COS?????

Object Oriented Programming

Learning Summary Report

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Self-Assessment Details

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

Self-Assessment Statement

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

Minimum Pass Checklist

	Included
Learning Summary Report	✓
Test is Complete	✓
C# programs that demonstrate coverage of core concepts	✓
Explanation of OO principles	✓
All Pass Tasks are Complete	✓

Minimum Credit Checklist (in addition to Pass Checklist)

	Included
All Credit Tasks are Complete	✓

Minimum Distinction Checklist (in addition to Credit Checklist)

	Included
Custom program meets Distinction criteria & Interview booked	✓
Design report has UML diagrams and screenshots of program	✓

Minimum Low-Band (80 – 89) High Distinction Checklist (in addition to Distinction Checklist)

	Included
Custom project meets HD requirements	

Minimum High-Band (90 – 100) High Distinction Checklist (in addition to Low-Band High Distinction Checklist)

	Included
Research project meets requirements	

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: Phan Vu

Portfolio Overview

This portfolio includes work that demonstrates that I have achieve all Unit Learning Outcomes for COS20007 Unit Title to **Distinction** level.

Dear Tutor,

I am writing to request a Distinction grade in COS20007 based on my accomplished tasks.

Throughout this unit, I have worked hard to not only understand but also use the core Unit Learning Outcomes in a more advanced way. The tasks I've done not only cover the basic ideas, but they also go into detail about the most complicated parts of the subject.

The Distinction tasks were done with a strategic understanding of the Unit Learning Outcomes in mind. In particular, the **6.3D – D Level Custom Program Initial Plan** and **6.4D – D Level Custom Program** tasks needed a creative and in-depth approach to bring together the unit's main ideas.

To complete these tasks, I tried to use what I had learned about object-oriented programming in new ways to make a custom program that went above and beyond what was required. It wasn't enough to just meet the requirements; you had to go above and beyond and show that you had a deep understanding and could apply the Unit Learning Outcomes in new ways.

The tasks that were done for Distinction weren't seen as separate projects; instead, they were seen as chances to combine and use the unit's ideas in a broad way. By using what I knew about classes, objects, inheritance, and encapsulation together, I made a program that not only met the requirements but also went above and beyond them by showing how well modular design, complex relationships between parts, and efficient code implementation can work together.

I'm sure that the hard work and skill shown in these Distinction tasks show how dedicated I am to not only mastering the course material but also taking it to a higher level that shows a deeper understanding and use of the Unit Learning Outcomes.

Thanks for looking at my request for a Distinction grade based on the things I've done that are shown in this portfolio.

Sincerely,
Phan Vu

Task Summary

To demonstrate my learning in this unit, I would like the following tasks to be considered part of my portfolio:

Completed Tasks:
1.2P - Object-Oriented Hello World
2.1P - In Person Check-in 1 – Tools
2.2P - Counter Class
2.3P - Drawing Program - A Basic Shape
2.4P - Case Study Iteration 1 - Identifiable Object
3.1P - Clock Class
3.2P - The Stack and Heap
3.3P - Drawing Program - A Drawing Class
4.1P - Drawing Program - Multiple Shape Kinds
4.2P - Case Study - Iteration 2 - Players Items and Inventory
5.1P - In Person Check-in 2 - Drawing Program
5.2P - Case Study - Iteration 3 – Bags
5.3C - Drawing Program - Saving and Loading
6.1P - Case Study - Iteration 4 - Look Command
6.2P - Key Object-Oriented Concepts
7.1P - Case Study - Iteration 5 - Tying it Together
9.1P - In Person Check-in 3 - Case Study
9.2C - Case Study - Iteration 7 – Paths
10.1C - Case Study - Iteration 8 - Command Processor
11.1P - Clock in Another Language
6.3D - D Level Custom Program Initial Plan
6.4D - D Level Custom Program
T1 - Semester Test

Incompleted Tasks:
1.1P - Preparing for Object Oriented Programming

Unknown Status Task:
6.3D - D Level Custom Program Initial Plan
6.4D - D Level Custom Program
7.2C - Case Study - Iteration 6 - Locations
10.1C - Case Study - Iteration 8 - Command Processor
11.1P - Clock in Another Language

Reflection

The most important things I learnt:

OOP opened up a whole new world of coding for me. Understanding classes, objects, and how they interact was a pivotal learning curve. It wasn't just about writing code; it was about structuring it in a way that made sense and was efficient.

The things that helped me most were:

Getting my hands dirty with practical examples was key. Building and experimenting with different classes really cemented the theory. Online resources and tutorials that offered step-by-step guidance were a huge help too.

I found the following topics particularly challenging:

Inheritance and polymorphism had me scratching my head a bit. It took some extra effort to grasp how subclasses inherit properties and behave differently.

I found the following topics particularly interesting:

Encapsulation was a standout! The idea of bundling data with the methods that operate on that data just clicked for me. It made code so much more organized and easier to manage.

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

Class design and implementation were my strong suits. I aced tasks that required creating and managing different classes. It felt like second nature to me.

I still need to work on the following areas:

Polymorphism is an area I know needs more attention. Understanding and implementing it seamlessly is where I need to put in some extra effort.

My progress in this unit was …:

I tried my best to stay consistent with submissions and engaged with my tutor whenever I hit a roadblock. There were times when I struggled to keep up, and it affected my deeper understanding of certain OOP concepts.

This unit will help me in the future:

OOP skills are the backbone of many programming languages and paradigms. Understanding these principles will be crucial in handling more complex projects and moving into advanced programming realms.

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

I'd definitely spend more time practicing polymorphism and seeking more hands-on guidance early on. Also, I'd be more proactive in seeking help from peers or tutors when facing hurdles.

Other…:

This learning journey taught me a lot about patience and perseverance. Sometimes, the challenges I faced helped me understand my learning style better and pushed me to explore different ways of approaching problems.