<u>**Sample Program Flow**</u>

This document is just to give you a general idea of the application flow. Please make sure you refer to the description and handle all the requirements/constraints mentioned therein.

Since there is no overlap between students and administrators the application will provide a single login screen and redirect the user to the appropriate home page. There are two different types of home pages depending on the type of user:

1)Administrator

2)Student

Please make sure you verify the login credentials before logging in.

Administrator

The account for administrator shall be created using SQL Scripts and not from the application. When logged in as an Administrator, the homepage displays the following options:

- **View Profile:** The logged in administrator will be able to view his profile.
- **Enroll A New Student:** Administrator will enter the required information for creating a new student account.
- **View Students Details:** Administrator can view the details(Name, DOB, contact details, past courses/grades) for a particular student after entering the student id. He should not be able to view the student's password. This will also have a submenu called "**Enter Grades"**. Admin will be able to view/add grades for the student.
- **View/Add Courses:** This will a submenu giving two options:
  1)Search: Administrator can view details of an existing course by entering the Course Id. The administrator should also be able to view all courses and details
  2)Add: Administrator will be able to add a new course using this option. Details like prerequisites, level, department etc will need to be provided.
- **View/Add Course Offering:** This will a submenu giving two options:
  1)Search: Administrator can view details of the current offering by entering the Course Id.
  2)Add: Administrator will be able to add a new course offering using this option. The administrator will have to provide details like days of the week, timing, location, names of faculty members teaching the course etc.
- **View/Approve Special Enrollment Requests:** Administrator will be able to view a list of requests that are waiting for approval and can approve or reject them. On approval the course should be added to student's schedule/waitlist.
- **Enforce Add/Drop Deadline:** This option when selected will enforce the add/drop deadline and will result in dropping of all the waitlisted courses, dropping courses of students with past due. This option can only be selected once for a semester and cannot be reverted after applied. So the application should ask for confirmation once before enforcing the deadlines.

Student

Please read the information provided as part of the description. Following are the details of the application menu for a student's homepage.

1. **Profile**: will have the option to view and edit the profile details like Address, Phone number, however, on no account should students be able to edit their level (Graduate or Undergraduate), status(In-state/Out-of-state/International), and Student Id.
2. **View Courses/ Enroll/ View My Courses:** Students should also be able to view all courses available to them in the current semester, courses details and schedule. The student should be able to enroll in a course. The student can also enroll in a special course by providing details like, no. of units etc. Students should also be able to view the courses they are already enrolled in.
3. **View Pending courses:** Students should be able to see the status of their application for special courses as well as the courses they have been waitlisted for.
4. **View Grades:** Students should be able to view their grades as well as CGPA. Students are not allowed to edit grades.
5. **View/Pay bill:** Students should be able to see what their owing and have an option to pay bills. When student clicks the pay bill button, he is allowed to specify an amount and it gets deducted from his current balance. If current balance is 0.00, it means that bill has been paid in full. You are not expected to maintain a billing history. Only the latest amount due is fine.

Start Menu

Display	Input	Output
1. Login 2. Exit		

Login Page

Display	Input	Output
1. Username : #### 2. Password : ####	UID and password	Recognize if user is an Administrator or Student. Print "Login Incorrect" and go back to previous menu.

Logged in as Administrator

Display	Input	Output
1. View Profile 2. Enroll A New Student	Enter choice	Display the options for

3. View Student's Details 4. View/Add Courses 5. View/Add Course Offering 6. View/Approve Special Enrollment Requests 7. Enforce Add/Drop Deadline 8. Logout	the entered choice

Administrator: Profile

Display	Input	Output
Press 0 to Go Back 1. First Name : ##### 2. Last Name : ##### 3. D.O.B : ##### 4. Employee Id : #####	User can enter 0 to go back to the previous menu options.	The user will be able to view his profile.

Administrator: Enroll A Student

Display	Input	Output
1. Enter Student Id : ##### 2. Enter Student's First Name: #### 3. Enter Student's Last Name: #### 4. Enter Student's D.O.B(MM-DD-YYYY): #### 5. Enter Student's Level:#### 6. Enter Student's Residency Status: #### 7. Enter Amount Owed(if any):###	The application should ask all these questions one by one and in the end if successful should create a new student with password same as the student id.	In case the creation is not successful an appropriate error message should be displayed. If successful the application should display success message and go back to previous menu.

Administrator: View Student's Details

Display	Input	Output
Please Enter Student Id: #### 1. First Name : #### 2. Last Name : #### 3. D.O.B(MM-DD-YYYY) : #### 4. Student's Level : #### 5. Student's Residency Status : #### 6. Amount Owed(if any) : #### 7. GPA : ####	The user will be prompted for entering student id and if valid show display the student's details.	In case the the id is correct, then the details for that student will be displayed. User now can press 0 to go back to the previous menu. If incorrect id then user

8. Phone : #### 9. Email : #### 10. Address : #### Press 0 To Go Back To Previous Menu Press 1 To View/Enter Grades		will be prompted to renter student id. User can select 1 to view and enter grades for this particular student.

Administrator: View/Add Course

Display	Input	Output
Select Appropriate Menu Option: 0. Go Back To Previous Menu 1. View Course 2. Add New Course	Menu Option	Redirects user to appropriate application menu screen.

Administrator: View/Add Course : View Course

Display	Input	Output
Please Enter Course Id: #### 1. Course Name : #### 2. Department Name : #### 3. Level : #### 4. GPA Requirement(if any) : #### 5. List of prerequisite courses : 1 ### : 2 ### 6. Special Approval Required : #### 7. Number Of Credits : #### Press 0 To Go Back To Previous Menu	The user will be prompted for entering course id and if valid show display the course details.	Number of credit would display an integer value OR a range if it is a variable credit course.

Administrator: View/Add Course : Add Course

Display	Input	Output
1. Enter Course Id : #### 2. Enter Course Name : #### 3. Enter Department Name : #### 4. Enter Course Level : #### 5. Enter GPA Requirement(if any) : #### 6. Enter prerequisite courses : 1 ### 2 ### 7. Special Approval Required(Y/N) : ####	The application should ask all these questions one by one and in the end if successful should add a new course. Prerequisite courses will take multiple inputs and number of credits should	In case the creation is not successful an appropriate error message should be displayed. If successful the application should display success message and go back to

Display	Input	Output
8. Enter Number Of Credits : #### Press 0 To Go Back To Previous Menu	ask if the course has variable credits or not first. If yes then it should take a minimum and a maximum value.	previous menu.

Administrator: View/Add Course Offering

Display	Input	Output
Select Appropriate Menu Option: 0. Go Back To Previous Menu 1. View Course Offerings 2. Add New Course Offering	Menu Option	Redirects user to appropriate application menu screen.

Administrator: View/Add Course Offering: Add (A similar menu option will exist for Viewing offerings)

Display	Input	Output
1. Enter Course Id : #### 2. Enter Semester : #### 3. Enter Faculty Name*(can be multiple)* : #### 4. Enter Days Of the Week : #### 5. Enter Class Start Time : #### 6. Enter Class End Time : #### 7. Class Size : #### 8. Wait list Size : #### Press 0 To Go Back To Previous Menu	The application should ask all these questions one by one and in the end if successful should add a new course offering. Faculty Name may take take multiple inputs.	In case the creation is not successful an appropriate error message should be displayed. If successful the application should display success message and go back to previous menu.

Administrator: View/Approve Special Enrollment Requests

Display	Input	Output
List Of Pending Requests: 1)### #### 2)### #### 3)### #### Press 0 To Go Back To Previous Menu	User will select one number from the list after which the application will prompt the user asking whether he wants to approve or reject the selected approval.	

Administrator: Enforce Add/Drop Deadline

Display	Input	Output
Are you sure you want to enforce deadlines: 1) Yes 2) No	Menu Options	After the user input take user back to the previous menu. If yes is selected then this option will become disabled for the current semester i.e. the output does not perform any action when clicked in the future. It only shows a message saying Deadline already enforced.

Student: Logged in as Student

Display	Input	Output
1. View/Edit Profile 2. View Courses/Enroll/Drop courses 3. View Pending courses (Pending, Rejected, Waitlisted) 4. View Grades 5. View/Pay Bill (Bill does not contain previous semester bills - just current semester bills)	Enter choice	Display the options for the entered choice

Student: View/Edit Profile

Display	Input	Output
Press 0 to Go Back 1. First Name : ##### 2. Last Name : ##### 3. Email : #### 4. Phone :##### 5. Level 6: Status	User can enter 0 to go back to the previous menu options. (Student should not be able to edit his level or status)	The user will be able to view his profile.

Student: View Courses/Enroll/Drop courses/View My Courses

Display	Input	Output
View Available Courses Enroll: 1. Enter Course Id : #### Press 0 To Go Back To Previous Menu View My Courses Show successfully added courses	The application should take the Id and if insert is successful should add a new course to the student's schedule Faculty Name may take take multiple inputs.	In case the creation is not successful an appropriate error message should be displayed. If successful the application should display success message and go back to previous menu.

Student: View Pending courses (Pending, Rejected, Waitlisted)

Display	Input	Output
View Courses and Status Press 0 To Go Back To Previous Menu	Menu Options	The user input take user back to the previous menu.

Student: View Grades

Display	Input	Output

View Letter Grades and GPA
    1.   Displays Letter Grades
    2.   Displays GPA
Press 0 To Go Back To Previous Menu
		After the input, take user back to the previous menu.

Student: View/Pay Bill (Bill does not contain previous semester bills - just current semester bills)

Display	Input	Output

View Letter Bills
    1.   Displays Student's balance
Pay Bills
    1.   Enter amount
Press 0 To Go Back To Previous Menu
	Amount	After the user input, amount gets deducted from students current balance.