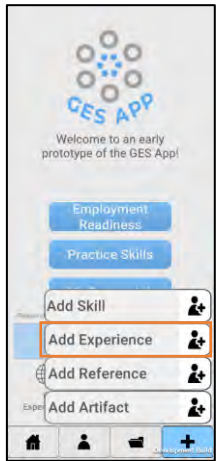
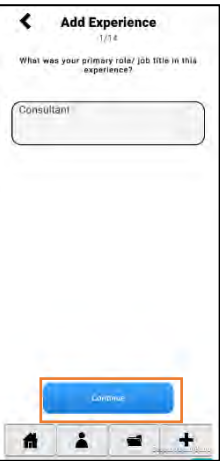
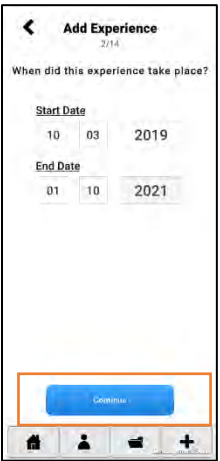



			
<p>5. Select the skill for which the experience is required to be added and select "Continue".</p>	<p>6. Add the type of Experience: "Academic" or "Professional".</p>	<p>7. Add a brief description of the Experience and select "Continue".</p>	
			

Table 6: Use Case Scenario 2 – steps to make a note of why I have a Skill (Experience)

<p>1. Evaluate Experience in terms of commitment to the assigned role. Choose option after some self-reflection.</p>	<p>2. Evaluate Experience in terms of commitment to the team success. Choose option after self-reflection.</p>	<p>3. Evaluate Experience in terms of commitment to the team leadership. Choose option after self-reflection.</p>	<p>4. Evaluate Experience in terms of commitment to the team process. Choose option after self-reflection.</p>
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<p>5. Evaluate Experience in terms of accountability towards the work. Choose option after self-reflection.</p>	<p>6. Evaluate Experience in terms of communication to the team. Choose option after self-reflection.</p>	<p>7. Evaluate Experience in terms of cooperation with the rest of team. Choose option after self-reflection.</p>	<p>8. Add any additional details relevant to the experience.</p>
<p>9. Once the Experience details are added and Experience is evaluated, the GES App saves and displays the summary. One Experience can be related to many Skills and one Skill can be related to multiple Experiences.</p>	<p>10. Experiences added to the Skill can be seen in skills summary.</p>		


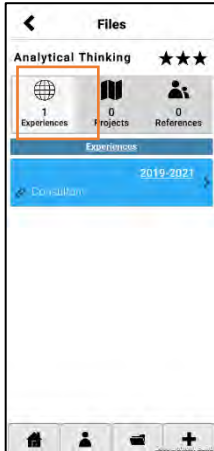

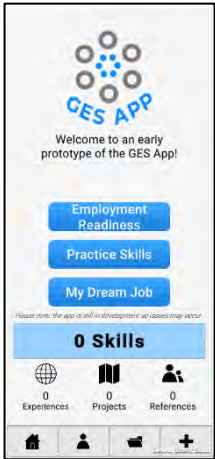
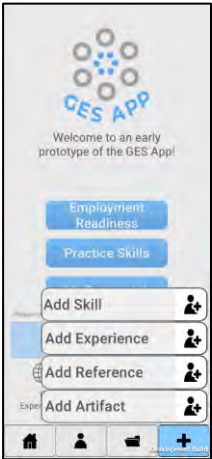

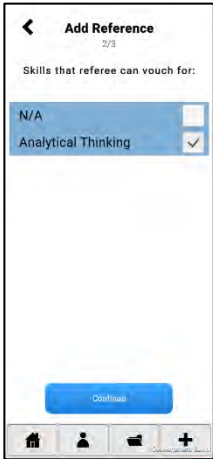
	
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Table 7: Use Case Scenario 2 – steps to make a note of why I have a Skill and support for Self-Reflection

1. To add a Reference as evidence to a Skill, select  from the main screen.	2. Select option of “Add Reference” from the pop-up menu.	3. Add details of the Reference to be added: Name, Position and Email. Select “Continue”.	4. Select the Skill(s) for which the added Reference person can certify and select “Continue”.
			
5. The GES App displays the details of the Reference added, select “Continue”.	6. GES App displays Skill and its evidence and upon clicking ‘References’, it displays the list of References added for verification of that Skill.		




			
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Table 8: Use Case Scenario 2 – steps to make a note of why I have a Skill (Reference)

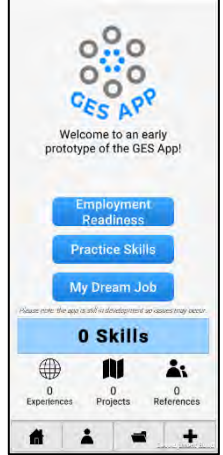
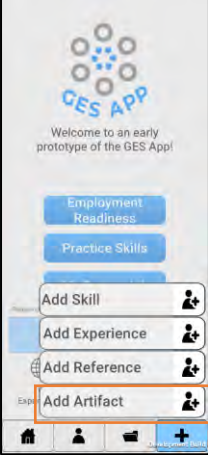


<p>1. Select + from the main menu.</p>	<p>2. Select “Add Artifact” from the pop-up menu.</p>	<p>3. GES App provides options for selecting different types of formats to upload the Artifact. Select one.</p>	<p>4. Add details of the Artifact that include its title, description, and the link to the online or other source.</p>
			
<p>5. Select the Skill(s) relevant to Artifact.</p>	<p>6. Select the Experience from existing profile related to the Artifact.</p>	<p>7. GES App displays the summary details of the Artifact added. Select “Continue”.</p>	<p>8. Application displays the Artifact in the Skills profile.</p>



Table 9: Use Case Scenario 2 – steps to make a note of why I have a Skill (Artifact)

7.3 Use Case Scenario 3 – Plan a specific career path

Introduction: This use case scenario takes the perspectives of a student and a Careers Adviser. The student has career aspirations and a clear idea of what he wants to work with and is determined to ensure that he can get his dream job in a specific industry or domain. The student identifies the skills required for his dream job, sets goals and works systematically to meet the skills requirements for his dream job. He focuses on improving his skills that would make him attractive for the specific job.

The relevance of career aspirations and its psychological impacts have been discussed in the literature [20]. Studies have also shown that students having proactive career behaviours, i.e. career planning, skills development, career consultation and network building show stronger commitment to their career goals which has a statistically significant relationship with career success [21, 22]. How to support career aspirations through the concept of a Dream Job through the GES App have been discussed in [23].

This use case scenario focuses on the benefit of targeted skills development by practising specific skills and working systematically on building up a skill profile for a specific industry or a job.

This use case scenario takes the perspective of an individual user.

Aim: The aim of this use case scenario is to highlight how the GES App could help targeted skills acquisition and improvement to achieve one's dream job.

Persona:

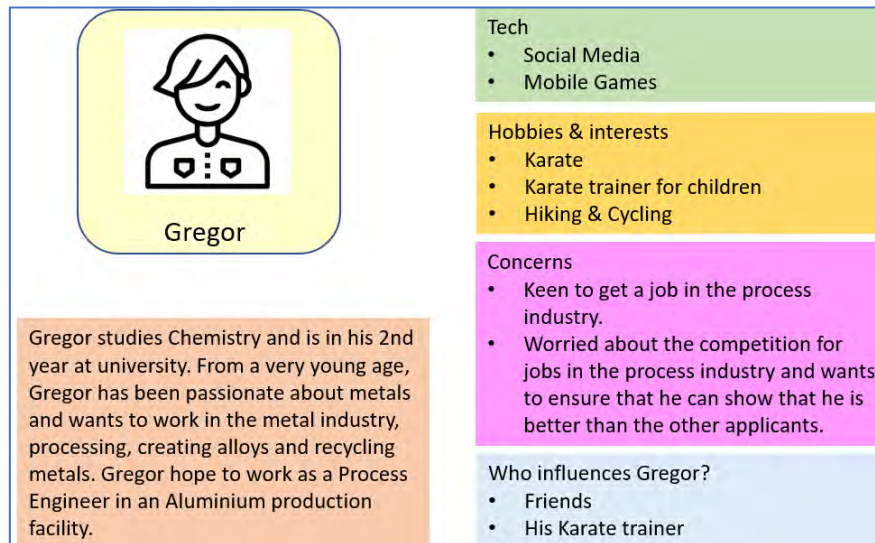


Figure 20: Persona for Use Case Scenarios - Plan a specific career path

Perspective of the user: From the Persona description presented in Figure 20, the student is very focused on his career goals and is determined to get a specific job within a specific industry. Gregor has a very clear idea of the industry and the organisation he wants to work for and is consciously working to achieve his dream job. He looks online for material that might help him such as the kinds of skills that are required for his dream job and often seeks career advice.

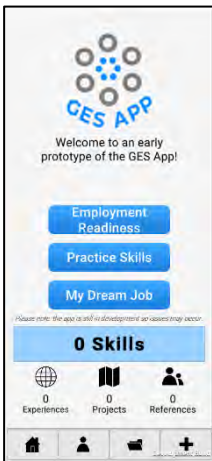


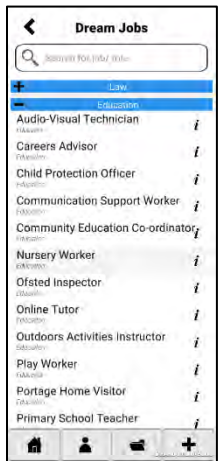
Context: During an online search for skills for the metal processing industry, Gregor comes across a mobile app called GES App, which catches his attention. Gregor downloads the app and installs it and starts using it. When Gregor saw “My Dream Job” on the main screen of the app, he becomes very excited and selects that option. He could recognise the list of industry sectors and the lists of skills linked to them as he has seen these in some of the online resources that he has looked at and also through the university’s career advice services. What really surprises him is that is that he could tailor make his own dream job in the GES App, by creating a skill profile for him and by linking them to a career goal through a set of desired skills. Gregor creates his skill profile on the GES App by adding his set of skills and he adds a dream job and the set of skills required for the dream job. He compares his skill profile with the skills required for the dream job and realises that he already possesses some of the skills. But he needs to acquire some more skills and improve the level of some of his skills. Gregor finds this a very helpful way of preparing for his desired career path and continues using the GES App regularly. He discovers that he could also access relevant online resources through the GES App that would help him learn new skills and improve his skills.

Relevance: This use case scenario is relevant for students who have career aspirations and are already aware of their skills and have an idea of their desired career. It highlights the possibility to

focus on a career path, identify the relevant skills and prepare for their employment opportunities through targeted skills development.

Steps in using the GES App: The steps to be performed in the GES App are shown in Table 10, which describes how to create Dream Jobs in the GES App. To do this, the user must have a user profile on the app and needs to add skills and skill levels to their profiles. When a user selects the Dream Job from the preferred industry, user is informed about the skills required to achieve the Dream Job. Through comparison of the user's profile with the list of skills required for the Dream Job, the user becomes aware of which skills are to be acquired.

The steps for practicing a Skill through the Learning Resources available in the GES App are shown in Table 11.

1. User selects option of "My Dream Job".	2. Click "Select a Dream Job".	3. From the list of industries, user selects the preferred industry.	4. List of industry expands and shows the roles within the industry. User selects the preferred role or Dream Job from the list.
			
5. Application displays all the skills as per requirements of the industry.	6. User can select list of skills either already acquired or need to acquire through learning.	7. If all skills are acquired by the user, all skills from the list can be selected and app displays the message for completion of profile for the selected Dream Job.	

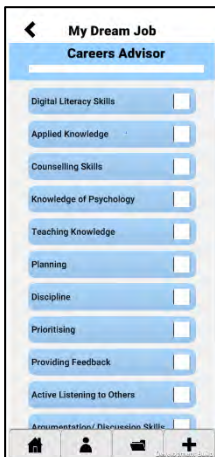

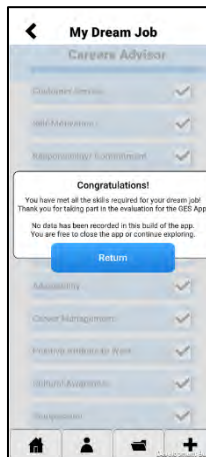
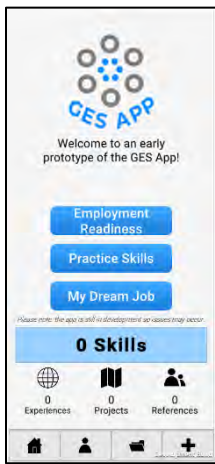
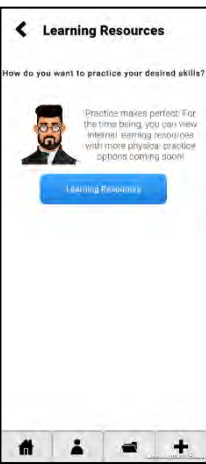
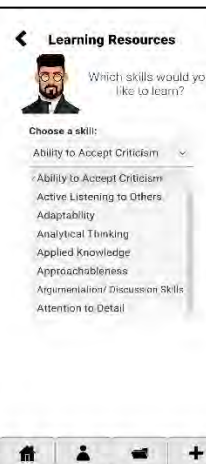
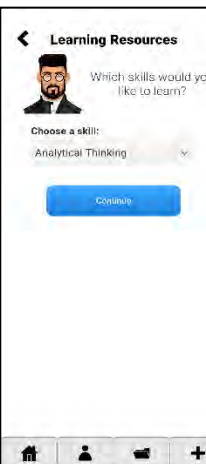
			
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Table 10: Use Case Scenario 3 – steps for planning a specific career path

<p>1. Select “Practice Skills” from the main screen.</p>	<p>2. Select option “Learning Resources” to access online resources related to Skills.</p>	<p>3. GES App displays option to select a Skill from the drop-down list.</p>	<p>4. Select the Skill from the list and selects “Continue”.</p>
			
<p>5. GES App displays options to choose different types of Learning Resources: Video/Audio, Articles/Blogs, etc. Select the preferred type of learning resource.</p>	<p>6. GES App displays a list of related Learning Resources.</p>		

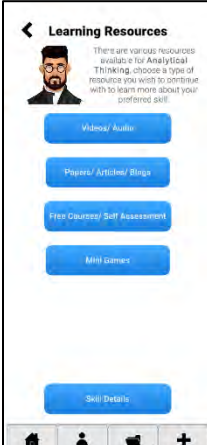

			
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Table 11: Use Case Scenario 3 - steps for Planning a specific career path and practicing skills

7.4 Use Case Scenario 4 – Student meets a potential employer

Introduction: This use case scenario is from the perspectives of a student and a potential employer, where a student meets and discusses career prospects with the potential employer. The student has career goals and is determined to get a job in a specific industry and is keen to convince the potential employer that he has the relevant skills and experiences for the job. This use case scenario illustrates how the functionality “Employment Readiness” can be beneficial for students and potential employers.

This use case scenario highlights the benefit of an overview of the skills and evidence of the skills as that could be a valuable asset in becoming attractive to a potential employer, and to convince the employer of one’s potential.

This use case scenario takes the perspective of an individual student.

Aim: The main aim of this use case scenario is to illustrate the importance of preparing students, graduates and job seekers to meet potential employers in an effective way.

Persona: The persona that is relevant for this use case scenario was described in the user case scenario: plan a specific career path, in Section 7.3. The persona is described in Figure 20. Gregor is a Chemistry student at university, who is determined to get a job in the metal process industry and is preparing to apply for a job as a Process Engineer at an aluminium processing facility.

Perspective of the user - Student: The student understands that the job he wants is attractive to many students and he is worried about the competition. He takes every opportunity he gets to prepare himself for the job and to find ways to make him more attractive to his potential employer.

Perspective of the user – Potential Employer: The manager in the Process Engineering department of the Aluminium plant, Helen, is very happy that so many young graduates are keen to work in her company. Every year, the company receives hundreds of applications for a few job positions. Several of the applicants meet the requirements for the job, which makes it very challenging to select the best candidates. Helen has often asked the Human Resources department to come up with good ideas and methods for scrutinising the applications to identify the best candidate based on a broad perspective of their skills, experiences and attitudes. Helen has experienced that one of the best approaches was to set aside time to meet potential employees and talk to them and try to get to know them better.

Context: Gregor attends a careers fair at the university and sees a stand with the logo of his favourite company, where he is planning to apply for a job. He approaches the stand, and he sees several of his fellow students there, browsing through flyers, picking up free gifts and talking to the people in the stand. Gregor waits patiently and is greeted by a lady, who introduces herself as Helen, the head of Process Engineering. Gregor gets very excited and wasn't quite sure what to say to her. He takes up his mobile phone and accesses his skills profile overview in the GES App. Helen looks a bit puzzled at first but waits patiently for Gregor to talk. Gregor asks her about the possibilities of getting a job in her company. He expresses his passion for metals and how much he would like to work in her company. He shows her his skills on the GES App and starts asking her specific questions about the types of skills and experiences that would be relevant for the job. Helen identifies that Gregor has listed several skills that she would like to see in her employees and asks about how Gregor had acquired these skills. Gregor happily explains his experiences and the skills he has acquired as a Karate trainer for children and how those could be relevant for working with other people and motivate his teammates. Helen's interests are aroused as she is able to see specific skills and relevant experiences, which none of the other students that she had spoken to had shown. She enjoyed talking to Gregor as it was easier to talk about the specific needs of the job as well as give relevant and specific hints to Gregor, so that he could create a focused and relevant CV and job application. Helen makes a note of Gregor's name and offers to answer any questions that Gregor may have later on. Gregor feels that he has a better idea of the skills that he needs to focus. Gregor leaves the stand very motivated and excited, and very glad that he had been using the Dream Job functionality in the GES App.

Relevance: This use case scenario illustrates the benefit of being able to show an overview of their skills and experiences to a potential employee as a support during their conversation. A skills overview can help to achieve a more focused discussion, where it is easier for the students to get

hints and ideas on how to make them more attractive to the potential employer. Similarly, it makes it easier for the potential employer to see the potential in prospective employees and to help filter the students who not only meet the requirements for the job but excel in many ways due to the additional skills and experiences they bring to the workplace.

Steps in using the GES App: The relevant functionality in the GES App for this use case scenario is the “Employment Readiness” and the overview of Skills, Experiences, References and Artifact. The user must have a skills profile for achieving this.

7.5 Use Case Scenario 5 – Create a CV

Introduction: This use case scenario takes the perspective of a student who is focused on getting an interesting job after completing her university studies. The student is actively looking for job opportunities and preparing her CV and job applications.

This use case scenario focuses on the benefit of an overview of their skills for students, which they could easily access and could use to include in their CVs and their job applications.

This use case scenario takes the perspective of an individual user.

Aim: The aim of this use case scenario is to highlight how the GES App could help a student create her CV. In addition, it highlights the value and of an overview of skills, experiences and other evidence of skills that the student has acquired over a long time and how that could contribute to the CV.

Persona:

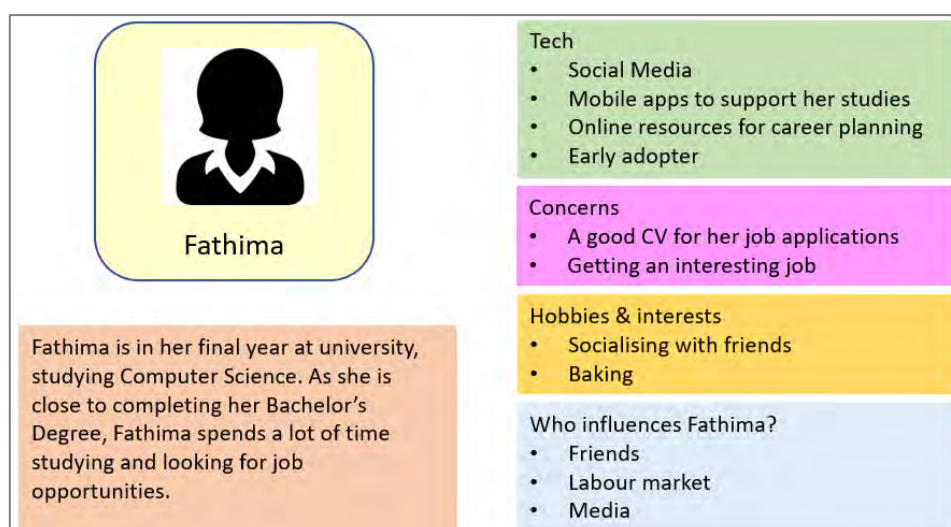


Figure 21: Persona for use case scenario – Create a CV

Perspective of the user - Student: From the Persona description presented in Figure 21, Fathima is a final year student who is focused on getting an interesting job and is preparing her CV and job

applications. She is in need of support material to create her CV and a good way of describing her skills and providing an overview of skills to the potential employees.

Perspective of the user – Careers Adviser: This use case scenario could also be seen from the perspective of a Careers Adviser, who is keen on providing constructive and personalised advice to students that can be beneficial to their careers and in their endeavours in job applications. Careers Advisers often provide general advice to students and job seekers, such as making them aware of emphasising the relevant skills in their CVs. But they often find it challenging to have an overview of each student's skills and thus providing specific personalised help. An overview of the skills and experiences of a students can be beneficial for Careers Advisers.

Context: Fathima is applying for jobs quite often and is anxious to have an interesting job that she could start soon after her graduation. She had been told by the Careers Adviser at the university that she should carefully consider the skills and experiences she lists in her CV, and they should be tailored to the job position, to have maximum effect.

Fathima was introduced to a mobile app, the GES App, through her friend Jane Doe, as described in the use case scenario presented in Section 7.6. Since then, Fathima has been using the GES App regularly and records all her skills in the app. Fathima browses through her skills stored in the GES App and wonders if she could use some of that information as a part of her CV. She would like to include several of the skills in her CV. Based on the advice from the Careers Adviser, she would like to be able to tailor make her list of skills and experiences for each job application.

Fathima explores the GES App to see if this is possible and she found the functionality to create a CV. She selects the relevant Skills and the related Experiences, References and Artifacts that she would like to include in her CV and exports it as an editable file from the GES App. She receives the export list of Skills as an email message. She copies the contents into her CV template and edits the format and adapts her CV to the needs of the job.

Fathima found this to be an effective means of tailoring her CV, where she could very quickly obtain an overview of the relevant skills and include them in any CV template. So, she is able to create CVs and job applications quicker than she had been able to in the past.

She also discovered that the GES App provides links to relevant resources that are helpful for creating CVs and job applications. Some of these have already been identified by Fathima using Google Search. But she found that it was much better to have them all in one place in the GES App.

Relevance: The use case scenario is relevant for students to appreciate that an overview of skills is beneficial for creating a good CV and it can contribute to effectively adapting the CV to the needs of the job.

Steps in using the GES App: The detailed steps for browsing, selecting and exporting the relevant skills from the GES App are described in Table 12. To create a CV in the GES App, a user must be registered and have a skills profile. The contents from the GES App are exported as an editable file and sent via email to the users.

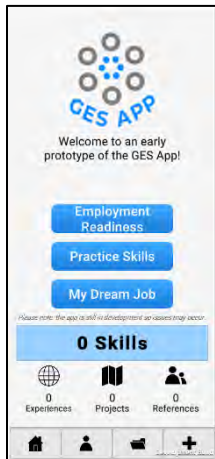
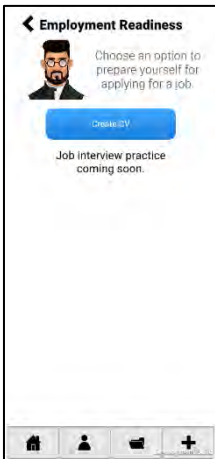
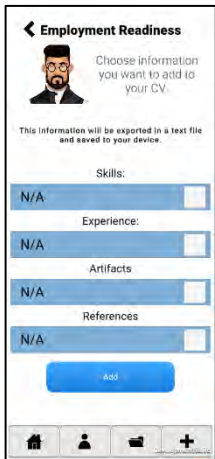


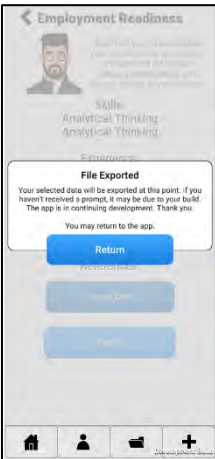
1. Select “Employment Readiness” from home screen.	2. Application displays option to create CV. Select “Create CV”.	3. Application displays options to add Skills, Experience, Artifacts and References.	4. Select list of skills, experiences, artifacts and references to be added to CV and select Add.
			
5. The application displays selected information and options of “Export Data” and “Return”. Select “Export Data” option.	6. The application shows confirmation message that the information is exported in editable file format.		
			

Table 12: Use Case Scenario 5 -Steps to create a CV

7.6 Use Case Scenario 6 – Group of students discussing their career plans

Introduction: This use case scenario takes the perspective of a student who is not so interested in using technology and does not think about her career. However, she likes doing things with her friends and when a friend introduces her the GES App, she gets inspired to use it and discuss her skills with her group of friends.

This use case scenario focuses on the benefit of students sharing their experiences with others and how group discussions about skills and experiences could be supported by the GES App.

This use case scenario takes the perspective of an individual user, as well as a group of users.

Aim: The aim of this use case scenario is to illustrate how groups of students could identify their skills, share ideas about skills and support one another in their skills development using the GES App.

Persona:

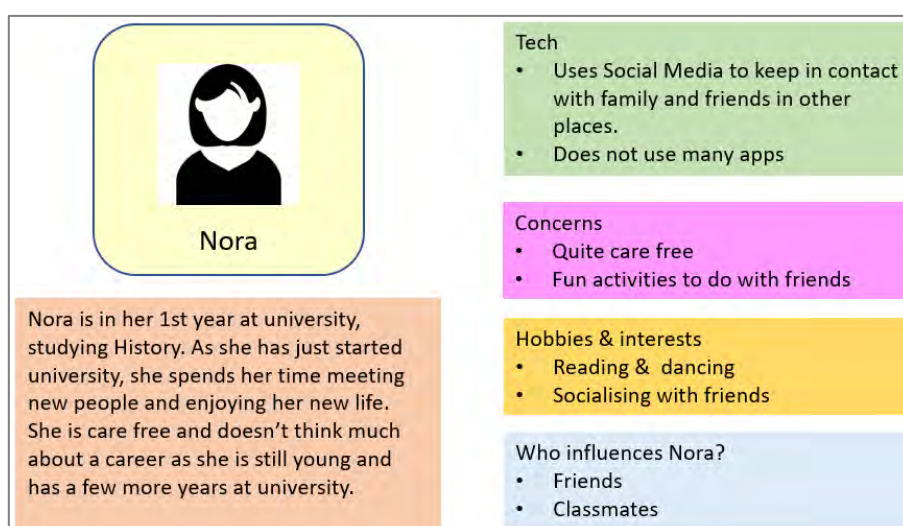


Figure 22: Persona for Use Case Scenario – Group of students discussing their career plans

Perspective of the user: From the Persona description presented in Figure 22, Nora is a young student who enjoys meeting new people and engaging in social activities with her friends. She does not think about her career as it's too early for her. However, she is easily influenced by what her friends do, and she likes joining them in their activities and sharing experiences with them.

Context: Nora was looking forward to her bi-weekly get-togethers with her friends, Jane Doe (presented in use case scenario 1, Figure 19) and Fathima (presented in use case scenario 5 and Figure 21). Nora enjoys hearing about what her friends had been doing and she loves telling them about her activities. They often plan to do activities together such as cooking and eating together and watching a movie.

After the usual greetings and a cup of tea in front of them, Jane Doe takes up her mobile phone and shows the others an overview of skills on the mobile phone. Fathima was immediately interested and started asking her about the application she was using and how she had come up with such a list of skills. Jane Doe started explaining, and both Fathima and Jane Doe were getting very excited, while Nora was wondering what they were talking about. She was more interested in telling them about the book that she was reading. But she decided to follow the excitement around Jane Doe's mobile phone and bent over to get a better look at it. She asked what Jane Doe and Fathima found so exciting about a list of skills. Then Jane Doe explained that she had been thinking about how to show a potential employer all the skills that she had gained through her work and other activities, which she believes are very relevant for her future career, and that it was never too early to start thinking about it. Fathima explained that she had been trying to write her CV as she is starting to apply for jobs, and she had also been thinking of what skills she had and could include in her CV. This raised Nora's interest a bit and she asked how she could identify her skills and if Jane Doe could help her do it.

Jane Doe helped Fathima and Nora install the GES App and register a user profile in the app. Fathima was quite ready to start adding her skills as she had already thought quite a lot about the skills. However, Nora needed some help from Jane Doe. Jane showed her the list of skills available in the GES App and Nora started browsing through them and assessing if she had any of the skills. She identified a few skills that were relevant for her.

Jane Doe showed her skills overview. Nora and Fathima were impressed to see that Jane Doe had three stars for some of her skills and asked how she had achieved the stars. When Jane Doe explained that it was a way for conducting a self-assessment of one's skills, Nora thought that she should also start using the GES App and making a note of her skills.

At the beginning, Nora was not motivated to use the GES App as she was not fond of using mobile apps for most things. During Nora, Jane Doe and Fathima's regular meetings, they often start the GES App and start discussing how they were progressing. This encouraged Nora and her enthusiasm for recording her skills and her awareness of activities and experiences that were contributing to improving her skills increased. Now, Nora often initiates the discussion about skills, and she has started telling her other friends about it.

Relevance: The use case scenario is relevant for students to appreciate that it is helpful and important to share experiences and discuss with friends as this may give new ideas, encourage others and it could become a fun collaborative activity.

Steps in using the GES App: The detailed steps in the GES App for this scenario are included in the steps described for use case scenario 1 in Section 7.6 and in Table 5.

8 Use Case Scenarios – Staff’s Perspectives

In this chapter, use case scenarios from the perspectives of staff are presented. The staff include university lectures and Careers Advisers. A use case scenario from the perspective of a Careers Adviser was presented in 7.5 (use case scenario to create a CV).

8.1 Use Case Scenario 7 – reflections about skills after a project-based activity (classroom- based)

Introduction: This use case scenario takes the perspective of a teacher who is keen on getting her students to reflect upon their activities in the classroom to identify GES that the students may have acquired during an activity.

With a focus on the fulfilment of academic requirements, students are usually not aware of employability skills that they acquire during their university [17]. University assessments are often based on what a student has learned rather than the non-directly observable constructs and how a student may apply what they had learned. With the recent focus on employability skills and their significance, teachers have become more aware of the role of reflection in making students aware of their GES. A review of the literature has shown the significance of reflections to bring unknown learning to light, especially when supported with evidence [13]. Reflection has been used as a catalyst to invoke skill awareness and the need for skill acquisition in students. The questions identified for the critical reflection in the model by Rolf et al (2001) provides reference to determine components of the skill that focus on reflection and can be saved as evidence of a skill.

The benefit of this use case scenario is to highlight the role of reflection in identifying GES and the role that teachers can play, within a classroom context, to encourage students to reflect upon their activities and to become better at identifying their GES and making a note of them.

This use case scenario is based in a classroom setting and apply for individual students or groups of students.

Aim: The aim of this use case scenario is to illustrate to teachers the role they could play in helping students reflect over their GES and to stimulate ideas about the kinds of activities they could do in the classroom to increase students’ awareness about their GES.

Persona:

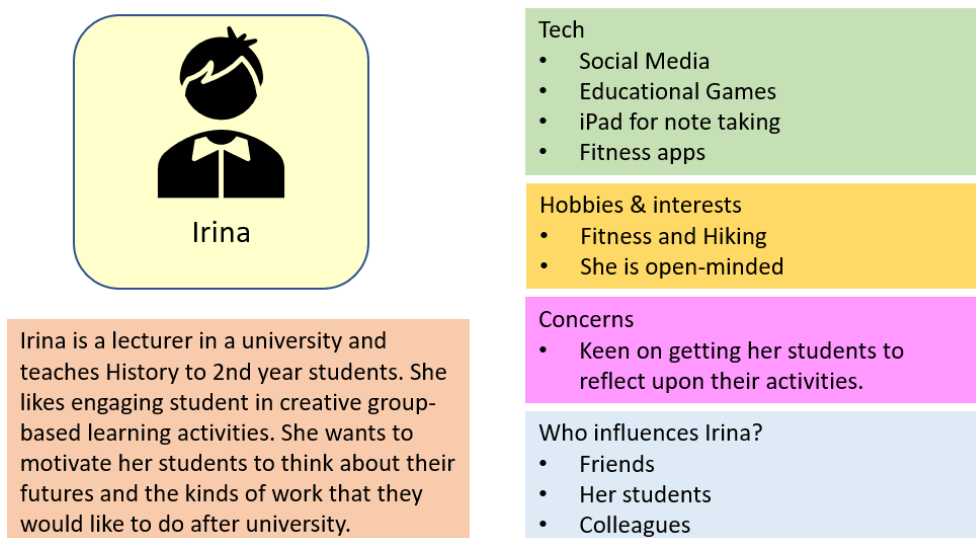


Figure 23: Persona for use Case scenario- reflections about skills after an activity

Perspective of the teacher: Based on the persona in Figure 23, this use case scenario takes the perspective of a teacher who wants to encourage her students about what they learn and the different skills they acquire through their school and classroom activities. She uses the opportunity after a group-based activity to reflect upon the skills.

Context: Irina has just completed a group-based activity with her History students and uses the last 15 minutes of the class time to reflect upon what they had learned. She asks the students to suggest any GES that they think they may have learned from the activity. One student asked what GES are. To Irina's surprise, one of the other students was very quick to respond and explained what they are and suggested how one could learn more about them. Some students suggested skills such as "Teamwork" and "Critical Reflection". Irina asked the students to reflect upon why they think they had gained their skills. She asked them if there were specific aspects of the group activity that contributed to the skill or were they specific incidents that happened in the group. This made the students think a bit. Some of the students turned towards their neighbours and exchanged a few words. There were follow up questions to Irina and Irina was very happy to see the students' engagement and the lively discussions. The students had identified quite a few skills that they through they had acquired or improved through the group activity.

One student asked Irina how they could document these skills and if there was any value in documenting them, e.g., to include in their CVs. Many students had opinions about this and in fact, some were already doing this through a mobile app called the GES App. One student volunteered to show her list of skills to the class. This triggered more discussions and helped students recognise even more skills.



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The 15 minutes passed very quickly, and Irina promises her students that she would have another reflection session about GES next week. Several students gathered enthusiastically around the student who showed the skills list from the GES App.

Relevance: The use case scenario is relevant for illustrating to teachers the importance of relating their classroom activities to GES and to encourage reflections about the skills that are learned beyond the contents of the academic curriculum.

9 Use Case Scenarios – Combined Perspectives

In this chapter, a use case scenario that combines the perspectives of the student, staff, in this case a careers adviser, and the employer is presented.

9.1 Use Case Scenario 8 - Student preparing for a specific job

Student's perspective: Sarah is a student, who is focused on getting an interesting job after completing her university studies. Sarah is actively looking for job opportunities and preparing her CV and job applications. She is concerned about creating a good CV that will make her attractive to her potential employers and she is keen to find good ways to present her skills and experiences to potential employers. Thus, Sarah decides to get an appointment with the university's careers adviser ask for advice.

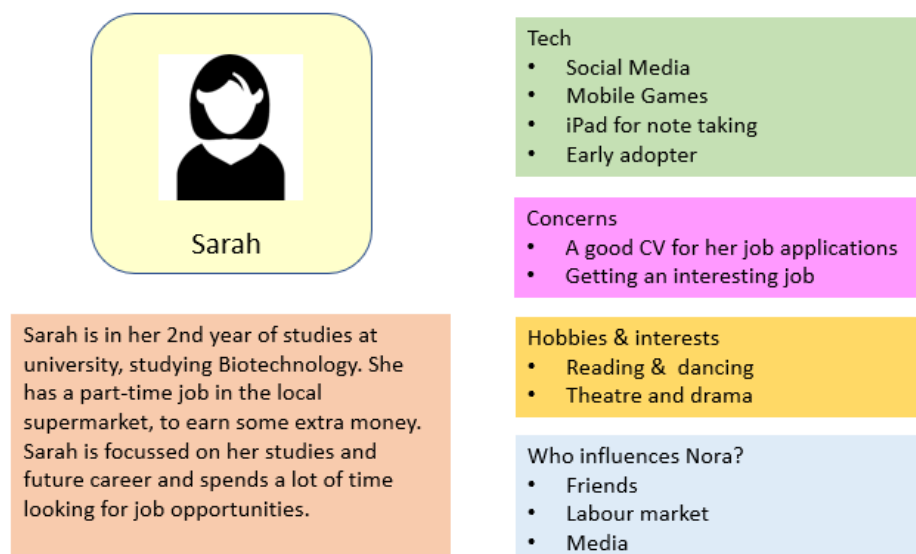


Figure 24: Persona for use case scenario - student preparing for a specific job

Sarah applies for jobs quite often and is anxious to have an interesting job that she could start soon after her graduation. She had been told by the Careers Adviser at the university that she should

carefully consider the skills and experiences she lists in her CV, and they should be tailored to the job position, to have maximum effect.

A friend introduces Sarah to a mobile app, the GES App. Since then, Sarah has been using the GES App regularly and records all her skills in the app. Sarah sets herself a goal using the Dream Job functionality and explores the diverse career paths that are possible with her set of skills. She discovers a selection of learning resources, in the form of games, videos, YouTube and other online sources, that are available through the GES App.

Sarah browses through her skills stored in the GES App and wonders if she could use some of that information as a part of her CV. Based on the advice from the Careers Adviser, she would like to be able to tailor make her list of skills and experiences for each job application. Sarah explores the GES App to see if this is possible and she found the functionality to create a CV. She selects the relevant Skills and the related Experiences, References and Artifacts that she would like to include in her CV and exports it as an editable file from the GES App. She receives the export list of Skills as an email message. She copies the contents into her CV template and edits the format and adapts her CV to the needs of the job. Sarah found this to be an effective means of tailoring her CV, where she could very quickly obtain an over-view of the relevant skills and include them in any CV template.

Sarah attends a jobs fair at the university and comes across a company that she would like to apply for a job. She approaches the stand waits patiently for her turn, and is greeted by a lady, who introduces herself as Helen, the head of Human Re-sources (HR). Sarah gets very excited and she wasn't quite sure what to say. She takes up her mobile phone and accesses her skills profile overview in the GES App. Helen looks a bit puzzled at first but waits patiently for Sarah to talk. Sarah asks Helen about the possibilities of getting a job in her company. She shows her skills on the GES App and starts asking specific questions about the types of skills and experiences that would be relevant for the job. Helen identifies that Sarah had listed several skills that she would like to see in her employees and asks about how Sarah had acquired these skills. Sarah happily explains her experiences and the skills that she has acquired while working with her drama group and how those could be relevant for working with other people and motivate her teammates. Helen invited Sarah to contact her if she had more questions related to applying for a job in her company. Sarah feels that she has a better idea of the skills that she needs to focus. Sarah leaves the stand very motivated and excited, and very glad that she had been using the GES App.

Staff's perspective – Careers Advisor: We take the perspective of a career's adviser, a role which could also be played by a teacher or a mentor for students. Jon is a Career's adviser at Sarah's university and is keen on providing constructive and personalised advice to students that can be

beneficial to their careers and in their endeavours in job applications. He often finds it challenging to have an overview of each student's skills and thus providing specific personalised help. When Sarah asked for his advice and showed him an overview of her skills and experiences that she had documented using the GES App, Jon was very impressed and motivated to help her. He found it easier to provide constructive advice to Sarah on how to improve skills with respect to the different career options and how to fine tune her CV by selecting the most relevant skills.

Employer's perspective: Helen, the HR manager of a company attends a job fair at a university to meet potential employees. These events often tend to be quite tiresome, and it becomes very difficult to spot the potential in students and identify the really good ones. Helen starts talking to a student, Sarah, who had a mobile app, where she had systematically documented her skills and experiences, and had assessed her level of skills. The possibility to see the skills profile of a student made it quite interesting and easier to have a conversation, and to provide more specific information related to the possibility of working for the company. Helen's interests are aroused as she is able to see specific skills and relevant experiences, which none of the other students that she had spoken to had shown. She enjoyed talking to Sarah as it was easier to talk about the specific needs of the job as well as give relevant and specific hints, so that Sarah could create a focused and relevant CV and job application. Helen makes a note of Sarah's name and offers to answer any questions that Sarah may have later on.

10 Best Practice scenario

In this chapter, a best practise scenario is described.

Introduction: The aim of this use case scenario is to look at the use of the GES-APP by a group of 4th year psychology students at a Scottish university taking a Psychology and Education module. There would be two aims in using the App. The first is to support the students in thinking about their future employment. The second is to make them think more deeply about the aims of education in the 21st century, and to critically evaluate the focus on skills and employability in modern approaches to learning. The Psychology and Education module has a strong focus on learning and factors that affect effective learning. Recent years have seen an increased focus on skills and employability in Higher Education, and on thinking about these from an early stage in one's career. The skills incorporated into the app were derived from a review of recent theories of employability skills.

Aims: The aim of this use case scenario is to look at the use of the GES-APP by a group of 4th year psychology students at a Scottish university to support them in thinking more deeply about the value of employability skills and their future employment.

Persona: A Psychology degree provides students with good knowledge and understanding about human motives and emotions, cognition, personality and social relationships. However only a relatively small percentage of students with a psychology degree carry on to work as practicing psychologists. The jobs that psychology graduates take up are very varied, with many working with people in health, counselling, education, business and retail, police force etc. These jobs require a good knowledge of human behaviour, cognition and emotions, but this is not always obvious to students.

Psychology degrees tend not to include work placements or apprenticeships, although many students work part-time or do voluntary work while studying, and they are acquiring useful skills while they are doing that.

The GES APP will allow Psychology students to consider the variety of jobs that they want to pursue when they graduate and to think about the employability skills that these jobs require. This is very much in line with current thinking about the value of an employability focus in higher education and is especially valuable in degrees that are not strictly vocational.

Perspective of the user: Psychology students can take a Masters degree that would allow them to become a clinical psychologist, an educational psychologist, an occupational psychologist etc.

The app should help psychology students to become aware of a range of possible careers they might follow in addition to becoming a psychologist, as well as the skills they would need for that.

Context: The psychology students would be introduced to the GES App during a lab-based workshop where they would have the chance to use the GES-APP along with a tutor looking at the importance of employability skills in their degree and the skills required for specific jobs that they might want to follow.

Relevance: This use case scenario is relevant for illustrating to psychology students the range of jobs that might be available to them in addition to becoming a psychologist.

11 Summary

The aim of this intellectual output is to provide guidance to support students to plan, record and evidence the acquisition and development of Graduate Employability Skills throughout their university journey. In addition, support for teachers and Career Advisers is provided as use case

scenarios. The document describes the user interface and functionalities of the GES App mobile application and demonstrates the usability through user experience and different use case scenarios. The GES App offers help students to identify, document, and improve their skills. It is a convenient way of documenting and obtaining a quick overview of their skills and evidence of the skills. Through a crowdsourced skills repository and an overview of job profiles and relevant skills for the jobs, it helps to increase students' knowledge about GES and market needs and helps them plan their careers effectively. It provides access to curated Learning Resources relevant for the specific skills. It also provides a means for targeted career planning through the concept of Dream Jobs. Furthermore, it could help students plan for their job interviews and provides convincing means of communicating their skills to potential employees.

We are continuing the evaluation of the GES App across all the partners and documenting best practices, which will be valuable resources for students and staff.

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