

E-Study

Academic Management System

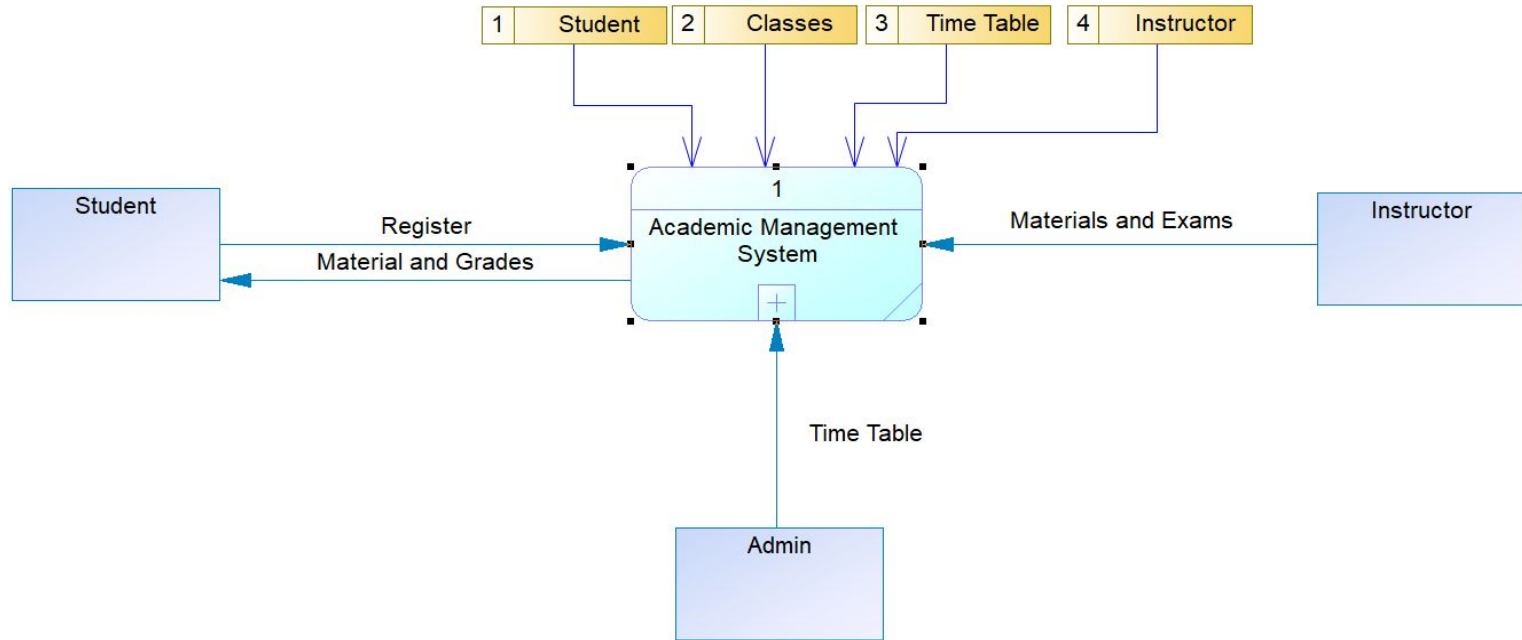
Group 25

Mentor : Kalgi Ma'am



- 201901080 Tarun Boricha
- 201901087 Vivek Makwana
- 201901137 Karabhai Hun
- 201901152 Rameshkumar Kodiyatar
- 201901405 Charitya
- 201901431 Dhawal Katriya

Context Diagram



Functionalities (User Stories)

1. Sign Up /Sign In :

Student/Professor/Admin can register to application to use functionality. All users have a unique username and password to sign up. It provides functionality to change password. If user forgets the password then the user can update it by contacting the admin.

2. Registrations :

Student can register to provided courses in particular semester. There are some core courses and it is compulsory for student to register. Student can change course till some time of period after register a course.

3. Result :

Student can see their result in application of each semester. Instructor can change/insert grade in student's result.

4. Examination :

Admin can upload timetable of examinations so all students can check timetable of examinations easily.

5. Timetable :

Admin will provide lecture, exam and lab timetable to student so they can check it and if they find any difficulty then they can also mail to admin and he can do some changes and again send to student.

6. Attendance :

Students can check their attendance of each core course. Attendance of each student is automatically marked in their profile.

7. Profile :

Students, Admin and Professors all have their own profile with all kinds of information like Contact Number, Email ID, addresses of home and they all can edit their information easily.

Functionalities (User Stories)

8. Committees/Clubs :

An institute can have different clubs /committee. Student can apply for to join committee. Admin can add or remove a particular committee.

9. Library :

Students can check anytime which books are available now and they can access available book. Students can check last date for return book.

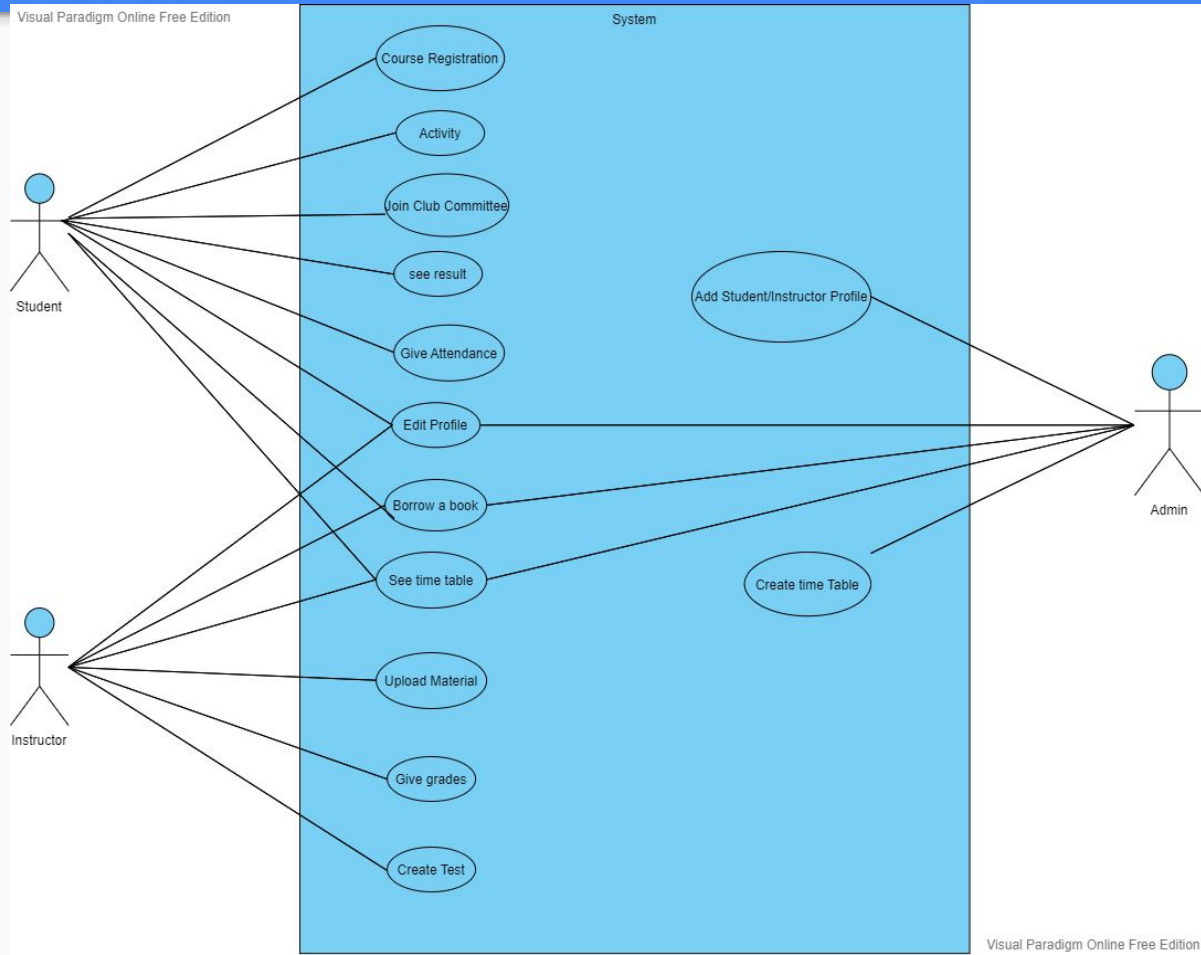
10. Study Material :

Professors can upload all kinds of material in pdf or word format. Students can download anytime it easily from application.

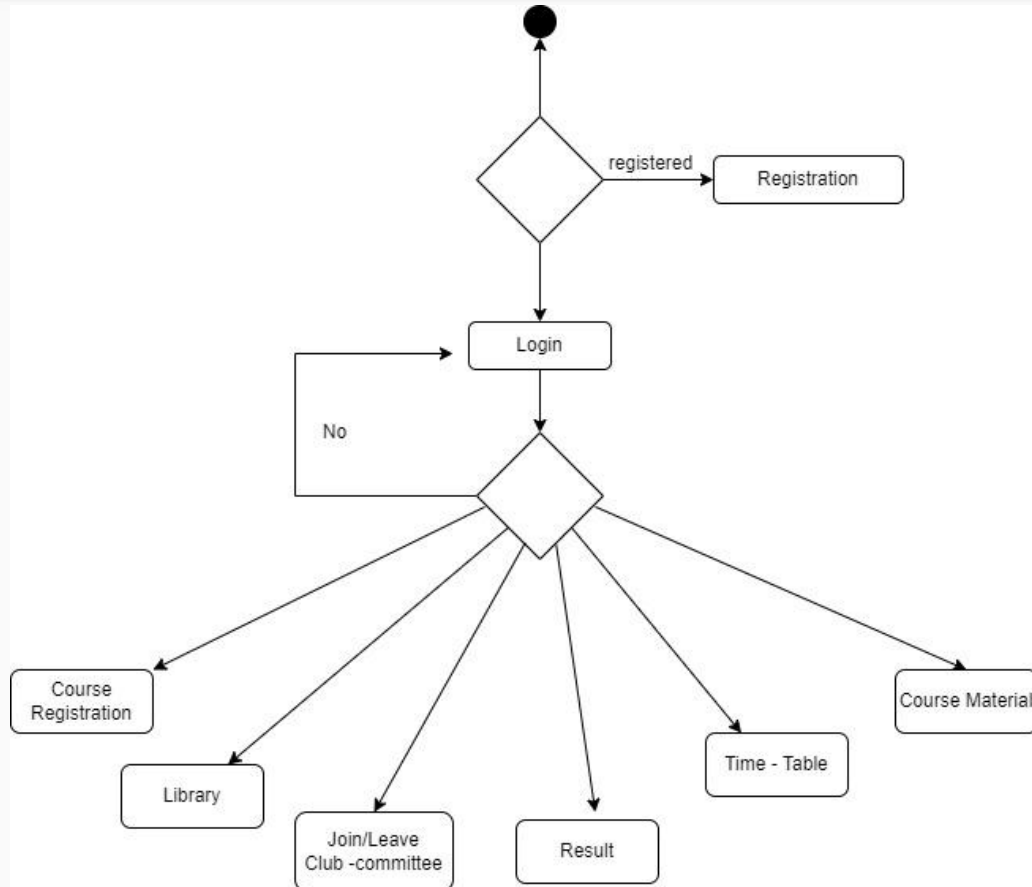
11. Help :

If any students need help of academic program or any other help from any professors so all kind of help provided by admin or professors.

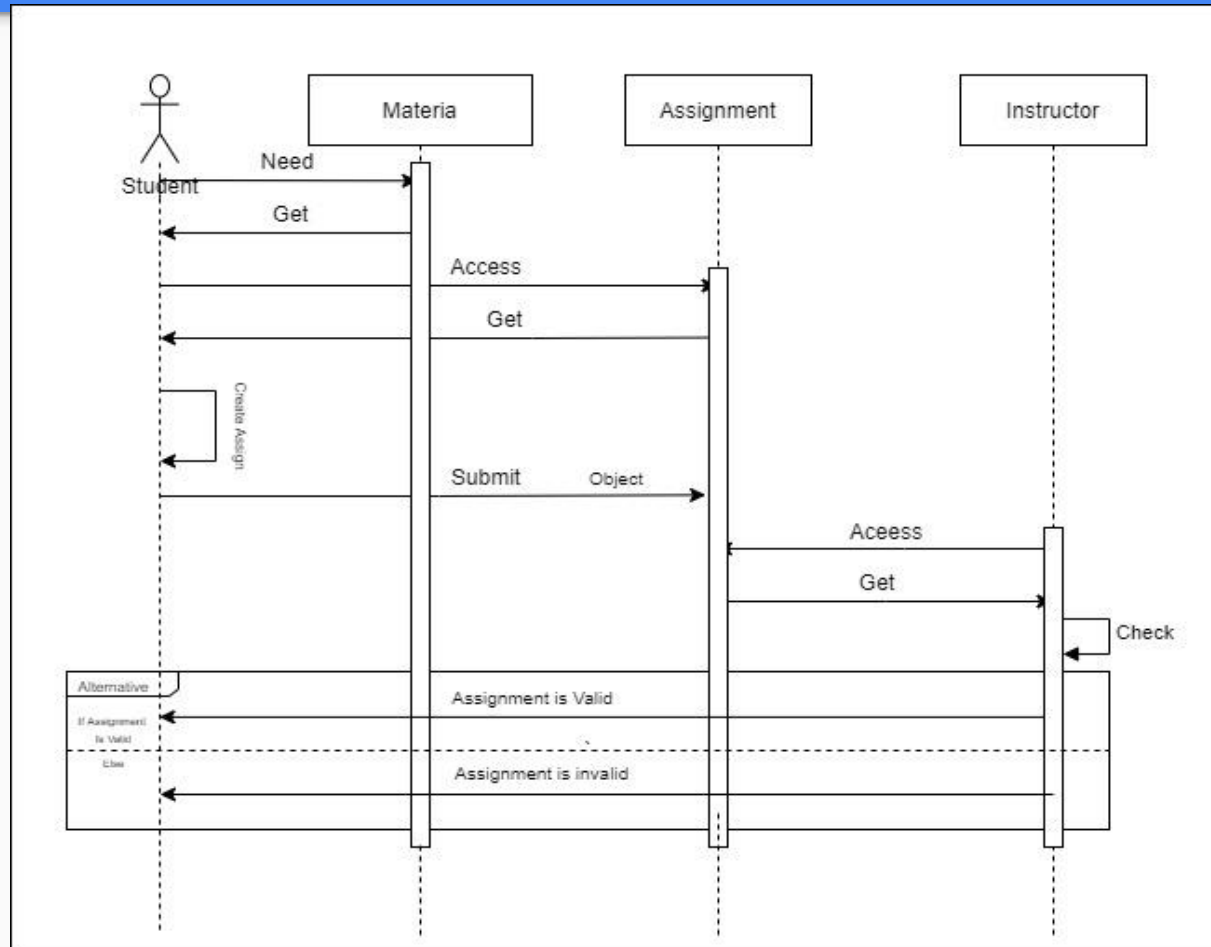
Top Level Use Case Model



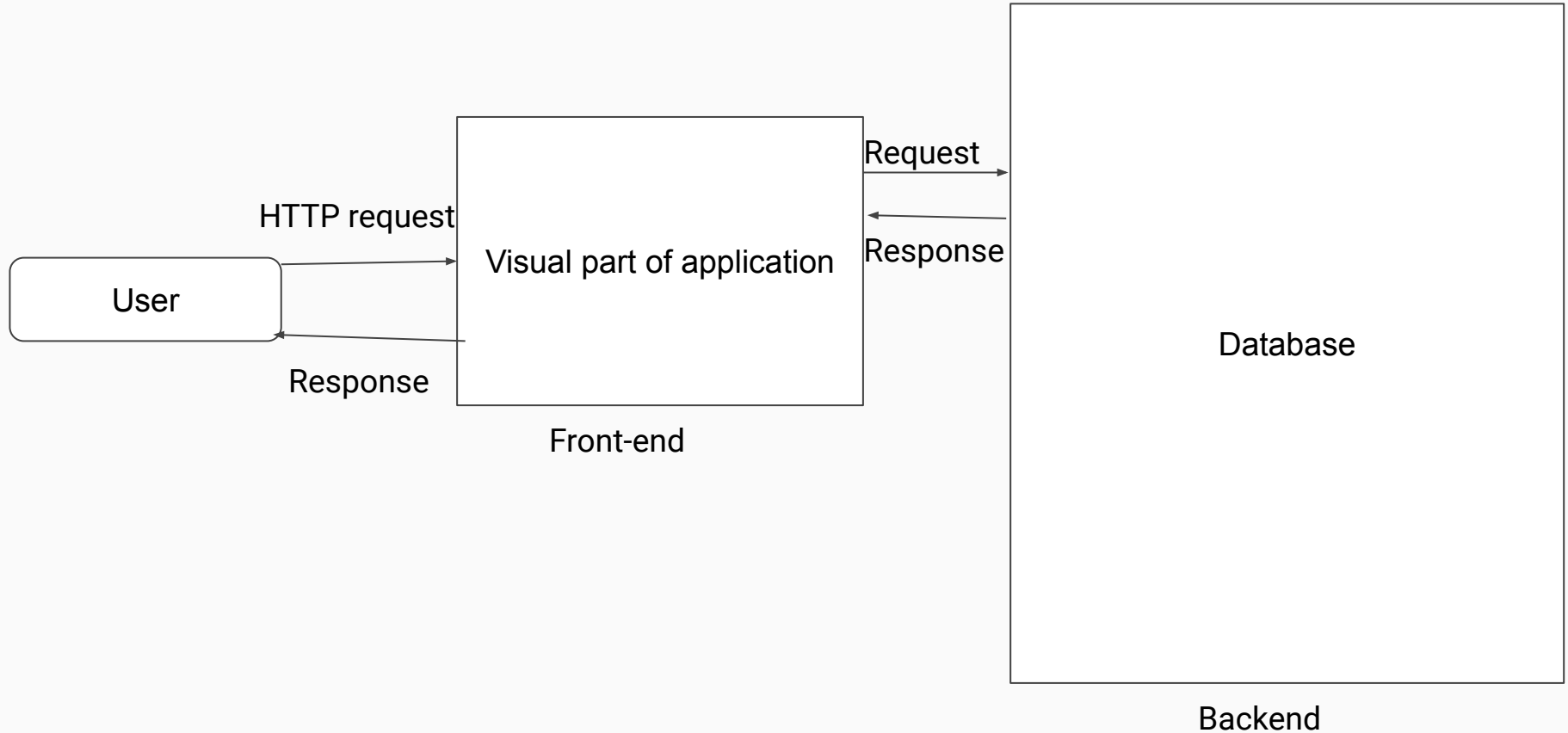
Activity Diagram



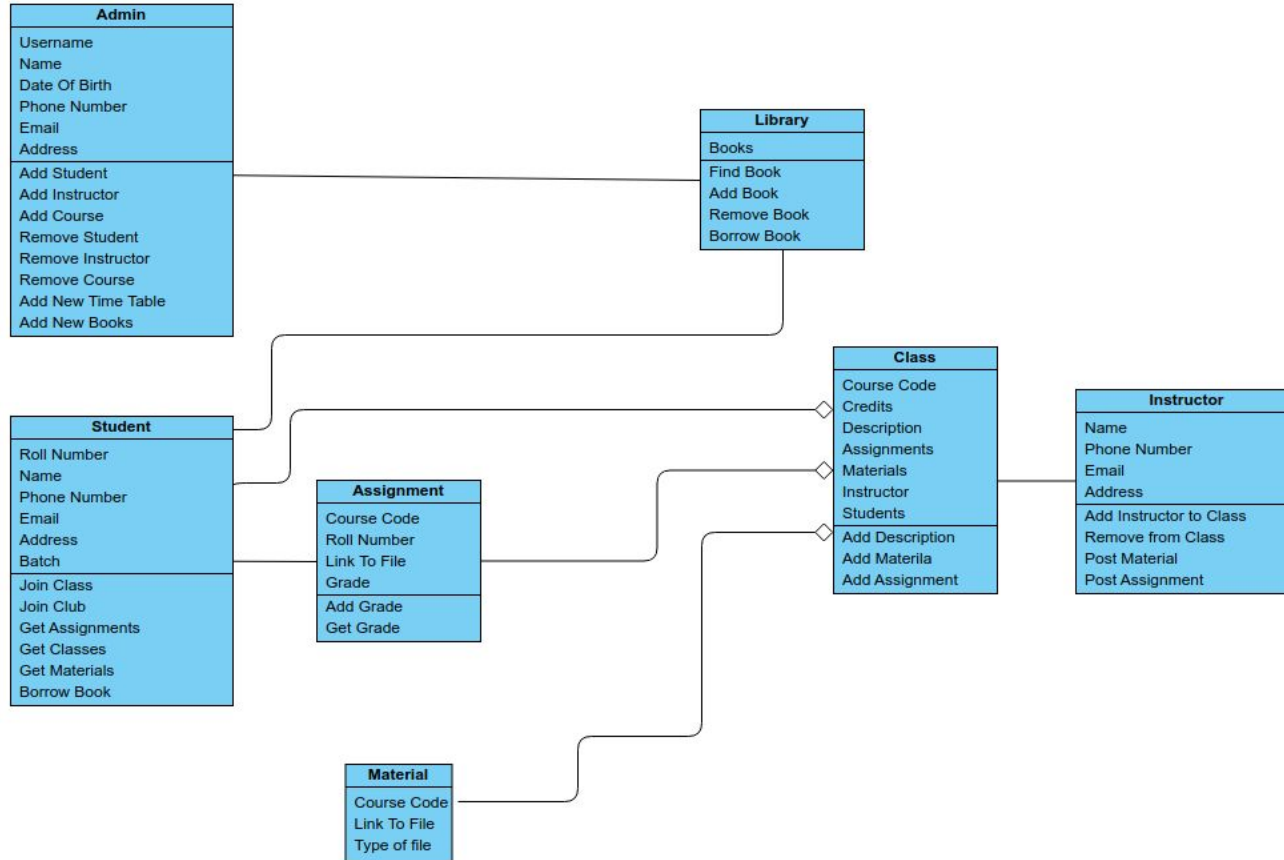
Sequence Diagram



Application Architecture

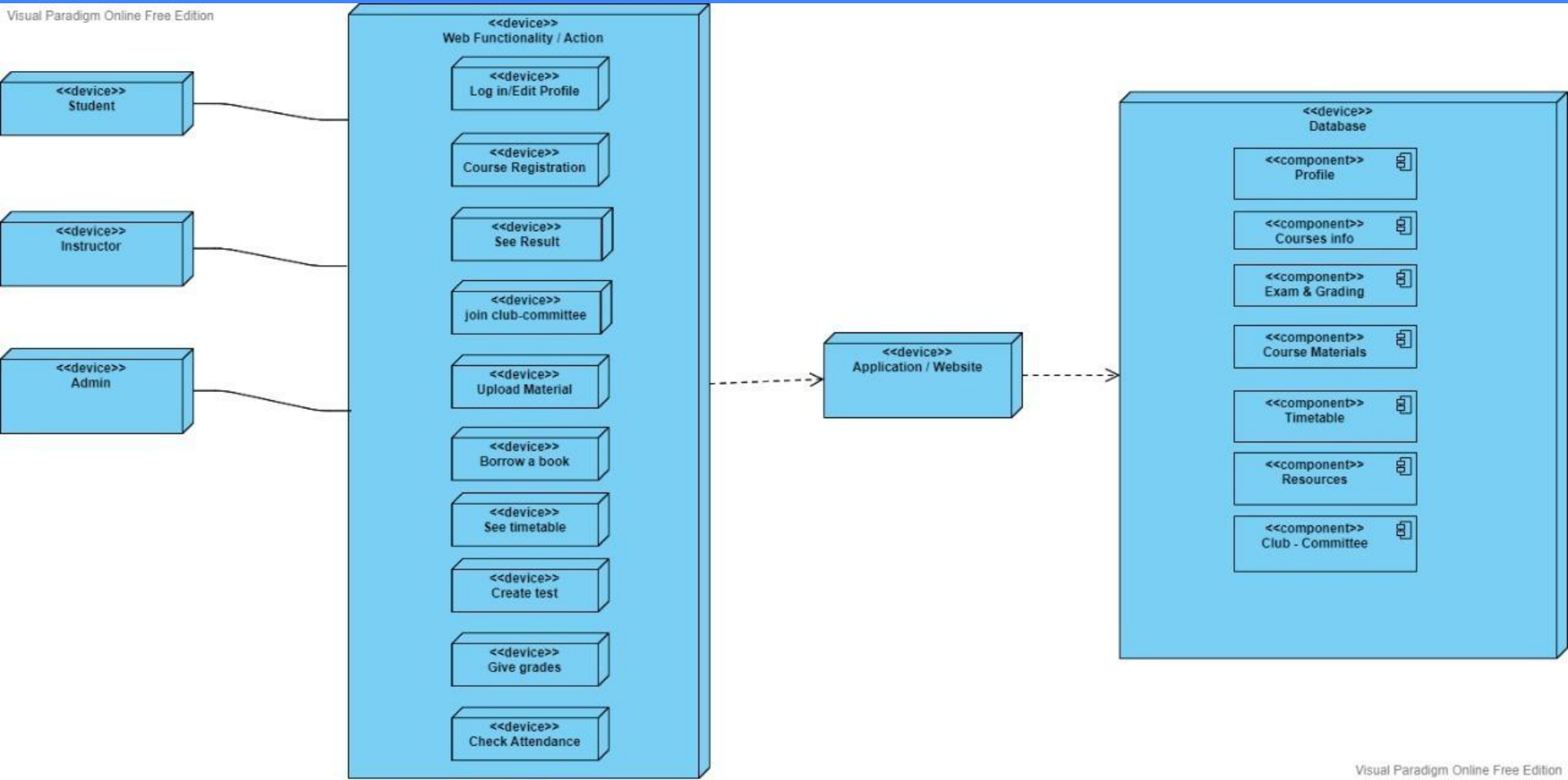


Detailed Class Diagram



Deployment Diagram

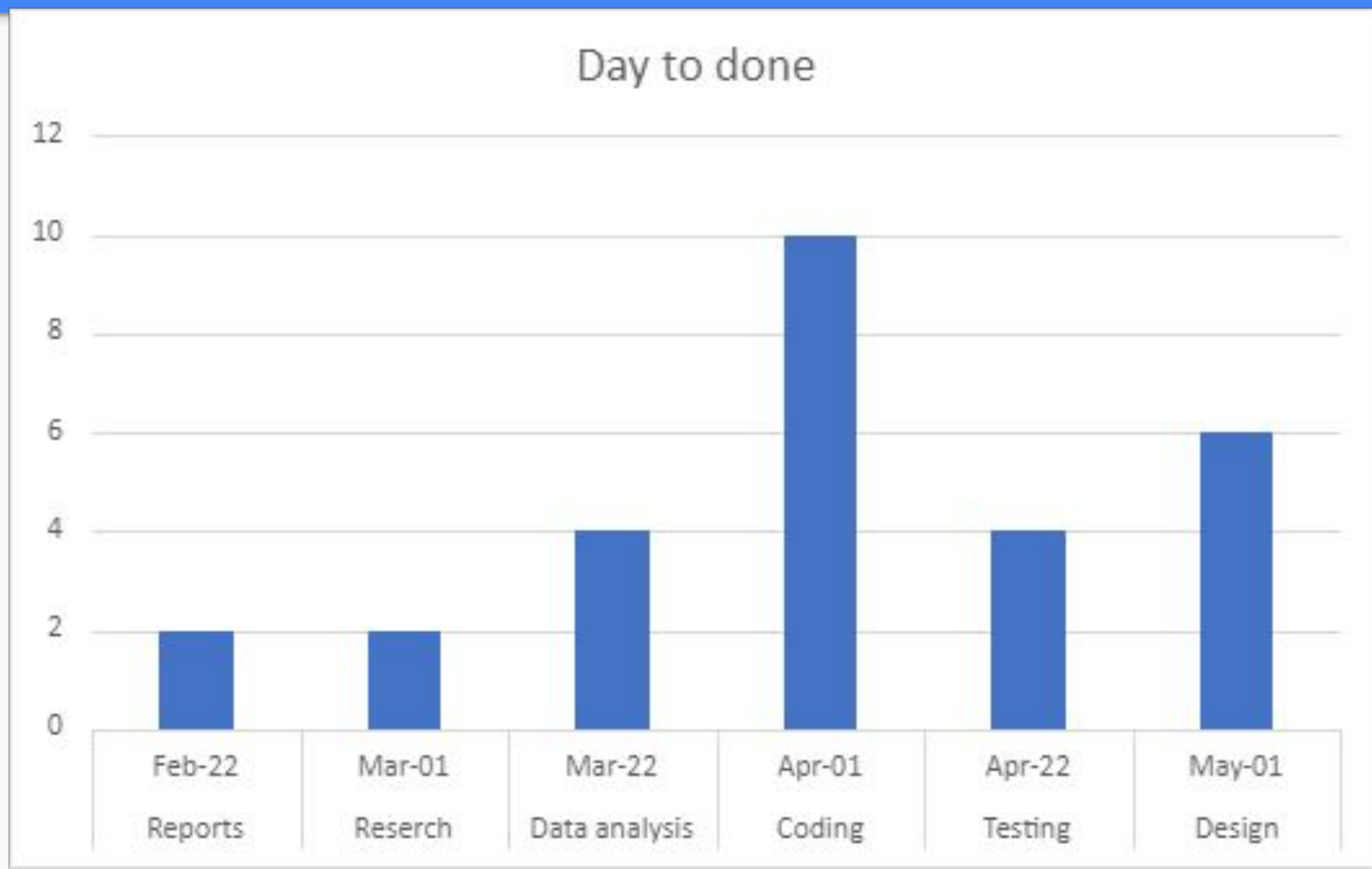
Visual Paradigm Online Free Edition



Contribution Details

ID - Name	Contribution
201901080 Tarun Boricha	Documentation, Research
201901087 Vivek Makwana	Front-end, Research
201901137 Karabhai Hun	Research,Front-end
201901152 Rameshkumar Kodiyatar	Research,Documentation
201901405 Charitya	Documation, Full-stack
201901431 Dhawal Katriya	Backend, Research

Gantt Chart for entire project



Technologies / Tools and Libraries

Programming Technologies

- React - Library to create interactive user interfaces.
- Bootstrap - A CSS styling library.
- PostgreSQL - An SQL database
- Django - A Batteries included web framework for python

Development Tools






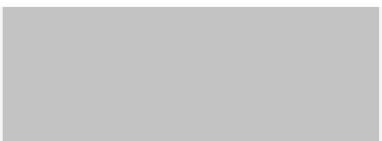
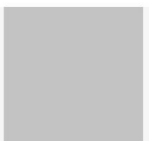


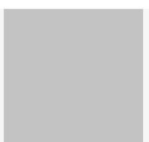
- VScode - An all in one modern code editor.
- PgAdmin - An application for managing Postgres database.

Languages

- JavaScript, HTML, CSS, Python

Application navigation using UI / UX design

My Classes

	<p>IT 315 Information and Communication Technology</p> <p>Prof. Tapas Kumar Maiti</p>	<p>1 of 4 Assignment Due Today</p> <p>2 Classes to Attend Today</p>
		
		
		

Work Schedule

3 Assignments Due Today

10 Assignments Due this Week

Class Schedule

3 Classes To Attend today

10 Classes To Attend this week

Application navigation using UI / UX design

IT 315(Information and Communication Technology)

Prof. Tapas Kumar Maiti

Work Schedule

3 Assignments
Due Today

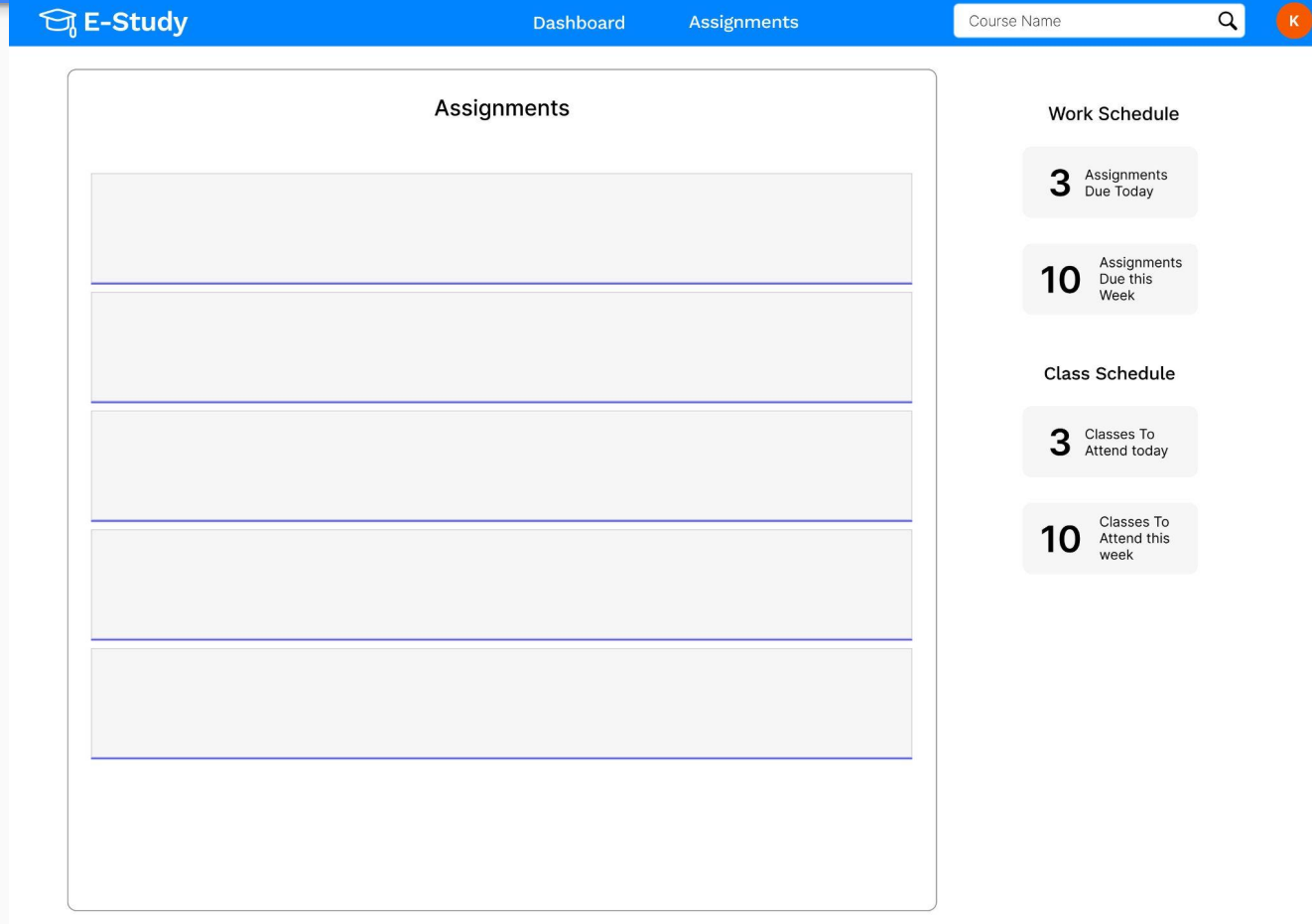
10 Assignments
Due this
Week

Class Schedule

3 Classes To
Attend today

10 Classes To
Attend this
week

Application navigation using UI / UX design



Application navigation using UI / UX design

The screenshot shows a web browser window with the Django administration interface. The browser's address bar displays the URL `127.0.0.1:8000/admin/`. The page title is "Django administration". In the top right corner, there is a welcome message: "WELCOME, DHAWAL. [VIEW SITE](#) / [CHANGE PASSWORD](#) / [LOG OUT](#)".

The main content area is titled "Site administration" and is divided into two columns. The left column contains three sections:

- AUTH TOKEN**: Includes a "Tokens" table with "+ Add" and "Change" links.
- AUTHENTICATION AND AUTHORIZATION**: Includes "Groups" and "Users" tables, each with "+ Add" and "Change" links.
- WEBAPP**: Includes "Admins", "Instructors", and "Students" tables, each with "+ Add" and "Change" links.

The right column is titled "Recent actions" and contains a section "My actions" listing several users with a red 'x' icon and the role "Admin":

- Stanly Poynor
- Casey Hynard
- Livia McKevany
- Janean Kochel
- Byrle Burtwistle
- Marillin Altofts
- Wilow Astley
- Glennis Cornock
- Hamlin Gellert
- Lisetta Featherbie

The bottom of the image shows a Windows taskbar with the system clock displaying 11:31 AM on 4/16/2022, and the weather showing 91°F and Smoke.

Application navigation using UI / UX design

The screenshot displays the pgAdmin 4 web interface. On the left, the 'Schemas (1)' tree is expanded to show the 'public' schema, which contains various database objects including 'Tables (13)'. The 'webApp_admin' table is selected. The main panel shows the 'Query Editor' with a SQL query: `SELECT * FROM public."webApp_admin" ORDER BY id ASC`. Below the editor, the 'Data Output' tab displays the results of the query in a table format. The table has 5 columns: 'id' (integer), 'name' (character varying), 'email' (character varying), 'address' (character varying), and 'mobile_no' (character varying). The results show 5 rows of data. A status bar at the bottom right indicates 'Successfully run. Total query runtime: 107 msec. 5 rows affected.'

pgAdmin 4

File Object Tools Help

Browser

Schemas (1)

- public
 - Aggregates
 - Collations
 - Domains
 - FTS Configurations
 - FTS Dictionaries
 - FTS Parsers
 - FTS Templates
 - Foreign Tables
 - Functions
 - Materialized Views
 - Operators
 - Procedures
 - Sequences
 - Tables (13)
 - auth_group
 - auth_group_permission
 - auth_permission
 - auth_user
 - auth_user_groups
 - auth_user_user_permi
 - django_admin_log
 - django_content_type
 - django_migrations
 - django_session
 - webApp_admin
 - webApp_instructor
 - webApp_student
 - Trigger Functions

public.webApp_admin/mydb/postgres@PostgreSQL 14

Query Editor Query History

Scratch Pad

```
1 SELECT * FROM public."webApp_admin"
2 ORDER BY id ASC
```

Data Output Explain Messages Notifications

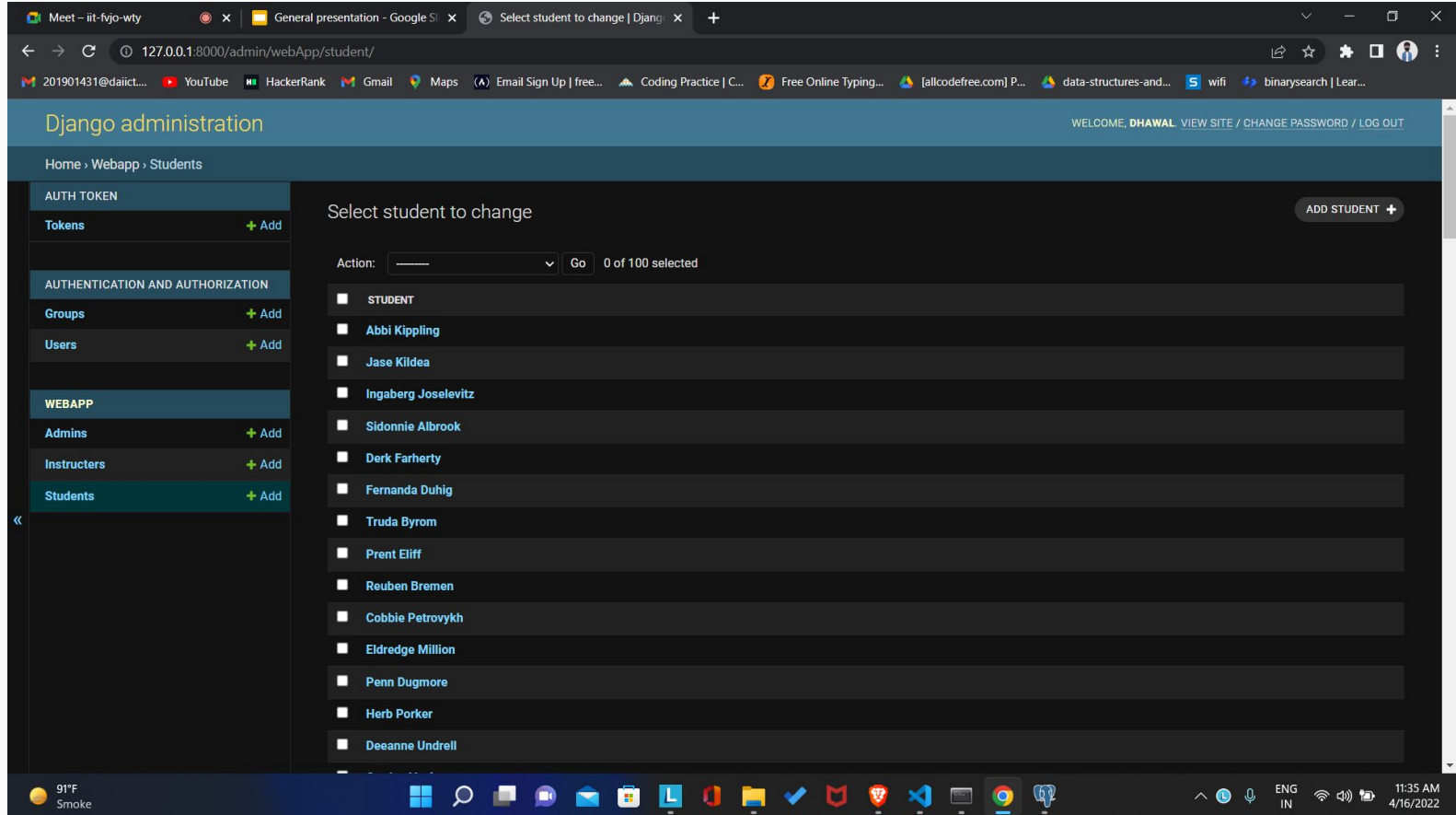
	id [PK] integer	name character varying (50)	email character varying (254)	address character varying (255)	mobile_no character varying (15)
1	96	Margery Rimell	mrime12n@mediafire.com	9507 Barnett Trail	7931309236
2	97	Buddy Behrend	bbehrend2o@1und1.de	82 Red Cloud Center	9208692340
3	98	Mathew Tubb	mtubb2p@dion.ne.jp	148 Westridge Street	8852515729
4	99	Franzen Vahl	fvahl2q@mlb.com	9 Kensington Hill	9198403745
5	100	Darbie Poston	dposton2r@cmu.edu	082 Clyde Gallagher Trail	9632449292

✓ Successfully run. Total query runtime: 107 msec. 5 rows affected.

91°F Smoke

11:33 AM 4/16/2022

Application navigation using UI / UX design



The screenshot displays a web browser window with the URL `127.0.0.1:8000/admin/webApp/student/`. The page is titled "Django administration" and includes a welcome message for "DHAWAL" with links for "VIEW SITE", "CHANGE PASSWORD", and "LOG OUT".

The left sidebar contains the following navigation menu:

- AUTH TOKEN
 - Tokens + Add
- AUTHENTICATION AND AUTHORIZATION
 - Groups + Add
 - Users + Add
- WEBAPP
 - Admins + Add
 - Instructors + Add
 - Students + Add

The main content area is titled "Select student to change" and features a table of students. The table has a checkbox column and a name column. The students listed are:

	STUDENT
<input type="checkbox"/>	Abbi Kipling
<input type="checkbox"/>	Jase Kildea
<input type="checkbox"/>	Ingaberg Joselevitz
<input type="checkbox"/>	Sidonnice Albroom
<input type="checkbox"/>	Derk Farherty
<input type="checkbox"/>	Fernanda Duhig
<input type="checkbox"/>	Truda Byrom
<input type="checkbox"/>	Prent Eliff
<input type="checkbox"/>	Reuben Bremen
<input type="checkbox"/>	Cobbie Petrovykh
<input type="checkbox"/>	Eldredge Million
<input type="checkbox"/>	Penn Dugmore
<input type="checkbox"/>	Herb Porker
<input type="checkbox"/>	Deeanne Undrell

At the bottom of the page, there is a status bar showing the weather as "91°F Smoke" and the system clock as "11:35 AM 4/16/2022".

Summary of Implementation

- To handle the coding component, we primarily used Visual Studio Code and Terminal. Many extensions are available for Visual Studio Code, which improves the development experience.
- We utilised SQL as a database, we used the django as backend framework, and postgres as Database.

Thank you!

