# **Group Project**

#### Aims

- Develop an understanding of developing software in a group environment;
- Develop an understanding of how the tools are used to control the complexity of developing large software in groups;
- Develop an understanding of how software engineers operate in industry;
- Develop an understanding of the tools used to develop large scale software;
- Develop an understanding of the software development life-cycle.

### **Learning Outcomes**

- Understand how to work as part of a team to design, build, test and deliver a software system;
- Gain experience of the software development processes typically used within industry;
- Be familiar with the main tools and technologies used to support the development and management of software systems;
- Understand the key components involved in designing, building and testing a software system.

#### Brief

This is a group project to deliver a report on the development of a piece of software. A general description of the project will be given, along with an opportunity as a class to interview the "customer" who will give more details. It is expected that the group will gather requirements, design the software, then develop and test it. Note that although the delivery of the software will be feasible within the time allowed, it is not necessary that this is done. However, the report should show that the group understand how they would have reached the point of shipping the software.

### Submission

There are submissions that must be made for each group and for each individual. If a group submits their submission late, a late penalty will be applied to the entire group. If an individual submits their individual submission late, a late penalty will be applied to that individual only. If the individual submission is not completed properly then this will be considered a late submission until a correct submission is made. Two submission pages will be open, one for the group submission and one for individual submissions. The group will be given a mark based on the group submission, this may be changed for individuals based on individual submissions from the group.

### **Group Submission**

Each group must submit a written report covering the following topics:

- Introduction and background
- Requirements
- Design
- Construction
- Testing
- Project Management and Lifecycle

## **Individual Submission**

- 1. Each individual must submit a single paragraph on their contribution to the group.
- 2. Each individual must submit a peer assessment form regarding their team member's contribution to the group. Peer assessment forms are available on MyPlace.

# Marking Criteria

•	Introduction and background	5%
•	Requirements	20%
•	Design	20%
•	Construction	15%
•	Testing	20%
•	Methodologies & tools for the software development lifecycle	15%
•	Structure and layout of final report	5%

## Contribution to the overall mark

This assignment constitutes 30% of the marks for this module.

#### Dates

Submission due date: 12:00 noon, Thursday April 2<sup>nd</sup>, 2020