BANNARI AMMAN INSTITUTE OF TECHNOLOGY
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Project ID: 09
Project title: IQAC mailer

Technical Components

Component	Tech Stack
Backend	Node.js with Express.js
Frontend	React (JS Library for building user interfaces)
Database	MongoDB
API	OpenAPI

Implementation Timeline

Phase	Deadline	Status	Notes
Stage 1	06/06/2024	In progress	Planning and Requirement gathering
Stage 2		Not started	Design and Prototyping
Stage 3		Not started	DB Designing
Stage 4		Not started	Backend Implementation
Stage 5		Not started	Testing & Implementation
Stage 6		Not started	Deployment

PROBLEM STATEMENT:

The decentralized nature of email communication within educational institutions leads to several challenges, including:

● **Inconsistent messaging:** Different departments and administrative units send emails independently, leading to duplication of information and inconsistent messaging.

● **Schedule conflicts:** Students and faculty receive multiple emails with overlapping schedules and events, leading to confusion and missed opportunities.

● **Fragmented communication:** Important announcements and updates get lost in the volume of emails, making it difficult for recipients to stay informed and engaged.

● **Administrative burden:** Managing email distribution lists, resolving conflicts, and ensuring timely delivery of critical information impose a significant administrative burden on staff and faculty.

PROJECT-FLOW:

Purpose:

The primary objective of this portal is to streamline email communication within educational institutions using a dedicated IQAC Mailer Application. By automating the process of sending emails, the portal ensures efficient dissemination of information.

Scope:

The portal focuses on the following aspects:

1. Content Creation and Approval:

- Faculty and administrators draft email content within the portal.
- The admin reviews and approves the content.

2. Automated Email Generation:

- Once approved, the system automatically generates email messages.
- These emails can be sent to students, faculty, or staff members.

3. Efficient Communication:

- The portal ensures consistent messaging and timely delivery of critical information.

Business Context:

In educational institutions, this portal addresses several challenges related to email communication:

Consistent Messaging: By centralizing email creation, it reduces duplication and ensures uniform messaging.

Schedule Optimization: The system avoids overlapping schedules and events in email communications.

Enhanced Engagement: Important announcements are delivered effectively, keeping recipients informed.

Consideration:

- Admins have full access to approval management functionalities.
- Faculties can upload request to send mail.
- Students can view inbox mails.

Dependencies:

- Integration with Google OAuth for user authentication.
- Consistent performance and availability of the existing email server.

User personas:

- Admin: Manages mail request, accept or reject, and feedback.
- Faculty: compose and request form.
- Student: Views inbox and other mail functionalities.

User Stories:

- Admin: Efficient way to manage email content.
- Faculty: straightforward method to create and submit email and request.
- Student: Wants a user - friendly interface to access mails.

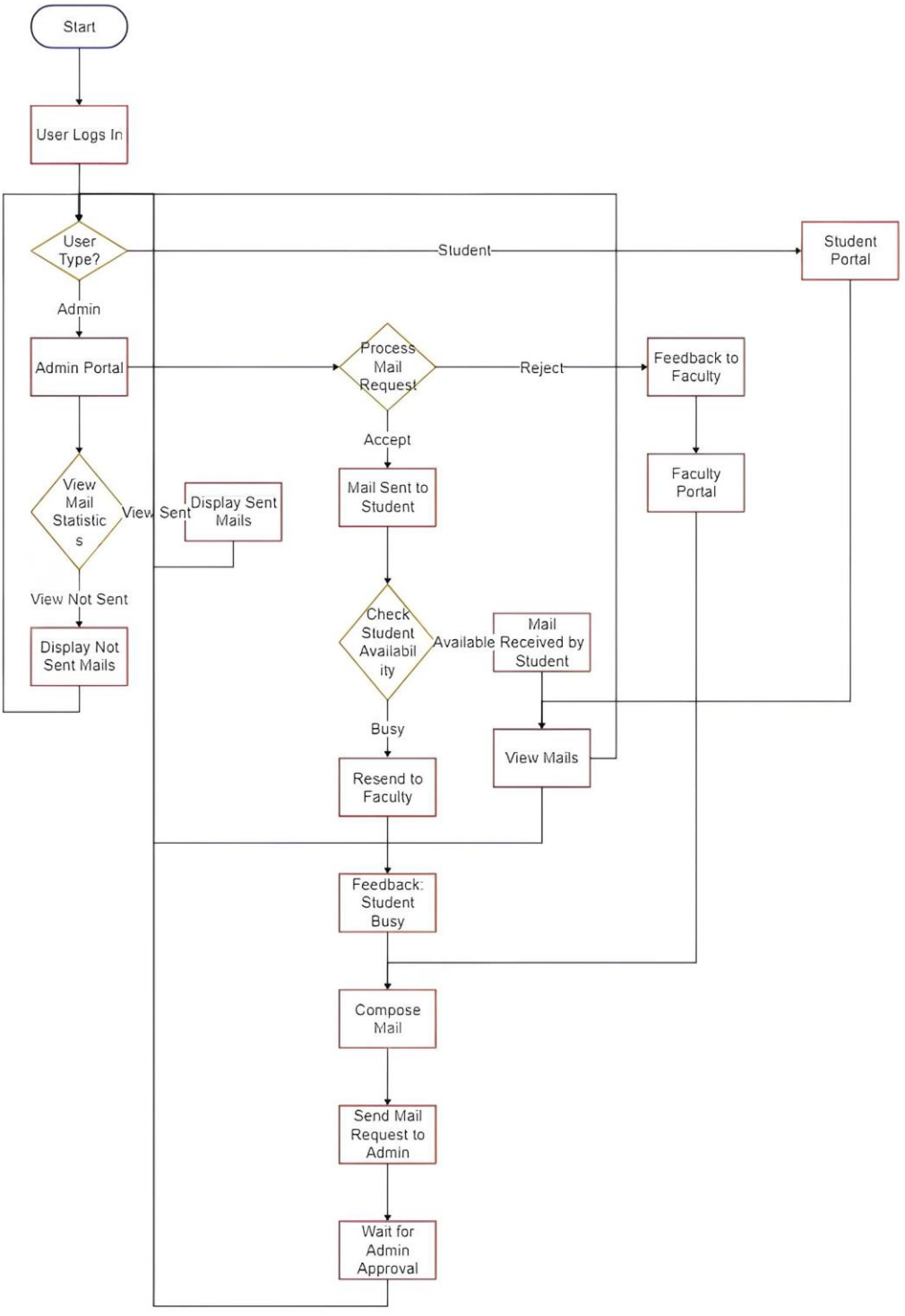
Functional Requirements:

The portal should support user authentication via Google OAuth.

- It must provide clear interfaces for email content creation, approval, and automated generation.

- Efficient email management functionalities should be available to administrators.

FLOW CHART:


Start
User Logs In
User Type?
Student
Student Portal
Admin
Admin Portal
Process Mail Request
Reject
Feedback to Faculty
Accept
Faculty Portal
View Mail Statistics
View Sent
Display Sent Mails
Mail Sent to Student
View Not Sent
Display Not Sent Mails
Check Student Availability
Available
Mail Received by Student
Busy
View Mails
Resend to Faculty
Feedback: Student Busy
Compose Mail
Send Mail Request to Admin
Wait for Admin Approval