



# COS20007

## 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				x

### *Minimum Pass Checklist*

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

### *Minimum Credit Checklist (in addition to Pass Checklist)*

	Included
All Credit Tasks are Complete	x

### *Minimum Distinction Checklist (in addition to Credit Checklist)*

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

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

	Included
Custom project meets HD requirements	x

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

	Included
Research project meets requirements	x

## 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: **Kien**

## Portfolio Overview

This portfolio includes work that demonstrates that I have achieved all Unit Learning Outcomes for COS20007 Object-Oriented Programming to a **High Distinction** level.

I have taken the initiative to extend beyond the material presented in the unit. I have pursued independent learning opportunities, exploring advanced topics related to object-oriented programming, such as some specific design patterns, beyond the main scope of the four key principles. By pushing the boundaries of my learning, I have demonstrated a genuine passion for object-oriented programming and a commitment to continuous improvement.

I firmly believe that, with what I have shown in the P and C tasks, in the test, and in the Custom Program and Research Project, I have fulfilled enough, and exceeded, the conditions listed in the OOP's Unit Learning Outcomes.

## Task Summary

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

## Reflection

### The most important things I learnt:

I personally think that the most remarkable thing I have gained in this unit is a detailed understanding of the concept of OOP, including the 4 key principles, the concepts (roles, responsibilities, cohesion, coupling, ... ), and related keywords (public, private, abstract, interface, ...) and how to complete a program/application using the OOP model

### The things that helped me most were:

In my opinion, I think the weekly lectures are the thing that helps me the most in this unit, with them, I have had a specific understanding of OOP, as well as related fields, helping me to complete the courses well. exercises and tests.

### I found the following topics particularly challenging:

I believe the most challenging thing for me is finding a suitable topic and implementing my Research Project, for HD band 2 goal.

### I found the following topics particularly interesting:

From my perspective, the Custom Program is the most interesting part for me in these units, as I not only have to apply all the knowledge that I have learned in the unit but also have to search for more knowledge on the Internet, and learn more from friends to complete the requirements for HD grade.

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

As I mentioned, I have gained an understanding and experience of OOP concepts, and have been able to apply them effectively in the weekly task, in the test, and in the Custom Program and Research Project.

### I still need to work on the following areas:

I firmly believe that what I need to improve in this unit is mainly in my Research Project, where I need to improve my research ability, including gathering relevant sources, conducting experiments and conclude effectively.

### My progress in this unit was ...:

I think I've shown good progress on this unit. I have regularly talked to my tutor about OOP concepts, submitted assignments and unit assignments, and received feedback to improve them. These feedbacks also helped me a lot in completing the following tasks, test, Custom Program and Research Project for this unit.

In my view, this strategy, discussions regularly with my tutor, will also be my main strategy in the next units at Swinburne, especially the Portfolio structured ones.

### This unit will help me in the future:

Obviously, OOP offers significant benefits in the future, as it allows code reuse across objects and classes, promoting modularity and maintainability, which is one of the principles. the basis of any application, or any IT project.

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

I think my disadvantages in this unit include resources and tools irrationally misusing, along with not following up with weekly assignments and letting them pile up at the end of the semester.

If I did this unit one more time, I would strive to address the drawbacks mentioned above.