



IT6035

Mobile Development

PRACTICAL TASKS

Course Level: 6

Course Credits: 15

Weighting towards the Final Grade: 25%

OVERVIEW

In this practical assessment you will design a mobile application based on the scenario provided. The purpose is to create sketches and wireframes for different views in the mobile application by applying software development practices. It includes requirement analysis, design patterns, decision making, design documentation, and wireframes.

This assessment consists of three tasks:

1. Refine the presented mobile application idea by adopting a research methodology. You are required to document the whole process including decision making and justification.
2. Create sketches and wireframes for different views in the mobile application. You are required to select a specific design pattern and justify the decision.
3. Analyse user feedback and list possible modifications to the applications design.

LEARNING OUTCOMES

- LO1. Design and write programs considering appropriate design patterns and following applicable software development standards and practices in a realistic setting, as they apply to mobile application development.
- LO5. Apply professional and ethical practice to address sustainability, equity, social or contemporary cultural issues.

CONDITIONS

- It is recommended that you spend between **5-7 hours** on this assessment.
- All course materials, and any other resources, can be used to complete this assessment.
- The work you submit must be your own work. It is an individual assessment.
- You can ask a tutor to clarify the instructions, and/or for advice, but they cannot do or solve the required tasks – you must carry out all the tasks yourself!

SUCCESS CRITERIA

You are required to obtain a minimum of 50% of the total available marks to be successful in this assessment. The assessment will be marked according to the rubrics provided in the Marking Form attached with this assessment. Please take time to read it.

A maximum of two attempts are allowed to complete this assessment. The maximum percentage to be awarded on a second assessment attempt is 50%.

This assessment contributes to **25%** of the final course grade.

Note: it is essential to pass each assessment in order to pass the course.

SCENARIO

You have been approached by a potential client to develop a mobile application for one of their businesses. The client has two ideas for the mobile application and is happy to select the ones that you would like to develop.

You are required to present the selected idea to the board of directors. For this purpose, the client is interested to see you refine the idea, and visually present it by using wireframes.

REQUIREMENTS

Client Mobile App Ideas (choose one);

1. Hotel's automated service.

Features:

- Guests can order a room service meal.
- Guests can ask to have their room made up.
- Guests can set up an electronic "Do not disturb" sign visible to the hotel staff through the app.
- Guests can book a spa treatment.
- Guests can order a wakeup call.

2. Restaurant's automated service.

Features:

- Diners can order a meal from various menu categories.
- Diners can order a drink from the drinks menu.
- Diners can take a photo of their meal through the app that will automatically frame it with the restaurant name.
- Diners can rate their food through the app.
- Diners can share photos of their food and restaurant experience to Instagram.

TASK 1: REFINING THE IDEA

1. Read the requirements carefully and decide which idea you would like to develop further.
2. Create a document to log mobile application development (MAD) activities. Name this document as **IT6035_MobileAppDevelopmentLog_<StudentID>**. This document will be used to note down important points and decisions during the research and refinement process. Moreover, it will contain information regarding the selected design patterns, including the justification, and user feedback.
3. Conduct further research to refine the selected idea using one of the methods studied in this course. You may use one or a combination of the following:
 - Observation and interviews
 - The Affinity Diagram
 - The Card Sorting method
 - The Tree Test method
4. Write your decisions and provide rationale for each of the decisions you have made during the research phase. Log this information under the **Research** heading in the MAD document. You are required to record at least three decisions.
5. Expand the mobile application idea and define three user groups, i.e. target, supported and non-supported users. Log this information under the User Groups heading in the **Mobile App Development** document. Subsequently, prepare three Persona Documents for the potential users from the target user group. Log this information under the **Persona Documents heading** in the MAD document.
6. Write three Scenarios describing different sets of circumstances that the mobile app can help to resolve. Log this information under the **Scenarios** heading in the MAD document.
7. Create three User Journey descriptions fit for the Scenario documents you have created. Document the User Journeys in the Mobile App Development Log under the **User Journeys** heading.

TASK 2: SKETCHING AND WIREFRAMING

1. Create sketches for at least three views to support the refined idea. Take photos of your sketches if they are manually sketched by using pen and paper. Log these sketches under the **Sketches** heading in the MAD document.
2. Specify the mobile application design patterns that are used in your sketches. Explain the role of these design patterns to improve the user experience. Log this information under the **Design Patterns** heading in the MAD document.
3. Create wireframes for at least three views to support your refined idea. Log this information under the **Wireframe** heading in the MAD document. We recommend to use the Justinmind tool, however you are open to using another wire framing tool approved by the course tutor. Try to use a variety of elements and actions in wireframes. Make sure that the designed sketches and wireframes fulfill all the user requirements.
4. Collate user feedback and present the list of possible modifications to the application design. For this purpose, it is recommended to do the following:
 - Decide what to test and the testing approach you would like to take.
 - Provide users with context and the questions specific to what you would like to test.
 - Observe how the participants react to the product.
 - Collate the feedback and identify important findings. Summarise this information under the **User Feedback** heading in the MAD document.

TASK 3: UX ACCESSIBILITY AND DESIGNING FOR VARIOUS CULTURES

Create a proposal for the mobile application design that is suitable both for multi-culture people and people with disabilities. Outline important changes (at least three) and resultant improvements in the mobile application. Log this information under the **Accessibility and Localisation** heading in the MAD document.

SUBMISSION CHECKLIST

Use the following checklist to ensure that all tasks are completed to a good standard.

Task	Completed
Task 1: Refining the idea	
The submitted mobile application design matches one of the client's ideas.	<input type="checkbox"/>
The IT6035_MobileAppDevelopmentLog_<StudentID> document is created and it contains the Research, User Groups, Persona Documents, Scenarios and User Journeys headings.	<input type="checkbox"/>
The relevant information is presented under each heading in the IT6035_MobileAppDevelopmentLog_<StudentID> document per the steps in Task 1.	<input type="checkbox"/>
Task 2: Sketching and Wireframing	
The IT6035_MobileAppDevelopmentLog_<StudentID> document contains the Sketches, Design Patterns, Wireframes and User Feedback headings.	<input type="checkbox"/>
The wireframes for at least three views are created by using a variety of elements and actions.	<input type="checkbox"/>
The relevant information is presented under each heading in the IT6035_MobileAppDevelopmentLog_<StudentID> document per the steps in Task 2.	<input type="checkbox"/>
Task 3: UX Accessibility and Designing for Various Cultures	
The IT6035_MobileAppDevelopmentLog_<StudentID> document contains the Accessibility and Localisation headings.	<input type="checkbox"/>
The relevant information is presented under the Accessibility and Localisation heading in the IT6035_MobileAppDevelopmentLog_<StudentID> document per the steps in Task 3.	<input type="checkbox"/>

SUBMISSION INSTRUCTIONS

- You are required to submit all three tasks of this assessment together.
- Go through the submission checklist to ensure that everything is completed as per the expected standard.
- Upload all the required documents and files through the upload facility in iQualify.
- Read the declaration before submitting the assessment in iQualify.