



IT6035

Mobile Development

Written Assessment:

Mobile Optimisation

Course Level: 6

Course Credits: 15

Weighting Towards the Final Grade: 25%

OVERVIEW

In this written assessment, you will demonstrate your ability to research, analyse, and optimise software for mobile devices. It includes the following.

- What is mobile optimisation? Analyse the benefits of mobile optimisation.
- Identify steps involved in mobile optimisation of the website.
- Advise on the design and performance risks in the specific case of website mobile optimisation.

Learning Outcomes

This assessment contributes to the following course 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.
- LO3: Analyse and apply software optimisation concepts and techniques for the mobile app to work more efficiently and use less resources.

Conditions

- It is recommended that you spend between 10-15 hours to complete 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 an advice, but they cannot do/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 given below. 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 written assessment contributes to 25% of the final course grade.

INSTRUCTIONS

In this assessment you are asked to create document containing the following parts:

1. Definition and analysis of the benefits of mobile optimization.
2. Identify the steps involved in mobile optimisation of the website.
3. Provide examples and analysis of real-world mobile optimised websites.
4. Advise on the design and performance risks in specific cases of website mobile optimisation.

Deliverables

You are required to provide evidence of your work as a **single** deliverable for this assessment. This evidence must be collated into one document, named **IT6035_WrittenAssessment_<your StudentID>**. Make sure that each part of the assessment is clearly indicated.

Task 1: Mobile Optimisation Overview

Marks: 15

Create a document named **IT6035_WrittenAssessment_<StudentID>**. In that document under the **Task 1 – Mobile Optimisation Overview** heading describe the following:

1. What is a mobile optimised website?
2. What are the benefits of a mobile optimised website? List at least three.
3. What are the challenges of implementing mobile optimization? List at least three. Provide a way to overcome the challenges listed.
4. Given the challenges and benefits you have listed, conclude the importance of mobile optimisation. Provide arguments in support of your conclusion.

Task 2: Mobile Optimisation Examples

Marks: 9

In the **IT6035_WrittenAssessment_<StudentID>** document under the heading **Task 2 – Mobile Optimisation Examples** add the following:

1. How can you recognise that the website is mobile optimised? List at least three factors.
2. Provide screenshots of two mobile optimised websites. Include analysis of what makes those websites mobile optimised.

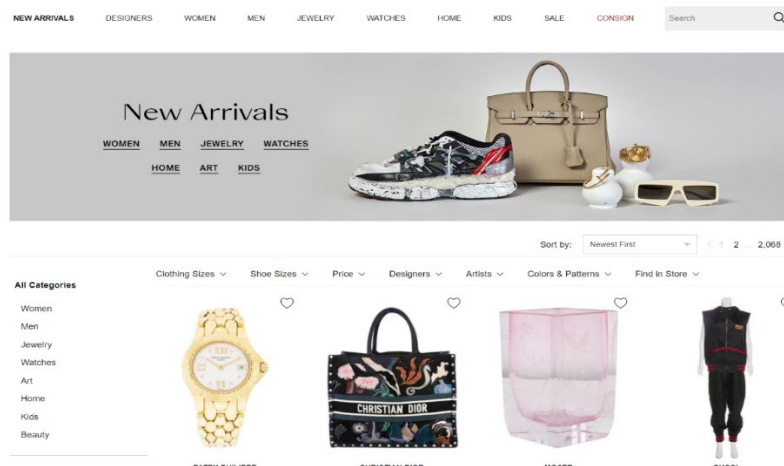
Task 3: Design and Analysis of Specific Case

Marks: 12

Scenario

A company, that runs a designer brand online shop, is interested in updating the mobile version of their website. The company already has a mobile app but it could not efficiently load heavy images, hence is too slow. Usually, it takes up to 7 seconds to load a page. Consequently, the majority of the potential customers (mobile app users) leave the website after browsing one or two pages. Moreover, the existing mobile app is user friendly. The company is interested to make it mobile optimised.

Below is a screenshot from the website for your reference.



The company director wants to make sure that the new version of the website will run faster without sacrificing image quality.

You are required to advise on the design and performance optimisation steps that are needed to efficiently load mobile app pages.

Tasks

In the **IT6035_WrittenAssessment_<StudentID>** document under the heading **Task 3 – Design and Analysis of Specific Case** specify the following:

1. Identify the risks in creating a mobile app based on the original website. What should you look for when designing and developing the app?
2. Based on the risks identified, create a best practice guide for the company outlining best practices in mobile app optimisation that will apply to the specific case listed.

SUBMISSION

To submit your work:

- Verify that all items have been completed using the submission checklist provided.
- Upload your individual assessment documentation to iQualify (*Course Home > Tasks tab > Written Assessment*).
- Read and agree to the declaration, and submit the assessment in iQualify.

SUBMISSION CHECKLIST

Before you submit your work, make sure you have completed all the tasks in this checklist:

Task	Completed
The document named IT6035_WrittenAssessment_<StudentID> is created and contains the following headings: <ul style="list-style-type: none">▪ Task 1 – Mobile Optimisation Overview▪ Task 2 – Mobile Optimisation Examples▪ Task 3 – Design and Analysis of Specific Case	<input type="checkbox"/>
You have provided all required information listed in Task 1 under the Task 1 – Mobile Optimisation Overview heading	<input type="checkbox"/>
You have provided all required information listed in Task 2 under the Task 2 – Mobile Optimisation Examples heading	<input type="checkbox"/>
You have provided all required information listed in Task 3 under the Task 3 – Design and Analysis of Specific Case heading	<input type="checkbox"/>