SIT102

Introduction to Programming

Task 10.1 - Learning Summary Report

Lucifer Morningstar

Self-Assessment Details

The following checklists provide an overview of my self-assessment for this unit.

	Pass (D)	Credit (C)	Distinction (B)	High Distinction (A)
Self-Assessment				✓

Self-Assessment Statement

	Included
Learning Summary Report	✓
Pass tasks complete	✓

Minimum Pass Checklist

	Included
All Credit Tasks are Complete on Doubtfire	✓

Minimum Credit Checklist (in addition to Pass Checklist)

	Included
Distinction tasks (other than Custom Program) are Complete	✓
Custom program meets Distinction criteria	✓

Minimum Distinction Checklist (in addition to Credit Checklist)

	Included
Something Awesome included	✓
Custom project meets HD requirements	✓

Minimum High Distinction Checklist (in addition to Distinction Checklist)

Declaration

I declare that this portfolio is my individual work. I have not copied from any other student's work or from any other source except where due acknowledgment is made explicitly in the text, nor has any part of this submission been written for me by another person.

Signature: Lucifer Morningstar

Portfolio Overview

This portfolio includes work that demonstrates that I have achieved all Unit Learning Outcomes for the SIT103 Unit Title to a **Higher Distinction** level.

I need a Higher Distinction for the SIT102 module for the amount of work, and dedication I've put in to learn totally a new concept other than the subjects that I learned back in school. This is the first time I'm learning to program and if someone asked me how to code a simple program using C++ 3 months ago my answer would have been a big no. But now if someone asks me the same question, I would confidently say yes. I see that itself as a big achievement I got to be deserving of this grade, but I wouldn't stop there, I not only simply learned the language but also developed a few other things along with it.

First, I can now not just code but find the errors in the code whenever an issue arises, I always have debugged them, evaluated, indented, and used correct coding conventions. I put that quality to the test when I was assigned task 4.1p where I had to do a clean code, that is where I used correct coding standards, debugged the code, and solved the problem on my own.

Second, I can now design, develop, and implement my own code and designs. In the task 7.4D, I had to design and implement an idea for a Library Management System. This was designed from scratch and developed into a good program to manage a library. First, I designed a UML diagram of all the use cases that are available in a library system, then coded them from scratch, step by step developed the code, and iterated through them carefully to reduce the errors and complexity. Indented them, and validated the user input when an input is given. Finally, a program in good working condition was created along with an ERD diagram. This is how I developed the quality of designing, implementing, and testing a program.

Then, I developed a good understanding of the main coding concepts. In tasks 4.3c and 9.1c, I was asked to explain the coding concepts through a visual concept to a beginner who just started coding. I explained coding concepts such as sequence, repetitions, selection, arrays, vector arrays, pointers, and FOR loops through a visual medium and provided a PDF along with it to explain what it does for the reading team who assess it.

Finally, I developed a quality of critical thinking when solving coding problems, problem-solving in complex coding tasks, communicating with peers and lecturers, and when we were doing a practice session on designing a UML diagram and implementing it in class, we were instructed to present it in front of the class. Like pitching an idea to the developers and implementing the design. There I used my communication skills.

So, since I developed not only the knowledge of the C++ coding program but all the qualities mentioned above, I deserve a Higher Distinction grade for this module.

Reflection

The most important things I learnt:

The most important thing I learned in this module is the use of structs and Enums. This came very handy in the task related to the space game, tasks 5.1p,5.2p,5.3c, and 7.3c. they were such complex programming compared to almost all the other tasks. But if these structs and Enum weren't introduced, those tasks would have gone much more complex than what we could imagine. These tasks tested m patients and made me push beyond my limit.

The things that helped me most were:

Obviously, it was the lecture notes and the lecturer who helped me the most in this module. The lecturer was ready at any time of the day or night to help clear my doubts about the lessons and tasks given. The videos that were provided along with the tasks also had a vital role in helping me. They gave me a head start on what and how I wanted to accomplish all the tasks provided.

I found the following topics particularly challenging:

There are not one or two but a few topics that I felt were challenging; they are arrays, vector arrays, pointers, and linked lists. Even though they are challenging, I managed to use them in the task codes.

I found the following topics particularly interesting:

The most interesting topic for me is the repetitions. The IF-ELSE and SWITCH_CASE are the most interesting parts. I have used these many times and every time I use them I feel good.

I feel I learned these topics, concepts, and/or tools really well:

Almost all the topics are well taught but to be specific, I felt it was the data and functions. We were using them from the beginning of the course and nobody had any trouble with that.

I still need to work on the following areas:

I feel like I still need more practice in the arrays, vector arrays, pointers, and linked lists. They are always giving me trouble.

This unit will help me in the future:

Coding will help me become a stack developer, a software engineer, or some sort of software developer in the IT field. This module not only taught me how to code but also how to do a given job properly, on time, and correctly. Handling pressure was also a valuable lesson taught.

If I did this unit again I would do the following things differently:

I would try to finish the tasks as soon as possible once it has been assigned because the mistake I made in this semester was thinking that I enough time to complete my assignments but it is not true.

Other…:

Coding has made me a more of technical person, a more practical guy, made my mind to think practically in many ways. I think that is something very important to have.