

## Structs, Strings and Pointers

Create a student report card application using structs, pointers, and proper file organization.

### TASK REQUIREMENTS:

#### Part 1: Student Record Creation

- Define StudentRecord struct with:
  - StudentID (int)
  - LastName (char[21])
  - FirstName (char[21])
  - Array of 5 CourseRecords (struct with CourseName char[21] and Mark float)
  - AverageMark (float)
- Create function to initialize student records for 5 students via user input

#### Part 2: Average Calculation

- Develop function to calculate and set AverageMark for each student

#### Part 3: Report Generation

- Create function to print formatted report cards showing:
  - Student ID, First/Last Name
  - All courses with marks
  - Calculated average

#### General Requirements:

- Organize code in src/ and inc/ folders
- studentRecord.c for operations
- studentRecord.h for prototypes
- Clear comments and consistent formatting

## SAMPLE OUTPUTS

### Student input for 1 student:

```
C:\PROG2007\ASSIGN3\cmake-build-debug\ASSIGN3.exe
Please enter the Student ID:
2762663
Please enter the last name for Student #2762663:
Brown
Please enter the first name for Student #2762663:
Charlie
Please enter the course name:
```

```
QRST4999
Please enter the mark for QRST4999:
96
Please enter the course name:
PROG0456
Please enter the mark for PROG0456:
91
Please enter the course name:
PLUM4988
Please enter the mark for PLUM4988:
74
Please enter the course name:
JUMP0500
Please enter the mark for JUMP0500:
57
Please enter the course name:
TRPO5000
Please enter the mark for TRPO5000:
74

Process finished with exit code 0
```

## Report card for 1 student:

```
C:\PROG2007\ASSIGN3\cmake-build-debug\ASSIGN3.exe
*****REPORT CARDS*****

Student: ID:2762663          Name: Charlie Brown
-----
Course name: QRST4999        Course mark: 96
Course name: PROG0456        Course mark: 91
Course name: PLUM4988        Course mark: 74
Course name: JUMP0500        Course mark: 57
Course name: TRPO5000        Course mark: 74

Grade average: 78.40

Process finished with exit code 0
```

**REMEMER:** your assignment should accept inputs & output report cards for 4 students.

## Submission Instructions

### Video Recording Submission:

You will demonstrate the completion of this project via a **video screen-capture recording** of you using CLion, GitBash, and viewing your code to show completion of the **Video Submission Checklist**, which

is posted on Brightspace. You will post **either your video file or a link to it** (e.g. a Microsoft Stream recording, make sure to give the instructor permissions to watch it), to the Brightspace Assignment 3 Dropbox prior to the deadline. If you are not sure of how best to capture such a video, seek advice from the instructor prior to the deadline.

**NOTE:** MAKE SURE TO SHOW EVERYTHING IN THE VIDEO SUBMISSION CHECKLIST STEP-BY-STEP. YOU WILL NEED AUDIO IN THE VIDEO FOR AT LEAST THE CODE REVIEW PORTION OF THE CHECKLIST