SOFTWARE REQUIREMENT SPECIFICATION

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Project ID	10
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Problem statement	Tac Review Scheduling Portal

PROBLEM STATEMENT:

Difficulty Locating Review Times: It might be challenging for educators and students to ascertain when TAC project reviews are available. Since there's nowhere to go to find this information in one location, people lose out on opportunities to be reviewed, and scheduling is delayed.

Faculty Time Crunch: Educators who oversee projects find it challenging to manage their calendars. Since there is no structure in place to assign review times, some teachers end themselves overworked and others underutilized. This implies that reviews could not be completed to the best of their abilities.

Mixed Signals: There's unclear communication on TAC project reviews among teachers, students, and administrators. It is possible that important information regarding the opening and closing times of slots will not reach everyone in a timely manner. Delays and misunderstanding result from this.

Many pupils, Few Slots: To ensure that everyone has an opportunity to complete evaluations, a solid scheduling system must be in place because of the large number of pupils. In addition to helping students learn more from the experience, a central scheduling system would ensure that all students received review slots fairly.

TECHNICAL COMPONENTS:

FRONTEND	REACT
BACKEND	Node.js with express
DATABASE	MongoDB

1. INTRODUCTION:

A web-based tool called the Review arranging Portal for TAC (Team Academic Project) was created to make the process of arranging reviews for student projects in educational institutions more efficient. The portal attempts to solve the problems with slot visibility limitations, ineffective resource allocation, manual review scheduling, and poor stakeholder communication.

2. PURPOSE:

This Software needs Specification (SRS) document aims to give readers a thorough understanding of the features and needs of the TAC Review Scheduling Portal. It acts as a roadmap for the development team to efficiently design, build, and test the online application.

3. OBJECTIVES:

- Stating the application's functional and non-functional needs in clear terms.
- Defining the main players in the project and their responsibilities.
- Describing the features and functionalities that will be included in the project and its scope.
- Bringing stakeholders' knowledge of the project's objectives and deliverables to consensus.
- Supplying a foundation for resource allocation, estimation, and project planning.

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4. SCOPE:

The TAC Review Scheduling Portal will make it easier for the educational institution to schedule reviews of student projects, particularly TAC projects. Features including slot availability, appointment scheduling, real-time notifications, and reporting capabilities will all be available on the site. Three primary user roles will be served by it: administrators, faculty members (reviewers), and students.

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5. STAKEHOLDERS:

Students: The main users of the platform are students, who may check available slots, schedule review times for their TAC projects, and receive appointment reminders.

Faculty Members (Reviewers): After reviewing student work, faculty members will book review sessions according to availability. Notifications and updates regarding their scheduled visits will also be sent to customers.

Administrators: They are responsible for overseeing the entire system, which includes user accounts, slot setups, and reporting features. They will make sure the portal runs smoothly and take care of any arising administrative or technical problems.

6. SYSTEM OVERVIEW:

The modern and effective MERN (MongoDB, Express.js, React.js, Node.js) technological stack is used in the development of the Review Scheduling Portal for TAC (Team Academic Project). The project architecture, its constituent parts, and the ways in which the database, frontend, and backend work together to produce the required functionality are all described in this section.

6.1 Features:

User Authentication and Authorization:

- Using their login credentials, users can safely access the site (e.g., email and password).
- Only authorized users, according to their positions (student, professor, admin), are able to access certain services thanks to role-based access control.

Appointment Scheduling:

- In order to schedule review appointments for their TAC projects, students can browse the available slots.
- In order to assess student projects, faculty members (reviewers) can arrange review times according to their availability.
- The maximum number of bookings per slot and the number of slots available each day are among the configurations that administrators can control.

Real time Notifications:

- Notifications on slot availability, booking confirmations, appointment reminders, and any updates or modifications to planned appointments are sent to users in real-time.

Appointment Management:

- Users can view, edit, or cancel their booked appointments within a specified timeframe (e.g., 24 hours before the scheduled slot).
- Faculty members can view details of their assigned appointments, including student project IDs and scheduled review slots.

Slot Availability and Closure:

- Slots are automatically closed when they reach the maximum number of bookings, ensuring that review capacities are not exceeded.
- Admins can configure slot availability settings, such as opening/closing slots, adjusting capacities, and managing slot durations.

Project ID display:

- Upon logging in, students can view their project IDs associated with their college email addresses.
- Only the logged-in student can access their specific project ID, ensuring data privacy and security.

Excel Sheet Generation:

- At the conclusion of the project, an Excel sheet is generated containing project IDs of students, assigned review slots, and names of faculty members conducting the reviews.
- The Excel sheet provides a comprehensive overview of the review scheduling process and serves as a record for future reference.

7.1 FUNCTIONAL REQUIREMENTS:

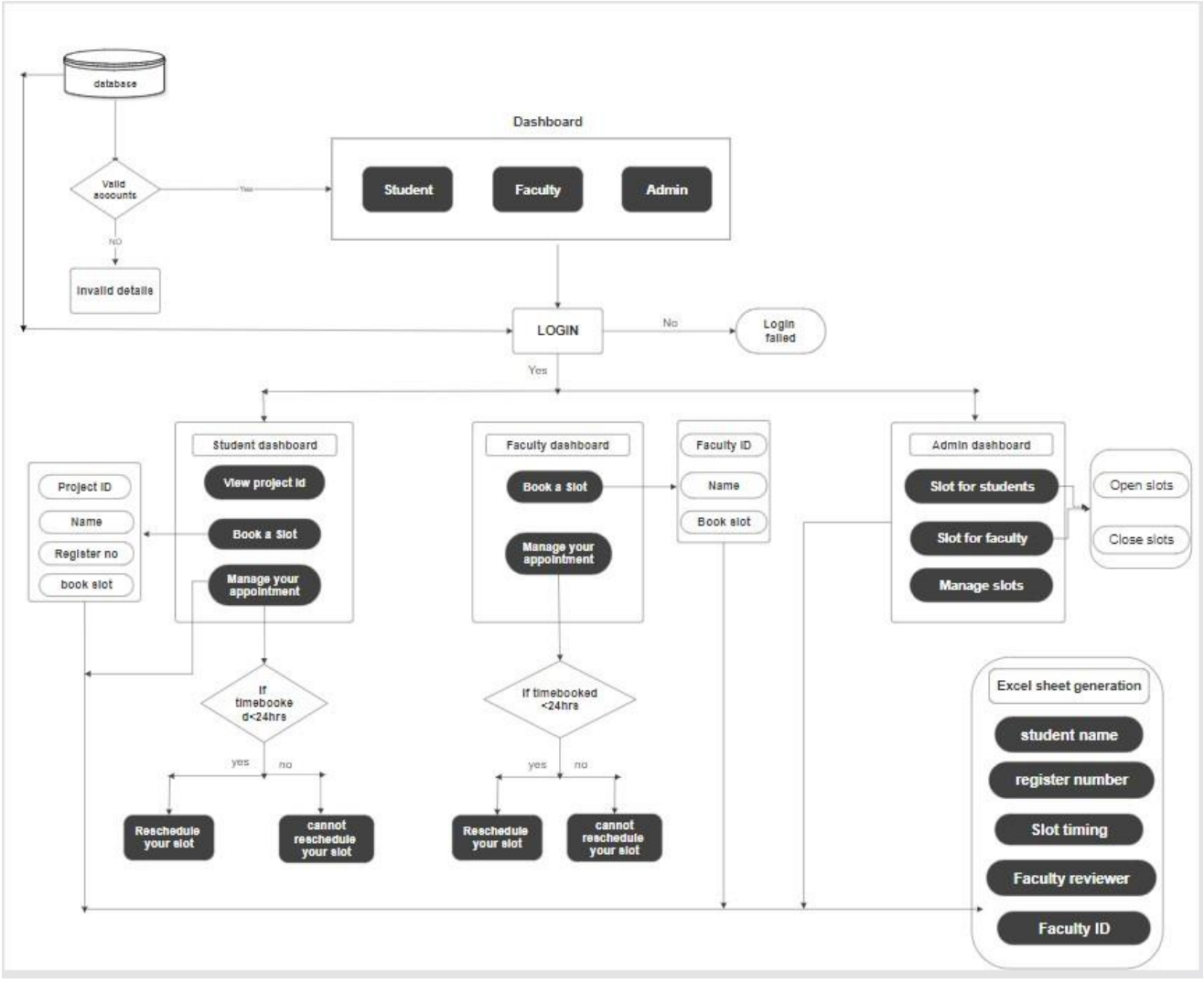
- **User management:** With role-based permissions, users can register using their college email address and password.
- **Slot Scheduling:** Admins set up timeslots according to predetermined standards and make them available for reservation.
- **Review Scheduling:** For TAC projects, faculty members and students arrange review times.
- **Project ID display:** After logging in, students can safely examine their project IDs.
- **Appointment Management:** User-managed appointments allow teachers to examine student project IDs and details.
- **Excel sheet Generation:** At project's conclusion, an Excel sheet with student project IDs and review information is generated.

7.2 NON - FUNCTIONAL REQUIREMENTS:

- **Performance requirements:** Handle multiple user sessions with efficiency and guarantee quick response times for user interactions.
- **Security requirements:** User authentication, authorization, and data encryption are required to guarantee data security.

- **Usability requirements:** Offer a responsive, user-friendly interface with unambiguous directions and instructions.

FLOW CHART



PROTOTYPE OF THE PROJECT:

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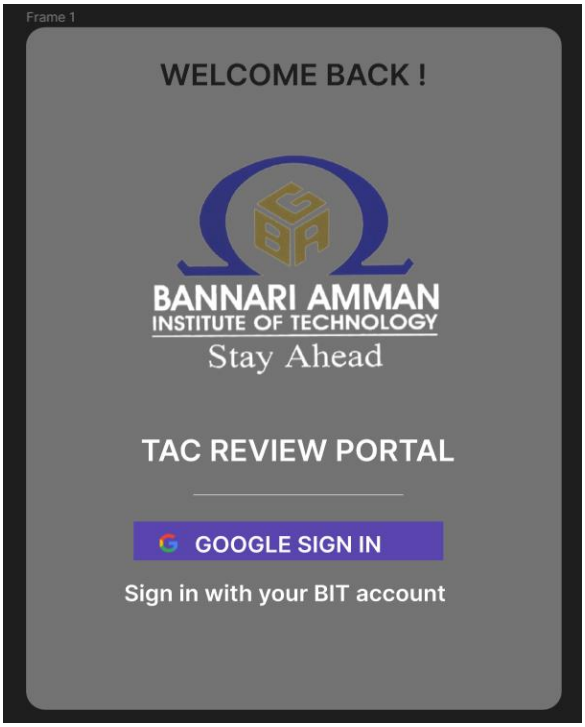
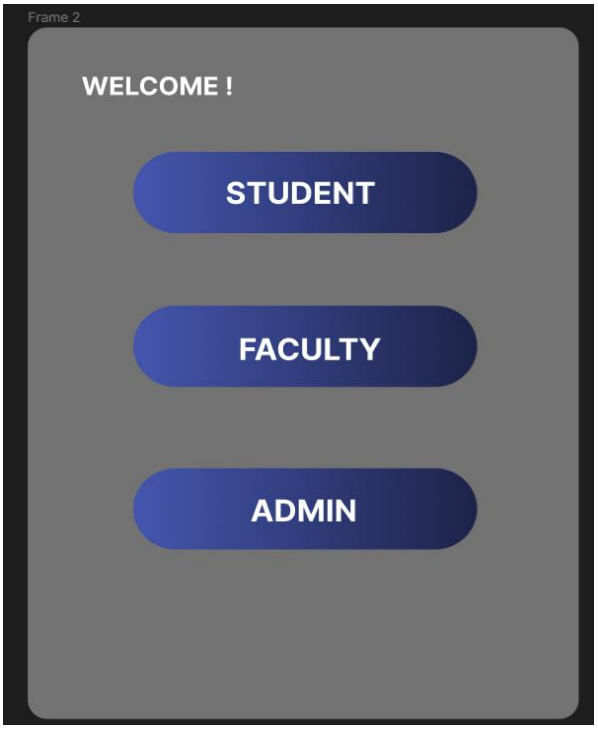
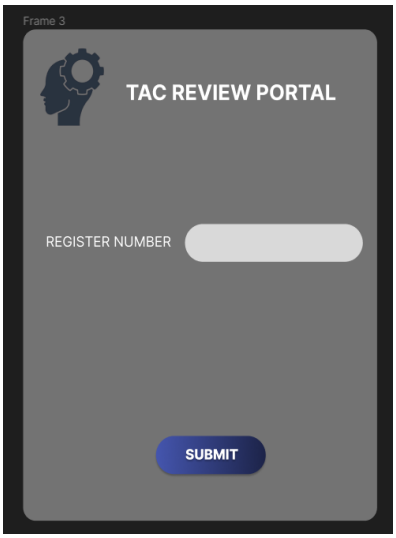


2. **STUDENT, FACULTY AND ADMIN WELCOME PAGE:**



3. STUDENT ENTRY PAGE:



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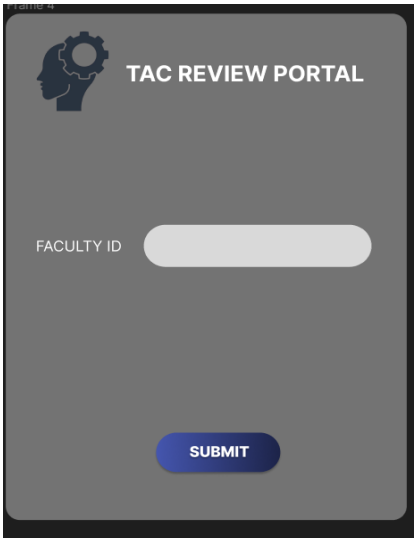

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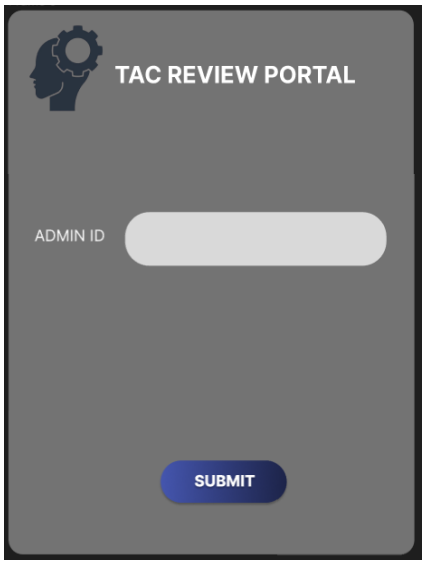

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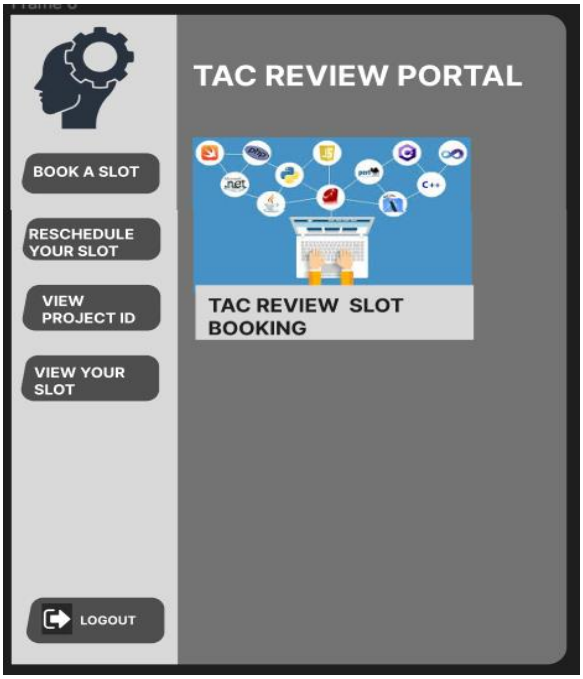

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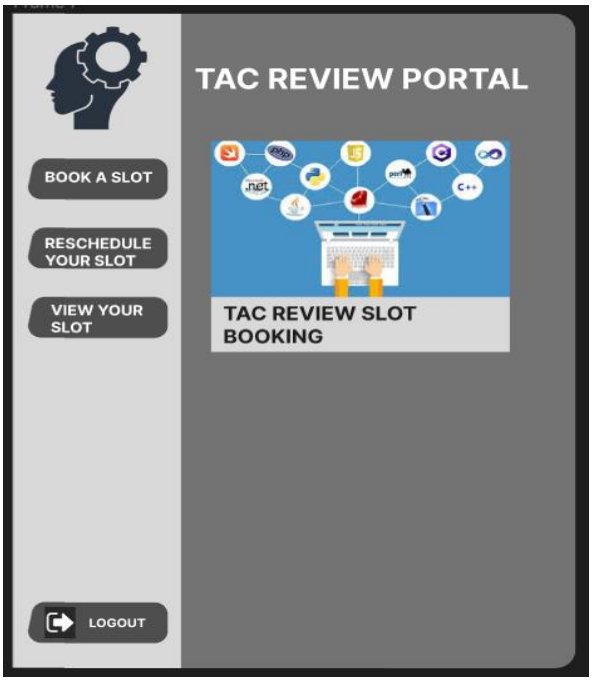

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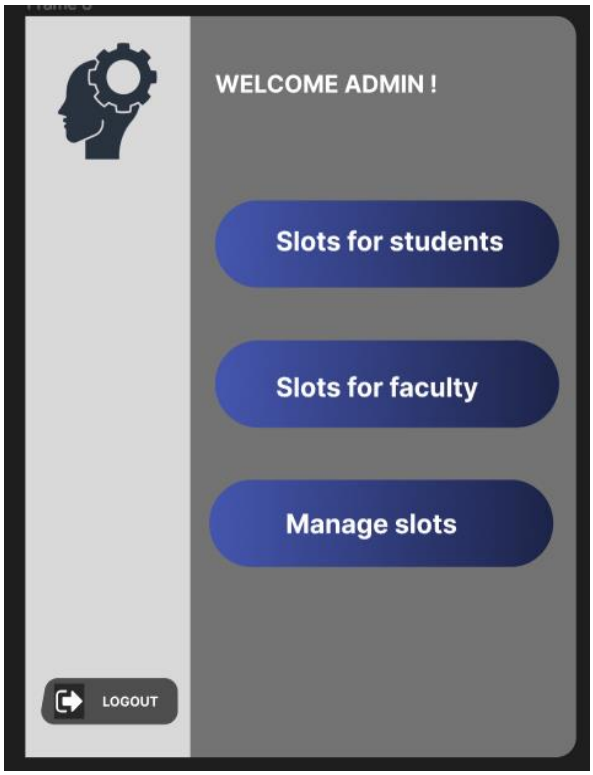

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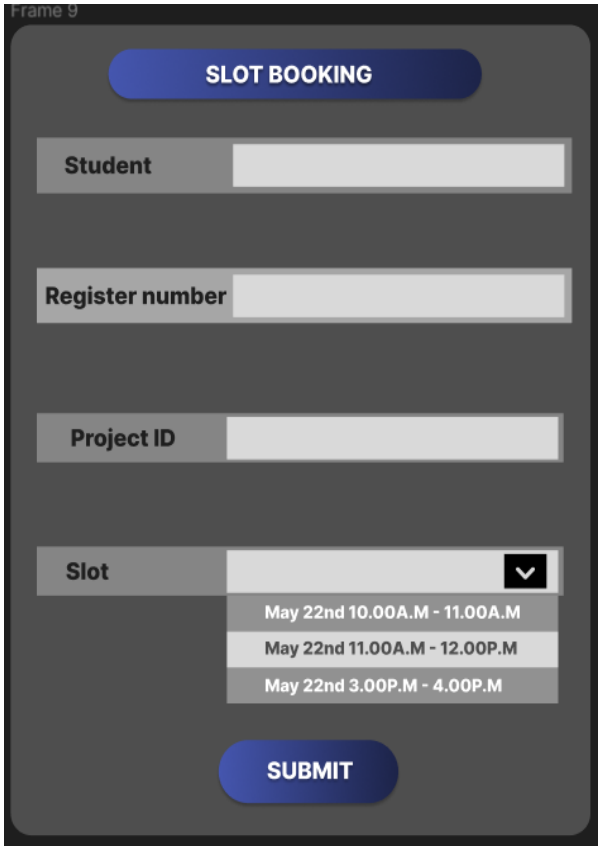

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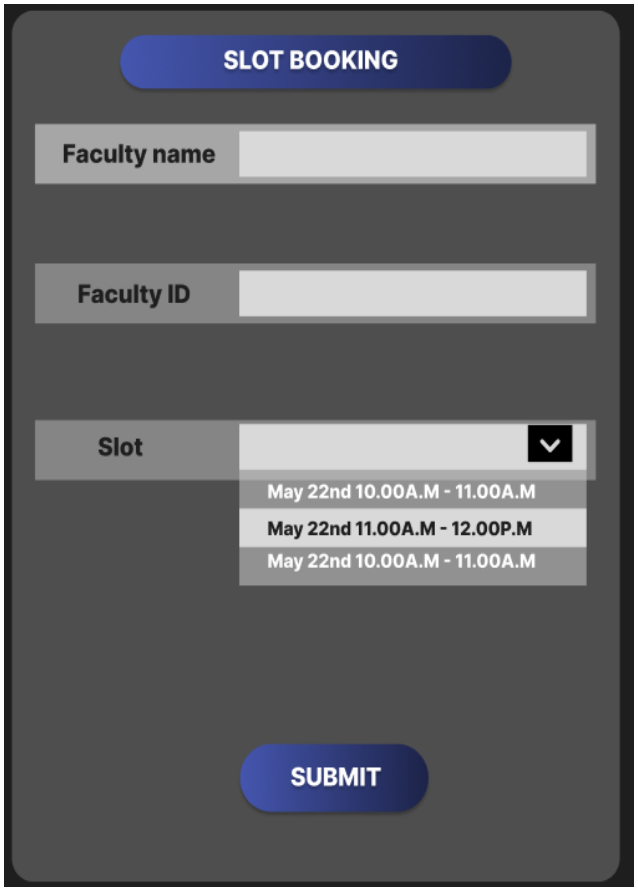
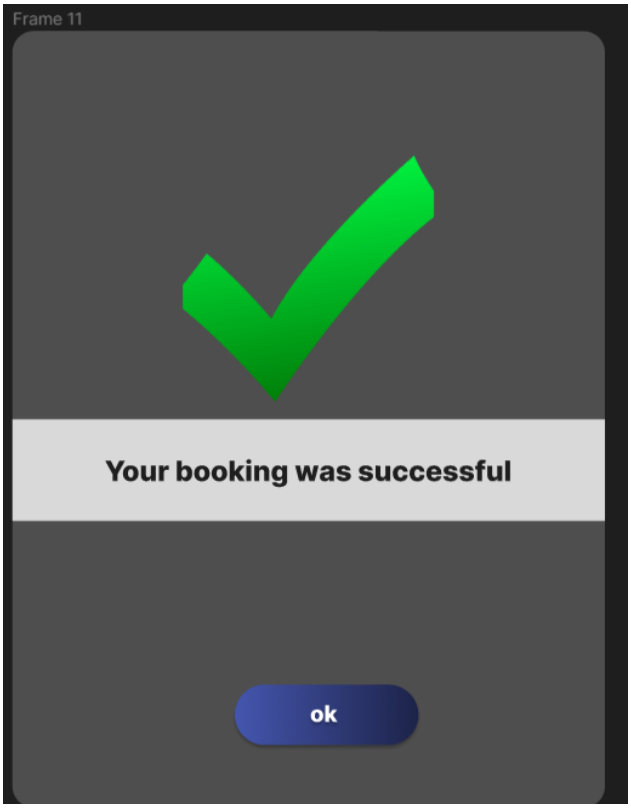
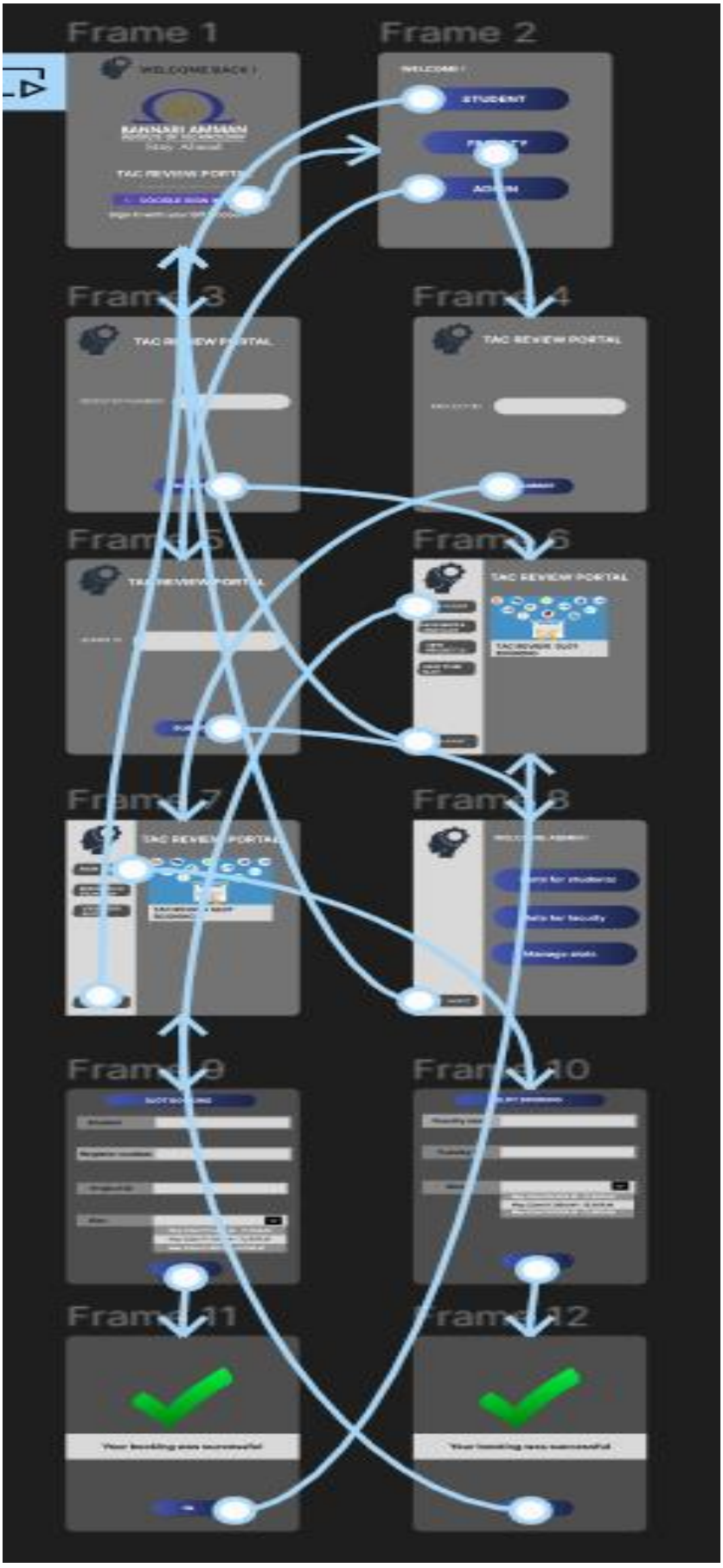


11. BOOKING SUCCESSFUL PAGE:



PROTOTYPE


Frame 1
Frame 2
STUDENT
TAC REVIEW PORTAL
TAC REVIEW PORTAL
TAC REVIEW PORTAL
TAC REVIEW PORTAL