

**MOBILE COMPUTING PROJECT
REVIEW REPORT -1
GROUP NO - 4**

COURSAIDE

An app for selection of courses

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COURSAIDE : An application that helps in selection of courses.

INTRODUCTION

Selecting electives at the beginning of every semester is a dreadful task for every student. This app provides a simple and hassle free solution to the ordeal of course selection that students face. This app not only lets a student check whether the selected courses are clashing with each other, it also provides recommendations for the same, based on the user's preferences. Once courses for the semester and TAs are finalized, an option of personalised timetable is also provided.

To make this system completely deployable, admin and student, both the entities have been taken into consideration. Admin's task is to upload time table using the app. However, worst case scenarios such as updation of course details, specialization, bucket etc. are also taken into consideration to allow flexibility.

Both login using the same login page but thereafter are taken to respective activities.

ADMIN APP FEATURES

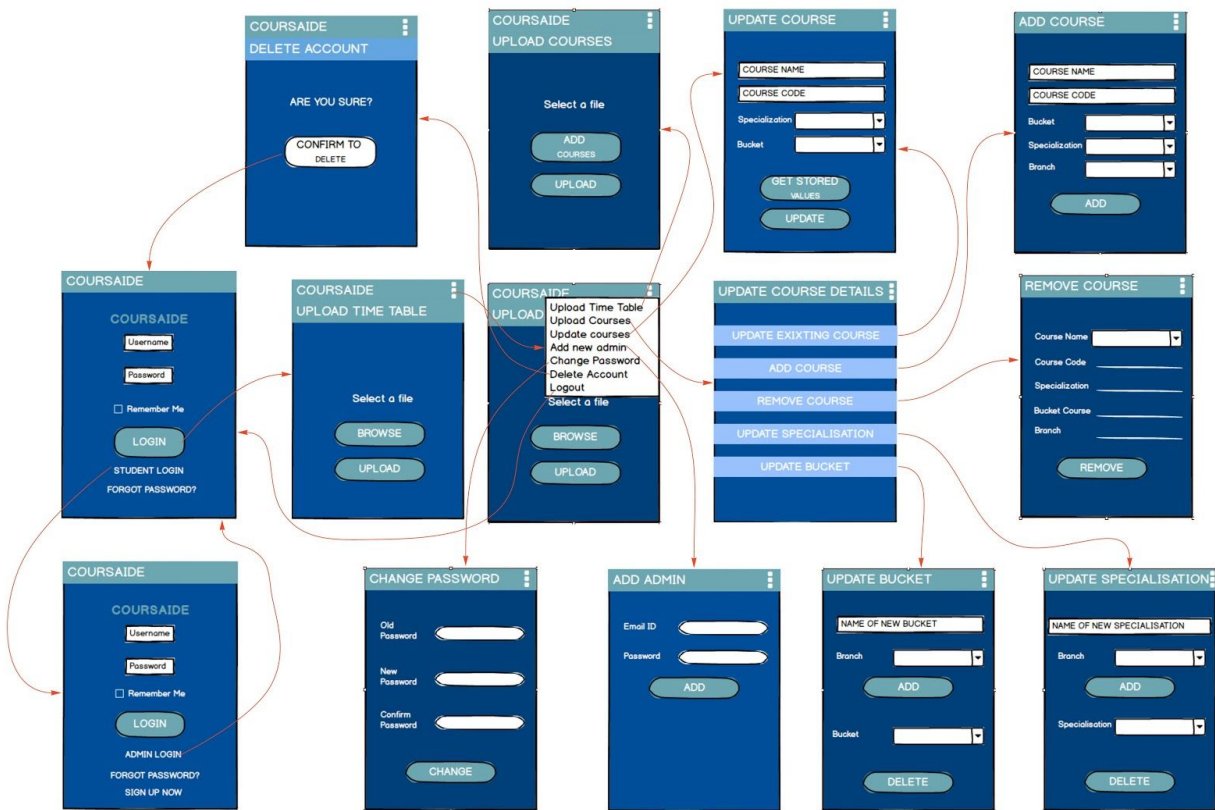
- Upload time table for the semester
- Update any course details
 - Update an existing course
 - Add a new course
 - Add multiple courses (as CSV file)
 - Remove a course
 - Add or remove a specialization
 - Add or remove a bucket
- Add a new admin

STUDENT APP FEATURES

- Selection of courses that one wishes to opt for
- Selection of TA course
- Generation of a personalised time table once the courses have been selected

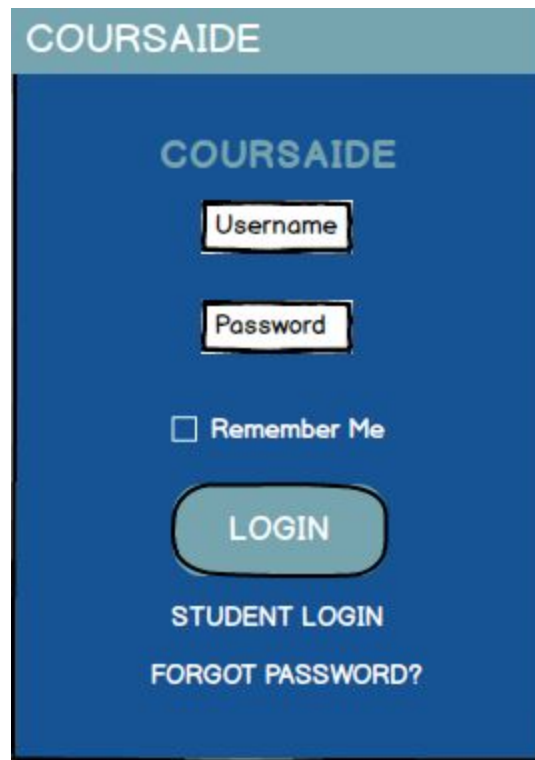
WIREFRAMES FOR THE ADMIN

The following figure shows how the activities are connected to each other. Later all the activities are explained with their functions.



fig(1):Flow diagram of admin app activities

LOGIN PAGE



COURSAIDE

COURSAIDE

Username

Password

☐ Remember Me

LOGIN

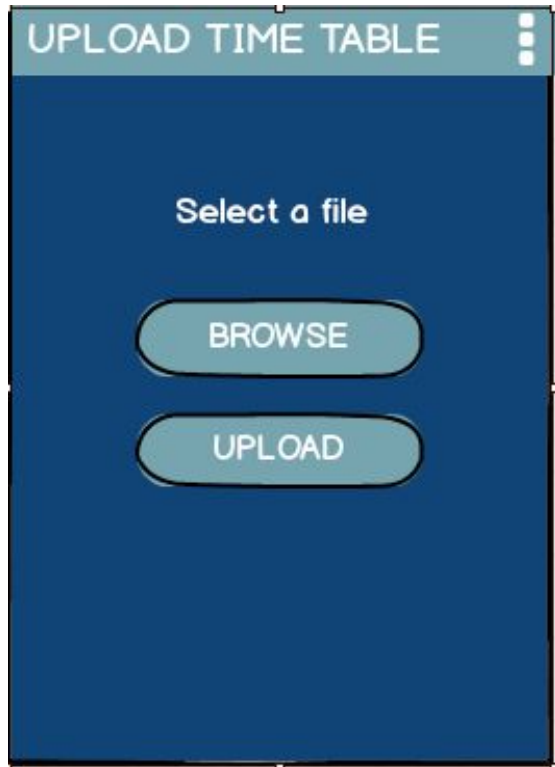
STUDENT LOGIN

FORGOT PASSWORD?

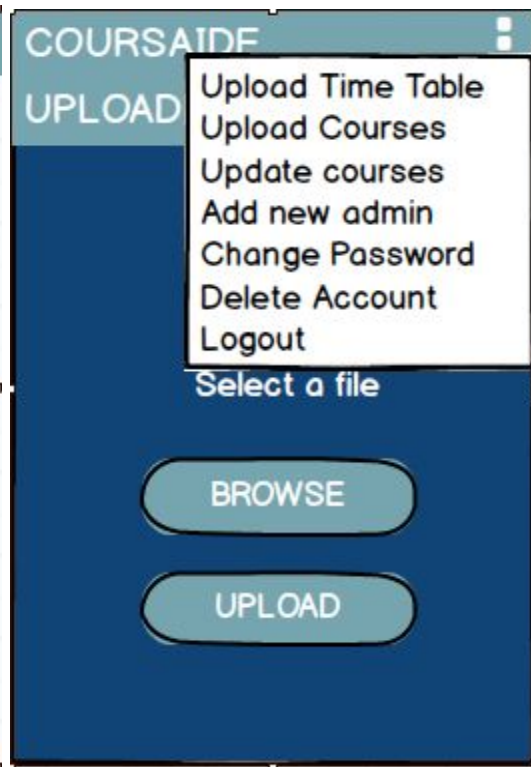
fig(2):Signup activity

- An admin can login into the system after entering his username and password.
- The admin can select the Remember Me option to save his credentials for easy logging from the next time.
- Admin can click on the login button to login into the system.
- If a user forgets his password then he can click on Forgot Password and a link will be sent to his email id to reset his password.
- From the admin login page user can be switch to student login page by clicking on the Student Login option.

UPLOAD TIME TABLE



fig(3):Activity to upload time table



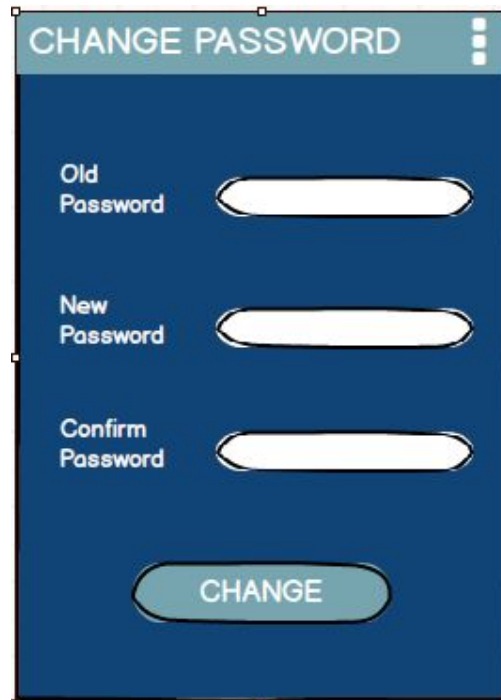
fig(4):Menu option on the activity

- Admin can browse for the time table file by clicking on the browse button.
- Select the file and then click on upload.
- Admin can switch to any other task by clicking on the three dots in the top right corner.

MENU FOR NAVIGATION

- A menu is present on “Upload Time Table”, “Upload Courses” , “Update Courses”, “Add new admin” , “Delete Account” and “Change Password” to navigate to any activity at anytime.
- Admin can navigate through the activities by using this menu button.

CHANGE PASSWORD



CHANGE PASSWORD

Old Password

New Password

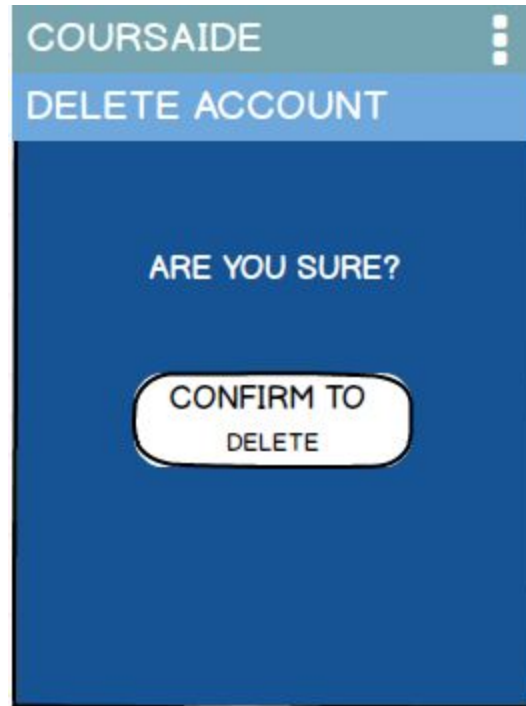
Confirm Password

CHANGE

fig(5): Activity to change password

- User can change his/her password by specifying the old password and the new password.
- Enter new again to confirm it.
- Click on change to change password.
- The menu on top allows the user to navigate to other activities.

DELETE ACCOUNT



fig(6): Activity to change password

- Admin can his delete account by clicking the confirm to delete button.
- On clicking “Confirm to delete”, the user will be taken to the login page.

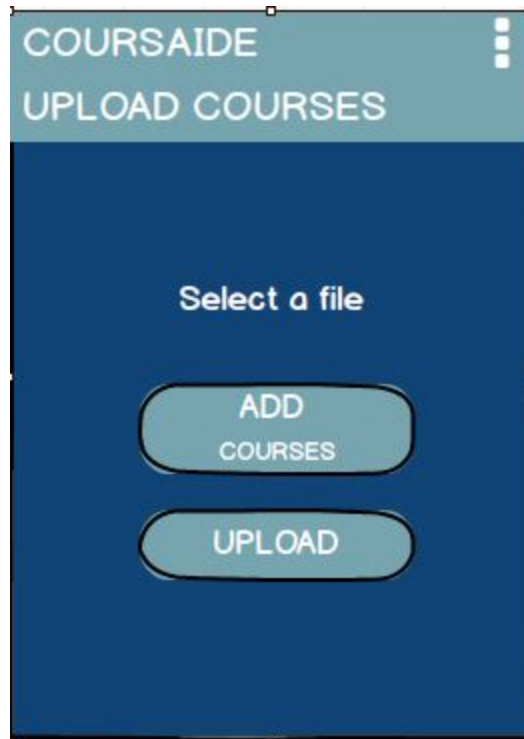
UPDATE COURSE DETAILS



fig(7):Activity with update course menu

- On clicking the update course details in the menu bar, admin is taken to the above activity.
- It shows the various updates that the admin can perform.

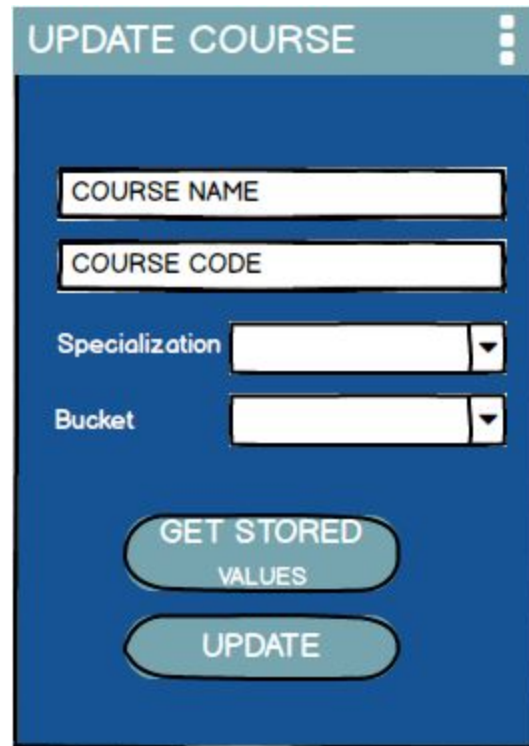
UPLOAD COURSES



fig(8):Activity to update an existing course

- Admin can add courses by clicking on ADD COURSES button..
- Select the file and then click on upload.
- Admin can switch to any other task by clicking on the three dots in the top right corner.

UPDATE COURSE

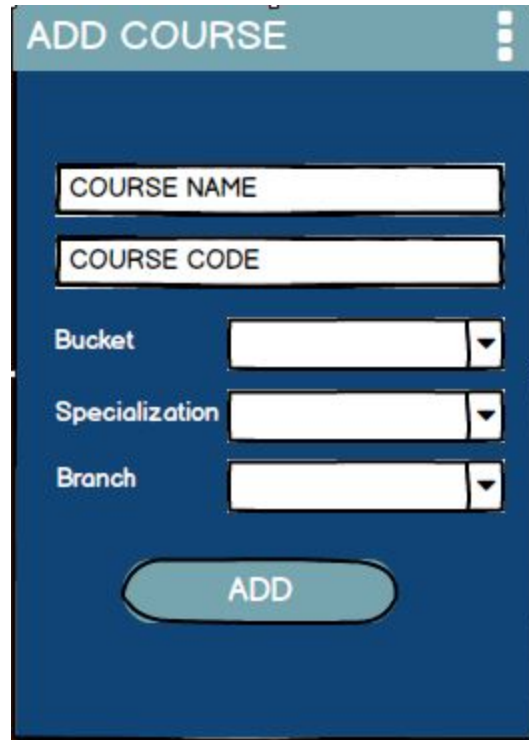


The image shows a mobile application interface for updating a course. At the top, there is a header bar with the text 'UPDATE COURSE' and a three-dot menu icon. Below the header, the form contains two text input fields labeled 'COURSE NAME' and 'COURSE CODE'. Under these, there are two dropdown menus labeled 'Specialization' and 'Bucket'. At the bottom of the form, there are two buttons: 'GET STORED VALUES' and 'UPDATE'.

fig(9): Activity to update an existing course

- Admin can update details of a course.
- Admin needs to specify the course name and its code for which he wants to update the details. Attributes of the course name such as specialisation, bucket and branch can be updated through a drop down menu as per the requirements.
- Course attributes will be updated according to the values selected in the spinners.

ADD A COURSE



The image shows a mobile application interface for adding a new course. The title bar at the top is teal and contains the text 'ADD COURSE' in white, followed by a three-dot menu icon. The main content area has a dark blue background. It features two white text input fields: 'COURSE NAME' and 'COURSE CODE'. Below these are three dropdown menus labeled 'Bucket', 'Specialization', and 'Branch'. Each dropdown menu has a white input field and a small downward arrow icon on the right. At the bottom of the form is a large, rounded, teal button with the word 'ADD' in white capital letters.

fig(10): Activity to add a new course

- Admin can add a new course by specifying the course name and its code
- Admin can choose specialisation, bucket and branch ,with which the course must be associated, from the drop down menu provided.

REMOVE A COURSE

REMOVE COURSE

Course Name

Course Code

Specialization

Bucket Course

Branch

REMOVE

fig(11): Activity to remove a course

- Admin can remove an existing course by selecting the course name.
- Its corresponding code, specialisation, bucket and branch will be displayed on in front of the respective fields.
- This will provide full information about the course being deleted.
- By clicking on remove admin can remove the course.

UPDATE SPECIALIZATION

UPDATE SPECIALISATION

NAME OF NEW SPECIALISATION

Branch

ADD

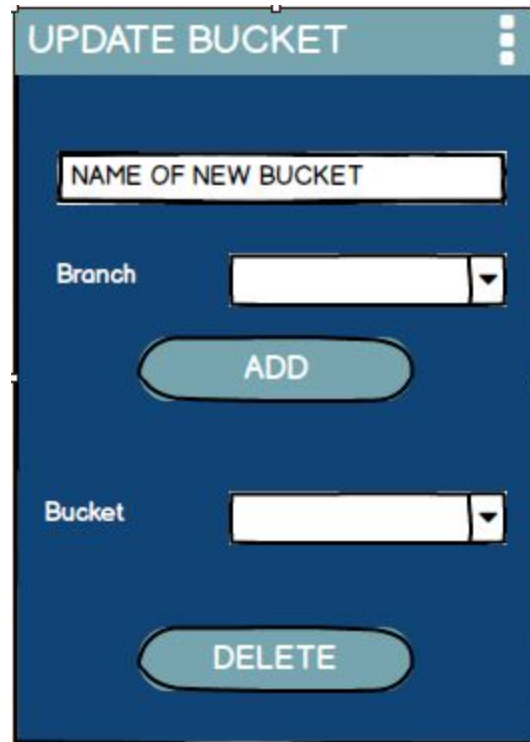
Specialisation

DELETE

fig(12): Activity to add or remove a specialization

- Admin can update a specialisation i.e., either add a new specialisation or delete an existing specialisation.
- Admin can add a new specialisation by specifying the specialisation name in the text field and selecting the branch ,with which the specialisation will be associated, from the drop down menu and then clicking the add button.
- To delete a bucket admin can select the specialisation name and its associated branch from the drop down menu and then click on the delete button.

UPDATE BUCKET

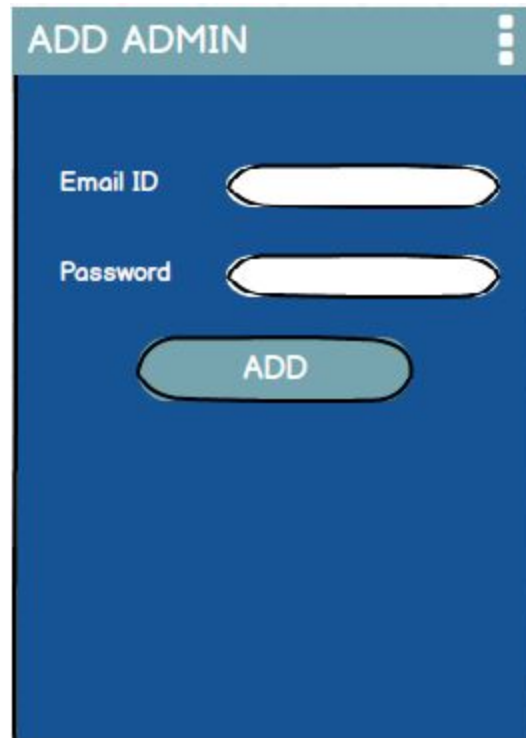


The image shows a mobile application interface titled "UPDATE BUCKET". It features a dark blue background with a teal header bar containing the title and a three-dot menu icon. Below the header, there is a text input field labeled "NAME OF NEW BUCKET". Underneath this, there is a label "Branch" followed by a white dropdown menu. Below the dropdown menu is a teal button with the text "ADD". Further down, there is a label "Bucket" followed by another white dropdown menu. At the bottom of the interface is a teal button with the text "DELETE".

fig(13): Activity to add or remove a bucket

- Admin can update a bucket i.e., either add a new bucket or delete an existing bucket.
- Admin can add a new bucket by specifying the bucket name in the text field and selecting the branch ,with which the bucket will be associated, from the drop down menu and then clicking the add button.
- To delete a bucket admin can select the bucket name and its associated branch from the drop down menu and then click on the delete button.

ADD A NEW ADMIN

The image shows a mobile application interface for adding a new admin. At the top, there is a header bar with the text "ADD ADMIN" and a three-dot menu icon. Below the header, the background is a solid blue color. There are two input fields: the first is labeled "Email ID" and the second is labeled "Password". Both fields are white with rounded ends and a black border. Below these fields is a large, rounded button with a blue gradient and the text "ADD" in white capital letters.

fig(14): Activity to add a new admin

- An existing admin can add another admin by specifying his email id and a default password.

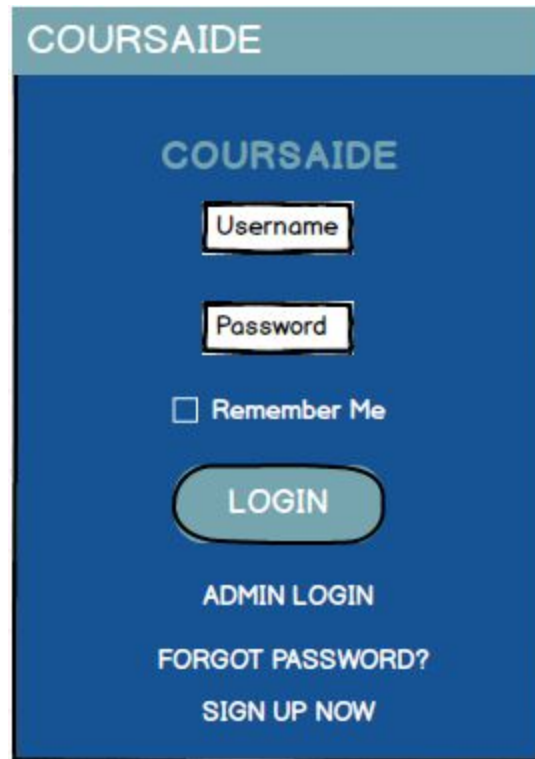
WIREFRAMES FOR STUDENT

The following figure shows how the activities are connected to each other. Later all the activities are explained with their functions.



fig(15):Flow diagram of student app activities

LOGIN

The image shows a login form for 'COURSAIDE'. It has a light blue header with the word 'COURSAIDE' in white. The main body is dark blue. In the center, there's a light blue box containing the text 'COURSAIDE' in white. Below this, there are two white input fields with black borders, labeled 'Username' and 'Password'. Under the password field is a checkbox labeled 'Remember Me'. Below the checkbox is a large, rounded, light blue button with the word 'LOGIN' in white. At the bottom of the form, there are three white links: 'ADMIN LOGIN', 'FORGOT PASSWORD?', and 'SIGN UP NOW'.

fig(16): Activity for login

- A student can login into the system after entering his/her username and password.
- The student can select the Remember Me option to save his credentials for easy logging from the next time.
- Student can click on the login button to login into the system.
- If a user forgets his password then he can click on Forgot Password. A link will be sent to his email id to reset his password.
- If the student has not signed up then he can do so by clicking on the sign up option.
- From the student login page user can switch to admin login page by clicking on Admin Login option.

SIGN UP

COURSAIDE

SIGN UP

1

2

Email ID

Password

Confirm Password

NEXT >

fig(17a): Sign up step one

COURSAIDE

SIGN UP

1

2

COURSES COMPLETED

CREDITS DONE

☐ M.Tech ☐ B.Tech

BRANCH

SPECIALISATION

FINISH

fig(17b): Signup step two

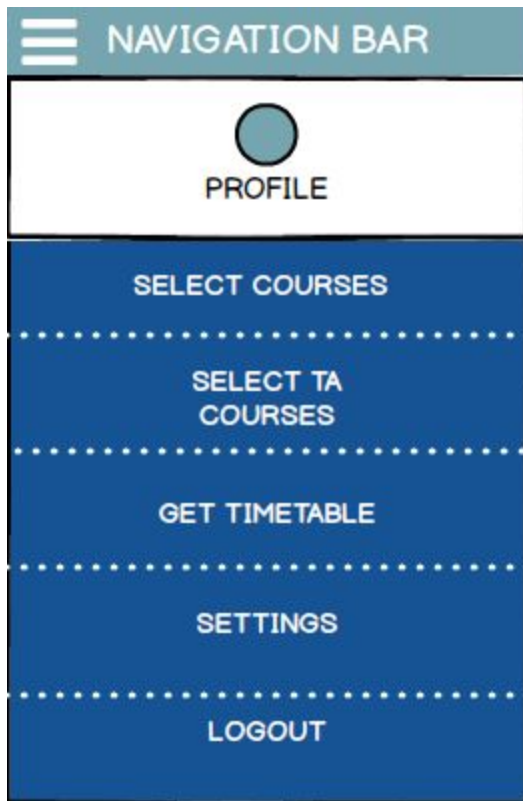
Step 1:

- Student can sign up into the system by providing his email id and a password.
- The student then clicks on next option and he is then directed to other page to complete the signup details.

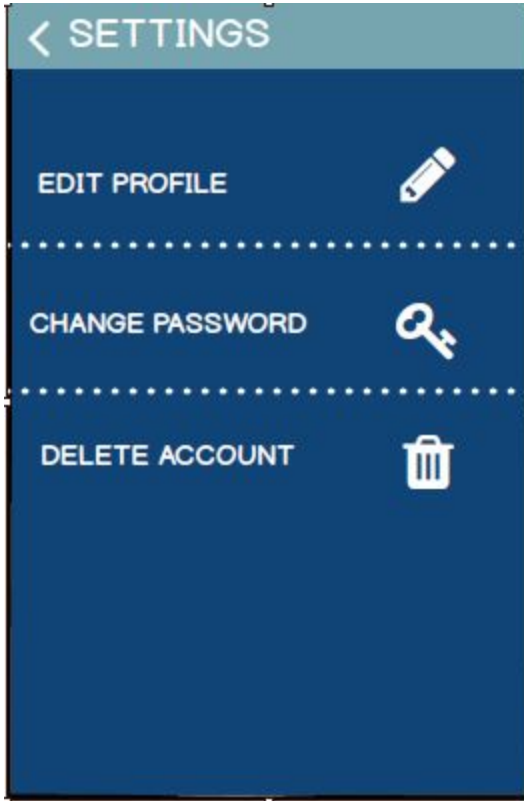
Step2:

- Student is required to fill certain details to complete signup.
- The student can provide information about the courses he has completed so far.
- He can mention the credits completed by him.
- He can choose his course by selecting either of Mtech or Btech radio button.
- He can choose his specialisation from a drop down menu.

NAVIGATION BAR



fig(18): Navigation Bar options



fig(19): Settings Activity

After signing up the user can move from one activity to another by using the navigation bar. A student can select the following options from the navigation bar.

- Select courses: To select course to be done in this semester.
- TAs courses: To select the best option for TA ship.
- A student can get the timetable by clicking the get timetable option after selecting both semester and TA ship courses.
- Settings will take user to the settings page, where he can edit his profile, change password or delete account.
- A student can logout from the app by clicking the logout option provided.

CLASH CHECKER FOR SEMESTER COURSES

The screenshot shows a mobile application interface titled 'COURSAIDE'. At the top, there is a navigation bar with a hamburger menu icon on the left and the title 'COURSAIDE' in the center. Below the navigation bar, there are two tabs: 'CLASH CHECKER' (highlighted in cyan) and 'RECOMMENDATION' (white). The main content area has a blue background. It starts with the text 'SELECT COURSES' in white. Below this is a large white rectangular text input field. Under the input field is a white button with rounded corners labeled 'CHECK CLASH'. A horizontal dashed white line separates the input section from the results section. Below the line, the text '.....RESULT.....' is displayed in white. Underneath, there are two lines of red text: 'SUBJECT1' and 'SUBJECT2'. At the bottom of the screen is a white button with rounded corners labeled 'SAVE'.

fig(20): Activity to check clash

Student is provided with two options - to run clash checker or to get recommendations.

- A student can specify courses of his choice in the text field and then run clash checker by clicking check clash button.
- Results are provided on the same screen with clashing subjects highlighted in same colour to indicate which subjects are clashing.
- When the user find the perfect combination of courses, then he can save those courses. This will enable the app to generate a personalised time table later on based on the users course selection.
- A student can get recommendations for course selection by clicking recommendations button.

RECOMMENDATION

The screenshot shows the COURSAIDE app interface. At the top, there is a header bar with a hamburger menu icon and the text 'COURSAIDE'. Below the header, there are two tabs: 'CLASH CHECKER' and 'RECOMMENDATION'. The 'RECOMMENDATION' tab is selected and highlighted in cyan. The main content area has a dark blue background. It contains three input fields for 'TOTAL CREDITS', 'SPECIALISATION CREDITS', and 'BUCKET CREDITS'. Each input field is a white rectangle with a black border. Below these fields is a white 'SUBMIT' button with a black border.

fig(21): Activity to specify filters

The screenshot shows the COURSAIDE app interface. At the top, there is a header bar with a hamburger menu icon and the text 'COURSAIDE'. Below the header, there are two tabs: 'CLASH CHECKER' and 'RECOMMENDATION'. The 'RECOMMENDATION' tab is selected and highlighted in cyan. The main content area has a dark blue background. It contains a section titled 'PREFERRED COURSES' with a large white input field below it. Below the input field is a white 'GET RESULTS' button with a black border. Below this button is a horizontal dotted line, followed by the text 'RECOMMENDATION'. Below this text are three radio buttons labeled 'RESULT1', 'RESULT2', and 'RESULT3'. At the bottom is a white 'SAVE' button with a black border.

fig(22): Activity to get recommendations

- In order to get better recommendations the user must fill in the details in the filter. However, they can be left blank.
 - Total Credits : How many credits one wishes to complete in this semester.
 - Specialization credits : How many specialization credits one wishes to complete.
 - Bucket credits : How many bucket courses one wishes to complete.
- Submit button saves the filter preferences and takes the user to another activity.
- Here the user can repeatedly enter a few course he is interested in or “definitely wishes to opt”.
- By clicking on the get results button all the user preferences will be used to generate a set of possible combination of courses that the user might be interested in.
- If the user finalizes any recommendation result then by clicking on the radio button he can select it and save it by clicking on the save button.

CLASH CHECKER FOR TA COURSES

The screenshot shows a mobile application interface for 'COURSAIDE'. At the top, there is a header bar with a hamburger menu icon and the text 'COURSAIDE'. Below this, there are two tabs: 'TA CLASH CHECKER' (highlighted in cyan) and 'RECOMMENDATION'. The main content area has a dark blue background. It starts with a dropdown menu labeled 'Select a TA course'. Below this is a section titled 'SELECT COURSES' containing a large white text input field. Under the input field is a button labeled 'CHECK CLASH'. A horizontal dotted line separates the input section from the 'RESULT' section. In the results section, there are two labels, 'SUBJECT1' and 'SUBJECT2', both in red text. At the bottom of the results section is a button labeled 'SAVE'.

fig(23): Activity to check clash with TA course

Student is provided with two options for TA courses - to either run clash checker or to get recommendations.

- A student can specify courses of his choice in the text field and then run clash checker by clicking check clash button.
- The course entered is checked against the courses that user has taken in this semester and if there is a clash it is indicated in the results.

TA COURSES RECOMMENDATION

The screenshot shows the 'COURSAIDE' application with a navigation bar containing 'TA COURSE CLASH' and 'RECOMMENDATION'. Below the navigation bar is a section titled 'FILTERS' with three categories: 'LEVEL' (with checkboxes for '100-300', '300-500', and '500 and above'), 'BRANCH' (with checkboxes for 'CSE', 'ECE', 'CB', and 'Others'), and 'DUTIES' (with checkboxes for 'TUTORIAL' and 'LAB'). At the bottom of the filter section is an 'APPLY FILTERS' button.

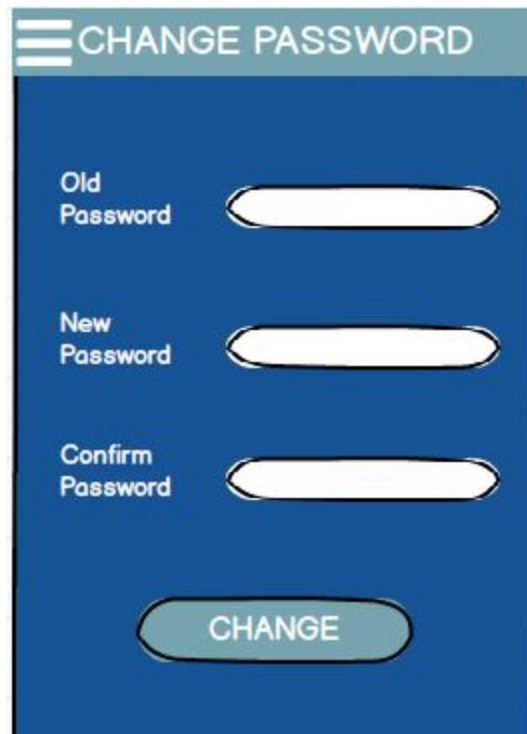
fig(24): activity to specify TA filters

The screenshot shows the 'COURSAIDE' application with a navigation bar containing 'TA COURSE CLASH' and 'RECOMMENDATION'. Below the navigation bar is a section titled 'MY COURSES FOR THIS SEMESTER' with a large empty text input area. Below the input area is a 'GET RESULTS' button. Below a dashed line is a section titled 'RECOMMENDATION' with three radio buttons labeled 'RESULT1', 'RESULT2', and 'RESULT3'. At the bottom is a 'SAVE' button.

fig(25): Activity to get TA recommendations

- A student can specify filters to help system in recommending courses.
- Filters are available such as level, branch and duties.
- Through level a student can choose the level of TA course
- Through branch a student can choose the branch of which he wants to be a TA .
- Student can choose to take whether he wants to take a course which requires him to attend either of tutorial or lab or both.
- Based on the filters system recommends list of courses to the student.
- On clicking apply filter the user is taken to the next activity, where he enters the courses he has taken in this semester finally.
- On the basis of users preferences TA subjects are suggested.

CHANGE PASSWORD



CHANGE PASSWORD

Old Password

New Password

Confirm Password

CHANGE

fig(26): Activity to change password

- User can change his/her password by specifying the old password and the new password.
- Enter new again to confirm it.
- Click on change to change password.
- The menu on top allows the user to navigate to other activities.

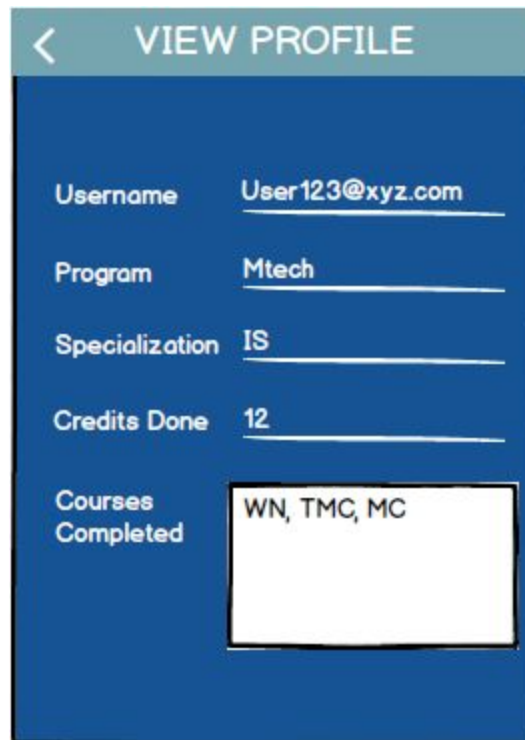
EDIT PROFILE

The screenshot shows a mobile application interface for 'COURSAIDE'. At the top, there is a header bar with a hamburger menu icon on the left and the text 'COURSAIDE' in the center. Below this is a blue bar with the text 'EDIT PROFILE'. The main content area has a dark blue background. It starts with the text 'COURSES COMPLETED' above a large white rectangular input field. Below this is the label 'CREDITS DONE' followed by a smaller white rectangular input field. Then, there are two radio button options: 'M.Tech' and 'B.Tech'. Below these are two dropdown menus, one labeled 'BRANCH' and one labeled 'SPECIALISATION'. At the bottom right of the form is a white oval button with the text 'FINISH'.

fig(27): Activity to edit profile

- A student can edit his profile by providing names of courses that he has completed so far.
- He can mention the number of credits already done and select either of Mtech or Btech from the radio buttons provided.
- He can choose his branch and specialisation from the drop down menu.
- To submit details he can click on finish button.

VIEW PROFILE



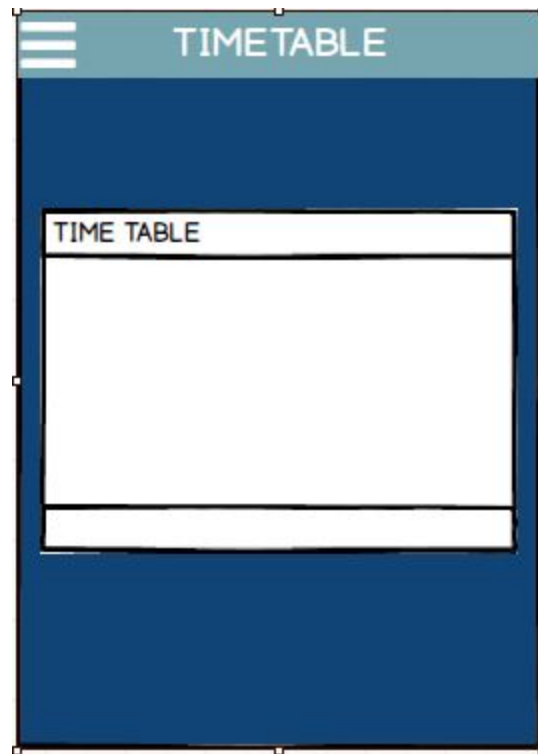
A screenshot of a mobile application interface titled "VIEW PROFILE". The screen has a dark blue background. At the top, there is a light blue header bar with a back arrow icon on the left and the text "VIEW PROFILE" in the center. Below the header, the profile information is displayed in a list-like format. Each item consists of a label on the left and a value on the right, separated by a horizontal line. The items are: "Username" with the value "User123@xyz.com", "Program" with the value "Mtech", "Specialization" with the value "IS", "Credits Done" with the value "12", and "Courses Completed" with the value "WN, TMC, MC". The "Courses Completed" value is displayed inside a white rectangular box with a black border.

Username	User123@xyz.com
Program	Mtech
Specialization	IS
Credits Done	12
Courses Completed	WN, TMC, MC

fig(28): Activity to edit profile

- By clicking on profile in the navigation bar user can view his profile.

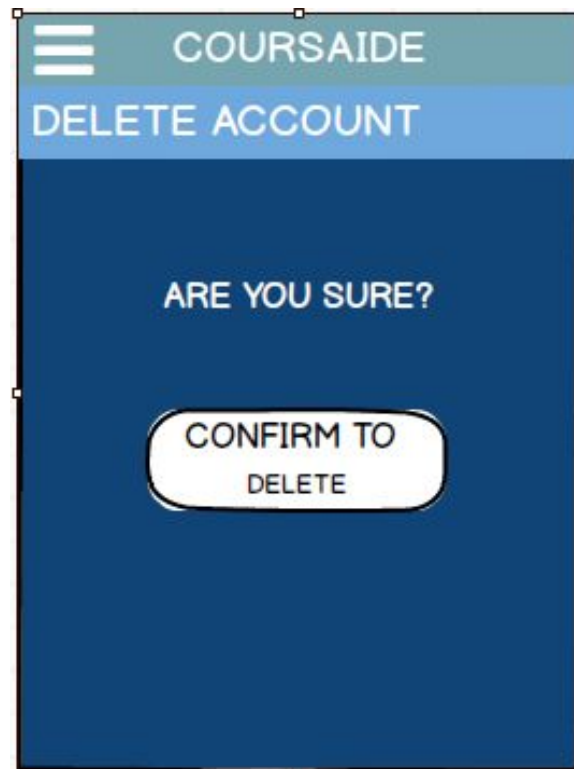
GET TIMETABLE



fig(29): Activity to get time table

- On clicking “Get time table”, in the navigation bar, the user is directed to this activity.
- Where he can get a time table according to the courses chosen by him.

DELETE ACCOUNT



fig(30): Activity to delete account.

- Student can delete account by clicking the confirm to delete button.
- On clicking “Confirm to delete”, the user will be taken to the login page.

