**Main Module/Module 1 (newsolus.py): User Interface and Data Structure**

**Data Structure: #data structure for the program**

* **Import course\_change.py and course\_info.py**
* course\_list = [], inputs data into the empty list
* reading each lines of the courses1.txt file, appending it to the course\_list.
* Putting each line into a list of a list(a list within a list)
* removing the \n from each line of the data
* implement a proper data structure for the users to use.

**def solusInterface(): #acts as an interface for the user to navigate around the program**

* Gives the option for the user to input numbers from 1-4 to call each function
* Run in a while loop for error checking
* Inputting 1 calls the function newCourse()
* Inputting 2 calls the function updateCourse()
* Inputting 3 calls the function infoCourse()
* Inputting 4 calls the function retrieveCourse()

**Module 2(course\_change.py): Updating/New course**

**def newCourse():**  **#allows the user to add a new course into the database**

* prompts the user for information (course code, department, instructor name, maximum enrollment, and if there are seats available)
* checks to see if course code is of proper formatting
* check error input, such as if user is prompt to enter number of seats, and they enter strings instead should tell them “invalid input.

**def updateCourse():** **#allows the user to update information on existing courses**

* Able to update no. of students enrolled in a specified course, when given course ID and number of students.
* Able to change instructor name, prompts the user which course would they like to update by inputting course ID.
* User can remove the course from course\_list, by inputting the course ID

**Module 3(course\_info.py): Retrieving/Displaying course information**

**def infoCourse(): #displays all the information in the database**

* Able to display all courses in the system when requested by the user
* Able to display all courses by department, instructor name or by availability.

**def retrieveCourse(): #allows the user to retrieve information from a course they request**

* If user inputs department, prints out course IDs related to that department
* If user inputs course ID, prints out the instructor teaching the course as well as informing the user of the current number of enrolled students.