Assignment 2 Guidance

# Task 1 – Introduction to your program (P3)

In this part, you will have to present the list of user requirements of your application before designing the solution. Then, you will give a brief explanation how your application could solve the problem.

The application has to allow user to enter inputs and perform specific CRUD (Create / Read / Update / Delete) actions.

*(Word limit: 100 – 250 words)*

# Task 2 – Explain programming paradigms (P2)

Next, you will need to explain what procedural, object-oriented (Class and Object) and event-driven paradigms are with their characteristics. Source code with explanations need to be included to justify these paradigms.

Then, you will explain why and how your program use these (or some of) paradigms.

*(Word limit: 700 – 1200 words)*

# Task 3 – IDE features (P4 – M2 – M3 – M4)

Before jumping to the implementation phase, you will present the chosen IDE to develop the application. You will the common features of an IDE should have and evidence (e.g., screenshots) of how the IDE was used to manage the development of your code.

Then, you will give:

* An evaluation of developing applications using an IDE versus developing an application without using an IDE.
* An explanation and evaluation of the debugging process in the IDE used and how it helped with development.
* Evidences that you have used debugging during the implementation

*(Word limit: 500 – 700 words)*

# Task 4 – Design and Implementation (P3 – P5)

Next, you will give the design of your application by using suitable diagrams such as: Flowchart, Activity diagram to describe its behaviours before implementing it.

When your application is finally implemented, you will need to include evidences (source code, result images) to show how it is implemented and works properly with explanations.

Finally, you have to explain and evaluate coding standards used in your program and the benefits to organisations of using them.

(*Word limit: 500 – 700 words)*

Report Structure

# Chapter 1 – Introduction to your program

* 1. Introduce the Overview/ Context of the problem
  2. List out application’s requirements

# Chapter 2 – Explain programming paradigms

2.1 Explain what is Procedural Programming with source code and illustrations

2.2 Explain what is Object-Oriented Programming with source code and illustrations

2.3 Explain what is Event-Driven Programming with source code and illustrations

2.4 Conclude which paradigms will be used to develop the application with explanation

# Chapter 3 – IDE features

3.1 Introduce what is IDE

3.2 Introduce features of IDE with illustrations

3.3 An explanation and evaluation of the debugging process in the IDE used and how it helped with development.

3.4 Evidences that you have used debugging during the implementation

3.5 An evaluation of developing applications using an IDE versus developing an application without using an IDE.

# Chapter 4 – Design and Implementation

4.1 Flowchart of the application

4.2 Source code and screenshots of the final application with explanation

4.3 Explain and evaluate coding standards used in the program

4.4 Explain the benefits of using coding standards