Software Specification Project

S2 AS/A Level Computer Science Assessment 6 Due 12/12 30 Marks

The **Software Specification project** is to produce a specification for a fully-functional python program. The student should first pick a program they wish to make, and then design the specification. The student need **not** write the actual python code until next semester. This semester we are making the specification (this assessment) and design documentation (assessment 7) only.

Project Specification Document (25 marks)

We all know communication is very important. This is very true when we are first designing a program for a customer. Often the customer and the programmer have different ideas of what should be made and how the problem will be solved. The *Software Specification* document is designed to clear up these miscommunications. This document gives a high-level description of the project that the developer will make, criteria for completion and milestones. It does not include deep technical details about the code or design itself (this is done in the Software Design document).

In our class we will produce a simplified version of this document; including:

- Overview
- Use Cases
- User Interface Sketches
- Functionality
- Testing Strategy

Overview

Include a short description and name of the project to be made. (2 marks)

Use Cases

This section helps the reader understand the types of ways the software will be used. You can describe your idea using *Structured English* for each use case. (9 marks)

User Interface Sketches

The user interface is one of the most controversial parts of your specification. As such, the rough idea needs to be agreed upon before beginning to make the software. Please draw a rough sketch of some of the screens that you will make in your software.

(5 marks)

Functionality and Limitations

This should discuss some features of your software and answer fundamental questions (if applicable) :

- What does the application do?
- What are the possible failure conditions and how are they handled?
- What one-time operations are done at the first execution (i.e. at the beginning of the program)?
- What are the limitations of the software?

(4 marks)

Testing Strategy

Please include some explanation of the way you intend to test your code. Name the type(s) of testing you intend to use and give some further details about it. (5 marks)

Handing in (5 marks)

Due date for this assignment is Monday, Dec 12th in class. Submitted documents include:

- Printed version of the **Software Specification**
- Digital (PDF) version of the **Software Specification**, named "spec.pdf"

Some marks will be allotted to the general quality of your submission (5 marks)