# COS10009 – Introduction to Programming

*Learning Summary Report*

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## 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 (please tick) | | √ | | |

*Self-assessment Statement*

| | Included (please tick) |
|---|---|
| Learning Summary Report | √ |
| Test 1 and Test 2 are Compete in Ed | √ |
| All Pass level tasks completed (including tutorial tasks) | √ |

*Minimum Pass Checklist*

| | Included (please tick) |
|---|---|
| All Credit Tasks are Complete in Ed | √ |

*Minimum Credit Checklist, in addition to Pass Checklist*

| | Included (please tick) |
|---|---|
| Distinction tasks (other than Custom Program) are Complete | |
| Custom program meets Distinction criteria & Interview booked | |
| Design report has structure chart and screenshots of program | |

*Minimum Distinction Checklist, in addition to Credit Checklist*

| | Included (please tick) |
|---|---|
| HD Project 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: *Saborni*

# Portfolio Overview

This portfolio includes work that demonstrates that I have achieved all Unit Learning Outcomes for COS10009 Unit Title to a **Credit** level.

All the tasks that have been done by me throughout the semester will prove that I have achieved good knowledge and enough understanding in all Unit Learning Outcomes.

In this unit, there were no tasks that I have completed perfectly without getting any errors. I used to debug my code following the line numbers in the console and spend countless hours in debugging which has sharpen my debugging techniques. In this process, I was figuring out where I went wrong and how to fix, some were simple like a missing end and other were major logic errors. I also have decent indentation which helps my code to be readable and easy to understand.

To demonstrate my work, I learned a lot about fundamental concepts in structured programming. Sequence, selection and iteration build up the principle of structured programming, and in ruby we include elements like if-else statement, case statement and while loops which are all shown in the 7.1P task . Even more knowledge was gained through online resources.

7.1P task, GUI Music Player was particularly very challenging for me because in this task I had to use a lot of functions and procedures , custom data type, arrays, parameters passing with call by value. This task includes two classes which declare two new data types . It also includes a couple of arrays , functions that are used to call and read the values from the file into the program by passing parameters

The tasks of week5-week7 were quite difficult for me because in these tasks I had to implement all the concepts together that I have learnt in the previous weeks. In week 5 and week 6 I have learnt modularity and functional decomposition deeply which helped to break my long codes into short separated functions. This helps me a lot to do my pass and credit tasks where I have delegated separated functions to do specific requirements that I had for them .

The week7 tasks were quite challenging for me but I managed to complete **7.1P and 7.2C** tasks.

In the end, all of these helped me to complete my portfolio tasks.

# Reflection

## The most important things I learnt:

The most important things that I learnt in this unit was Ruby Language. Also as I had no prior experience on programming , I learnt about the basic of a programming language very well which is very important for my upcoming learning .

## The things that helped me most were:

The helpdesk sessions were super helpful. Anytime I was stuck on anything I could join in one helpdesk session and asked tutors directly rather than mailing them.

## I found the following topics particularly challenging:

I found Gosu particularly challenging because there were not enough online resources on it and also in the lecture very little time was spent to go through all the function of it.

## I found the following topics particularly interesting:

Different types of loops and how they make our program very simple.

Arrays, storing similar data in one container.

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

Loops and Arrays –

Even though the concept of these topics are very simple but using them in program were particularly challenging for me but many of the portfolio tasks we had to use these so I got to practice a lot to eradicate my weakness on these topics and eventually succeeded.

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

I need to improve my understanding of Gosu

## This unit will help me in the future:

I suppose the basic of a programming language. I heard the basic concept of all programming languages is almost similar . I think the knowledge that I have gained of a programming language in this unit will help me a lot to learn new languages in my further study.

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

At the beginning of the course I used to have a lot of struggles to understand and used to spend a lot of time to do a single task by not going to any helpdesk sessions . If I did this unit again I would definitely rectify this mistake.