1

```
1 //Grant dawson COSC 220 Project 1
 2 #ifndef STUDENTDB H
 3 #define STUDENTDB H
 5 #include <iostream>
 6 #include "Course.h"
 7 #include "CourseDB.h"
 8 #include "Student.h"
9 #include <fstream>
10 #include <string>
11
12 using namespace std;
13
14 class StudentDB{
15 private:
16
     struct studentNode{
17
       Student s;
18
       CourseDB c;
19
       studentNode* next;
20
     };
21
22
     studentNode* head;
23
24
     void addMajorToList(string);
25
     void readMajorList();
26
     string* major=new string[1];
27
     int Mlength;
28
     string* department=new string[1];
29
     int Dlength;
     char* grade=new char[6];
30
31
     int Glength;
32
33
34 public:
35
     StudentDB();
36
     StudentDB(Student);
37
38
     ~StudentDB();
39
     StudentDB(const StudentDB&);
40
     StudentDB* operator=(const StudentDB&);
41
42
     void updateStudent(Student, Student);
43
     //void updateStudent(string,string);
44
45
     void removeStudent(Student);
     void removeStudent(string,string);
46
47
48
     void addStudent(Student);
49
     void addStudent(string,string,string);
50
51
     void printStudent(Student);
52
     void printAllList();
53
     void printAllStudents();
54
55
     void updateCourse(Student,Course);
56
57
     void removeCourse(Student, Course);
58
     void addCourse(Student, Course);
59
60
     int length();
61
62
     Student createStudentMajor(string,string);
```

```
63
     Student createStudent();
64
65
     Course createCourse();
66
     void readDepartmentList();
67
     void addDepartmentToList(string);
68
     string createCourseDepartment();
69
     char createCourseGrades();
70
71
     void readGradeList();
72
     Student chooseStudent();
73
74
     Course chooseCourse(Student);
75
76
77
78 };
79
80
81 #endif
82
```