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 3 CourseRecords (struct with CourseName char[21] and Mark float)
  - AverageMark (float)
- Create function to initialize student records for 3 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:
9914725
Please enter the last name for Student #9914725:
White
Please enter the first name for Student #9914725:
Dana
Please enter the course name:
```

```
WIND0444
Please enter the mark for WIND0444:
84
Please enter the course name:
GOLD4350
Please enter the mark for GOLD4350:
98
Please enter the course name:
BNMC0123
Please enter the mark for BNMC0123:
71

Process finished with exit code 0
```

Report card for 1 student:

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

Student: ID:9914725          Name: Dana White
---------------------------------------
Course name: WIND0444             Course mark: 84
Course name: GOLD4350             Course mark: 98
Course name: BNMC0123             Course mark: 71

Grade average: 84.33


Process finished with exit code 0
```

REMEMER: your assignment should accept inputs & output report cards for 3 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