# Software Engineering Assignment SDD

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#### 1 Introduction

#### 1.1 Date of Issue

2024/11/19

#### 1.2 Context

#### 1.3 Scope

#### 1.4 Authorship

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#### 1.5 Change History

#### 1.6 Summary

The application reads two input text files and outputs one file with specific formatting. The input files are NameFile.txt and CourseFile.txt, formatted as the following:

```
NameFile.txt:
Student ID, Student Name
000000001, John Hay
000000002. Mary Smith
...

CourseFile.txt:
Student ID, Course Code, Test 1, Test 2, Test 3, Final exam
000000001, CP317, 75.3, 80.4, 60.3, 70.5
000000002, CP414, 80.2, 90.5, 50.4, 75.6
000000001, CP414, 60.5, 70.6, 80.6, 75.6
...

The output file is formatted as the following:
OutputFile:
Student ID, Student Name, Course Code, Final grade
0000000001, John Hay, CP317, 66.7
0000000001, John Hay, CP414,
00000000002, Mary Smith, CP414, 74.8
```

#### 2 Software Architecture

#### 2.1 Overview

Given the requirements for our application, we have chosen to create a C++ script running on a Linux system. The overall system architecture then includes the following;

- 2 Input Files
- 1 Executable
- 1 Output File

### 3 Detailed Design

#### 3.1 Overview

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