src/Student.h

```cpp
 1  // Title:  Student.h
 2  // Desc:   Header file for Student.cpp
 3  // Name:   An Tran
 4
 5  #include <string>
 6
 7  #ifndef STUDENT_H
 8  #define STUDENT_H
 9
10  class Student
11  {
12  private:
13      // member variables
14      int sid{0};
15      std::string fName{""};
16      std::string lName{""};
17      std::string address{""};
18      long phoneNumber{0};
19      std::string grades{""};
20      int count{0};
21
22  public:
23      // constuctors
24      explicit Student(); // default
25      explicit Student(int sid, std::string fName, std::string lName, std::string
    address, long phoneNumber, std::string grades, int count);
26
27
28      // member functions
29      // getters
30      int getSID();
31      std::string getFName();
32      std::string getLName();
33      std::string getAddress();
34      long getPhone();
35      int getCount();
36
37      int getGrade(int location);
38      // description: Finds location of int inside of list and returns it
39      // receives:    location of where in the list
40      // returns:     the grade in the specific location in the list as an int
41
42
43      // setters
44      void setSID(int newSID);
45      void setFName (std::string newFName);
46      void setLName (std::string newLName);
47      void setAddress(std::string newAddress);
48      void setPhone(long newPubYear);
49
50      void setCount();
51      // description: updates count variable to be the number of elements in grades
    variable
52
```

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53      // other functions
54      void setStudent(int newSID, std::string newFName, std::string newLName,
   std::string newAddress, long newPhoneNumber, std::string newGrades);
55      // description:
56      // receives:    All new member variables and sets them to their corresponding
   member variables
57      // returns:     nothing
58
59      void displayStudent();
60      // description: displays information about student in a specific format
61      // receives:    nothing
62      // returns:     nothing
63
64      void addGrade(int);
65      // description: adds an new grade to the grade string
66      // receives:    nothing
67      // returns:     nothing
68
69      std::string convertLetterGrade(int);
70      // description: converts a grade value into corresponding letter grade using
   syllabus grading scale
71      // receives:    grade value is int
72      // returns:     corresponding letter grade as string
73
74      std::string currentLetterGrade();
75      // description: computes the average of student's grades to determine student's
   current grade
76      //              calls convertLetterGrade(int)
77      // receives:    nothing
78      // returns:     student's current letter grade as string
79
80      void listGrades();
81      // description: displays a formated table of each of the student's grades and the
   cumulative average of grades
82      // receives:    nothing
83      // returns:     pubYear as int
84 };
85
86 #endif
87
```