



CLASS DESIGN

Main Frame: It is the first frame of the application which controls log-in.

- Enables the Admin to log into the application in order to add or remove users to or from the Student Roll file (validation.txt) and Student Data files (IT.txt & ECE.txt).
- Enables a Student to log into the application in order to choose the timetable or view the finalized timetable.

Admin Frame: It provides functionality to the Admin.

- Enables the Admin to add a new Student User to the Student Roll file (validation.txt) and Student Data files (IT.txt & ECE.txt) .
- Enables the Admin to spawn the next frame - Student View .

Student View: It provides additional functionality to the Admin. It is spawned from the Admin frame.

- Enables the Admin to view all Students added along with their respective details.
- Enables the Admin to delete a Student User from the Student Roll file (validation.txt) and Student Data files (IT.txt & ECE.txt).
- Enables the admin to redirect to the Admin Frame.

User: It is the token Class for the Student Data File.

- It provides functionality to hold the Name , branch , Roll Number and CGPA of each new student entry.
- Objects of this class collectively constitute the Student Data files (IT.txt & ECE.txt) .

User List: It maintains all the records of the added Students. Objects of this class are made persistent using files.

- Provides the functionality to add a new User from the Student Roll file (validation.txt) via Array Lists.
- Provides the functionality to remove an existing User from the Student Roll file (validation.txt) via Array Lists.
- Provides the functionality to add User information from the Student Data file (IT.txt & ECE.txt) via Array Lists.
- Provides the functionality to fetch User information from the Student Data file (IT.txt & ECE.txt) via Array Lists.

User Frame: It enables the logged in Student user to choose the desired timetable.

- Displays the default timetable with the mandatory subjects filled in their respective slots.
- Enables the Student user to select the desired subjects which are interactively filled in their respective slots.
- Enables the Student User to confirm the chosen Timetable.

Branch: It is a utility class to assist class User Frame to maintain the mandatory and non-mandatory subject lists.

Final Frame: It displays the finalized timetable.

- Enable the Student User to view the finalized timetable.
- Enables the Student User to logout.