Michael Vardanian

BCS-370

Group #6

Capstone Project: Assignment Manager

1. The only part of thje Data Structure I designed was the two functions displayprogress(int I) and update. All other parts of the data structure was designed and written by the rest of the team.
2. The coding portion I wrote is the menu and its ui, which includes the files add.h , search.h , update.h , import.h , menu.h , and Assignment Manager.cpp.
3. The menu was designed to input and output values for the user in a somewhat efficient manner. The program starts in Assignment Manager.cpp where it displays the name of the program and the names of who wrote it then it executes the function MainMenu() which is the file menu.h. From menu.h all other files which are separated instead of kept into a single file for efficiency reasons as well as to prevent any issues in the code and to make it more easier to manage / update. Navigating the menu is easy as instructions are given every time the program is started. The arrow keys were chosen as it is a simple way to navigate the menu. Numpad was considered however there since there are keyboards that do not have a numpad this was dropped. Different options were considered for key input however getch was chosen due to how simple it was to use it.

The base class homeworkAssignment and homeworkManagementSystem was designed and written by Nicholas Poje , as well as the addassignment and search by due date functions in the class. The search by course function in the class HomeworkManagementSystem was designed and written by Anthony Weathers.

The first option in the menu is to add an assignment which opens the file add.h and starts the function addassignment(). This function queries the user for the values that are needed to properly construct the class and is added to the vector. The user is then prompted if they want to add another assignment which then executes the function addassignment() again.

The next option is Update Assignment which opens the function UpdateAssignment which requires the name of the course and a assignment number for security reasons and confirmation reasons. In update assignment there are five options.

1.Mark as started – It marks the assignment as started

2.Mark as Complete – It marks the assignment as completed

3. Unmark as started – it unmarks the assignment as started

4.Unmark as complete – It unmarks the assignment as complete

5.Remove Assignment – It removes the assignment from the program

All five options use the same function update() in the class homeworkmanagementsystem.

Each of the five options gives the course name and assignment number to the update function , however there are two check integers that are manually inserted by the program to simplify the code and to prevent any possible issues where a course that needs to be marked as in progress is deleted or marked as complete.

The last part of the menu is search assignment which is the function Search() located in the file Search.h. There are 3 options in Search().

1.Search by Due Date – asks the user for a date and inputs it into the function searchDueDate which was written by Nicholas Poje.

2.Search by Course- asks the user for a course and inputs it into the function searchByCourse which was written by Anthony Weathers.

3.Display in Progress- Displays all assignments in progress using the function displayprogress which checks the vector using tail recursion.

4.Display all uses the same method as display in progress however does not check for progress.