CSE2101 Software Engineering

Semester Project

**Submission 0:** Preliminary Work

Briefly outline your proposed project idea. Be sure to list all group members. Your group from the CSE2102 - Semester Project must be retained for this project.

**Date for submission:** 21st September, 2018 no later than 11:30 p.m.

**Email to**: alicia.layne@uog.edu.gy

**Subject:** CSE2101\_Sub0\_GroupLeaderFirstName\_GroupLeaderLastName

**Submission 1:** Project Plan

Based on your **approved** project idea you are required to prepare a project plan. It must include the following:

1. Feasibility Report;
2. Project Risk Assessment;
3. Software Quality Assurance Plan;
4. Cost Estimation;
5. Schedule.

Feasibility Report   
Your feasibility report should address the:

* Product: A general statement of the product; give a brief description of what the proposed system will do, highlighting where the proposed system meets the specified business requirements of the organisation.
* Technical Feasibility: Will the proposed system perform to the required specification? Outline technical systems options you propose to use which will give a technical solution satisfying the requirements and constraints of the system, as outlined in the terms of reference.
* Social Feasibility: Consideration of whether the proposed system would prove acceptable to the people who would be affected by its introduction. Describe the effect on users from the introduction of the new system; consider whether there will be a need for retraining the workforce. Will there be a need for relocation of some of the workforce? Will some jobs become deskilled? Will the current workforce be able to perform effectively any new tasks introduced by the proposed system? Describe how you propose to ensure user cooperation before changes are introduced.
* Economic Feasibility: Consider the cost/benefits of the proposed system. Detail the costs that will be incurred by the organisation adopting the new system; consider development costs and running costs. Detail benefits that the new system will bring, direct economic benefits such as reduced costs, and indirect benefits, such as improved management information and better customer service. Illustrate the cost/benefit of the new system by applying a suitable cost/benefit analysis method such as the payback method.

*Adapted from* [*https://www.sqa.org.uk/e-learning/SDM02CD/page\_12.html*](https://www.sqa.org.uk/e-learning/SDM02CD/page_12.html)

Risk Assessment

This should be done in a tabular format. The following headings are required:

* Risk description
* Type of risk
* Source of risk
* Classification of risk (probability and consequence)
* Effect of risk
* Plan to minimize/avoid risk

A minimum of ten (10) risks must be considered.

Software Quality Assurance Plan

This document describes the procedures and control methods to obtain the desired quality of the end products and the process by which these end products are created. It will therefore specify product and process quality standards and will serve as a guide for the client and development team. All team members would read this document and apply the procedures stated in it. Be sure to explicitly describe the following:

* The management and organization of the Software Quality Assurance team
* Standards, practices, conventions and metrics related to:
  + Document preparation (e.g. formatting and header specification for all company documents)
  + Uniform code comment
  + Testing standards

Note: *subsequent documents submitted must adhere to these standards*

* Compliance monitoring of standards

Cost Estimation

Based on standard cost estimation techniques and models, produce a document estimating the cost of your proposed project.

Schedule

Create a detailed project schedule and represent it in a Gantt Chart. Be sure to highlight milestones.

**Date for submission:** 5th October, 2018 no later than 11:30 p.m.

**Date for submission:** 27th October, 2018 no later than 11:30 p.m. (students not doing database course)

**Name of File:** Sub\_1

**File Type:** pdf

**Email to**: alicia.layne@uog.edu.gy

**Subject:** CSE2101\_Sub1\_GroupLeaderFirstName\_GroupLeaderLastName

**Submission 2:** Requirements Specification

Use Submission 1 to guide the creation of a Software Requirements Specification document for your project. This document is essentially a description of the software system to be developed. It lays out the functional and non-functional requirements, and should include use cases which describe the user interactions that the software must provide. Use this modified [IEEE SRS template](https://drive.google.com/open?id=1wZ9TIjHdb7yUyw24P2kfS0nESaX_3SQH) to help guide your preparation of the document. Note it is a guide - so feel free to further modify it (within reason) and add other relevant information.

**Date for submission:** 27th October, 2018 no later than 11:30 p.m.

**Date for submission:** 10th November, 2018 no later than 11:30 p.m. (students not doing database course)

**Name of File:** Sub\_2

**File Type:** pdf

**Email to**: alicia.layne@uog.edu.gy

**Subject:** CSE2101\_Sub1\_GroupLeaderFirstName\_GroupLeaderLastName

**Submission 3:** System Design

You are required to prepare the following diagrams and models for your system:

1. Context model;
2. Sequence diagram for any five use cases;
3. Class diagram;
4. Activity diagram.

A brief description should accompany each diagram. Be sure to use appropriate UML symbols and design. Diagrams should be clear and accurate. Hand-drawn diagrams are not acceptable.

**Date for submission:** 3rd November, 2018 no later than 11:30 p.m.

**Date for submission:** 17th November, 2018 no later than 11:30 p.m. (students not doing database course)

**Name of File:** Sub\_3

**File Type:** pdf

**Email to**: alicia.layne@uog.edu.gy

**Subject:** CSE2101\_Sub3\_GroupLeaderFirstName\_GroupLeaderLastName