

Student Database Management

Project ID: 25

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Department: Civil Engineering

Stack: Python stack

TECHNICAL COMPONENTS

Work Phase	Technical components used
UI/UX-Design	Figma
Front end development	HTML, CSS, JavaScript
Database Implementation	MySQL
Backend Development	Python-Django

Project Timeline Implementation

S.no	Deadline	Phase	Status
1.	04/05/2024	Planning and Requirement gathering	Completed
2.	13/08/2024	Design and Prototyping	In progress
3.		Database Designing	Not started
4.		Backend Development	Not started
5.		Testing And Implementation	Not started
6.		Deployment	Not started

Module Description:

To build a portal that provide details of student with respect to the department, gender, year, student status, hostel/day scholar, community, quota, seat category etc.

Problem Statement:

To develop a secure web-based student and administrator information portal to centrally manage detailed student data, including personal, academic, enrolment details, and attributes like department, gender, year, status, hostel, community, quota, and category etc. Enable authorized user access, data filtering, reporting, and analytics with interactive dashboards. And to create another interface for administrator where every student's data can be accessed and filtered accordingly.

1. Planning:

➔ Scope of the project:

The main aim of the project is to create the better user experience interface for the both Administrator and students to see their all information from any devices and users can access all their own data and administrators can access every student profile and sort and filter the required information.

➔ User design and Interface:

Creating engaging web experiences by satisfying user needs and considering every device website has been optimized for each device according to the size.

➔ Login and Authorization:

To increase the security and authentication of the users, website has been created with login page where user can login with the organization mail id to see their required information for both administrators and user.

2. Requirement Gathering:

By understanding the problem statement following requirements has been gathered for both users and administrators:

➔ Requirements for Administrators-Interface:

- The admin can access and see every individual profile starting admission to academics every information can be accessed easily.

- Administrator will be given with google account when login happens different user interface will be shown with every analytical data for required data
- The key feature of the website is if the administrator needs bulk amount of data in a particular category, they can filter it out and name list can be taken.
- If the user needs to mail for the particular student, it is time consuming process to take individual mail id, so to avoid this export data option is kept, when he clicks filtered data will be stored as csv (comma separated value) file.

➔ Requirements for Students-Interface:

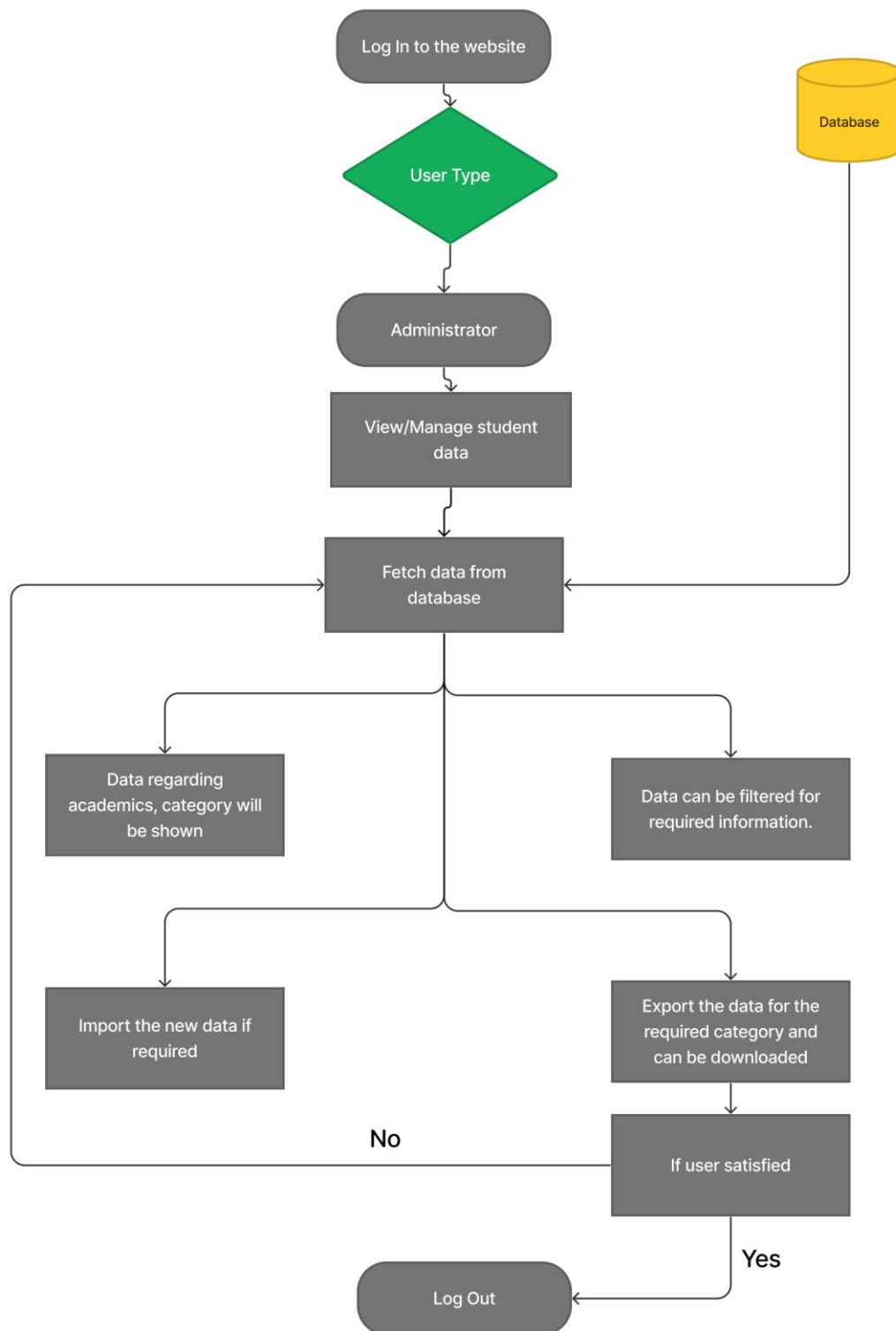
- For student when he enters the website, with mail id from server it will detect it as student and shows student user interface.
- In the interface shows all details like name, roll no, department, Community, seat, quota, etc., in a structured manner.

3. Technological stack:

For the creating the websites programming languages and database required are:

- **HTML, CSS and JS:** Here HTML and CSS are required for making wonderful user interface for the students and admins. JavaScript is required for making the website more interactive to the users.
- **Python (DJANGO):** Here Python is used for backend to render the HTML file and making website more secure. Django is used for connecting the Frontend and Database in a secure way.
- **Database:** MySQL is used for storing the data of all students like Roll no, name, department etc.

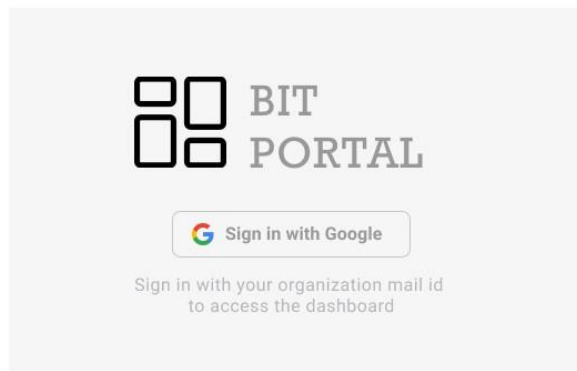
Flowchart:



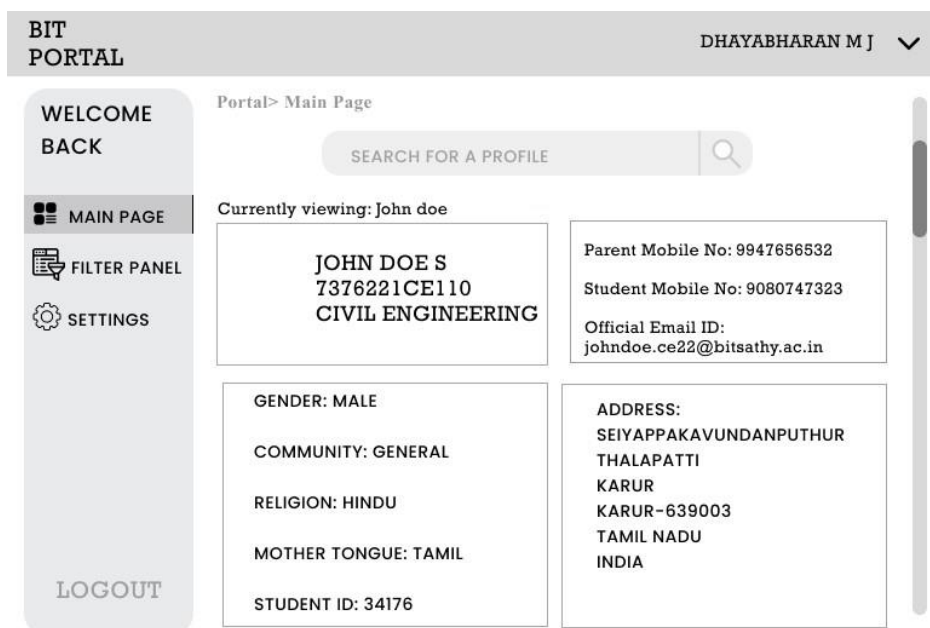
4. User-Interface Design:

➔ Admin (UI):

I. Log-In Page:





II. Main-page:





III. FILTER PANEL:


BIT
PORTAL

 DHAYABHARAN M J

WELCOME
BACK

 MAIN PAGE


 FILTER PANEL

 SETTINGS

LOGOUT

Portal > Filter Panel

Filter Panel

 Export Data

Total no of students: 0

Search your required data in
Filter section

Filters

Batch

All Batches

Department

All Departments

Quota

Counselling

Number of companies attended

Three



10th Mark percentage

Above 80%


Clear All


IV. FILTER PANEL RESULTS:


BIT
PORTAL

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WELCOME
BACK

 MAIN PAGE


 FILTER PANEL

 SETTINGS

LOGOUT

Portal > Filter Panel

Filter Panel

 Export Data

Total no of students: 20

ID	NAME	DEPARTMENT	MAIL-ID
1	DHAYABHARAN	CIVIL	dhayabharan.ce22
2	AJAY	IT	ajay.it22
3	BALAJI	AIML	balaji.ai22
4	NAGAMADHU	AIDS	nagamadhu..ad22
5	VIKASH	CIVIL	vikash.ce22
6	GUGANESH	CIVIL	guganesh.ce22
7	BARATH	CSE	barath.cs22

Filters

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WELCOME
BACK MAIN PAGE FILTER PANEL SETTINGS

LOGOUT

Portal > Filter Panel

Filter Panel

 Export Data

Total no of students: 20

 Filters

GENDER	ACCOMODATION	STATUS
MALE	HOSTELLER	Active
MALE	DAYSCHOLAR	Active
MALE	DAYSCHOLAR	Active
MALE	HOSTELLER	Active
MALE	HOSTELLER	Active
MALE	DAYSCHOLAR	Active
MALE	DAYSCHOLAR	Active

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