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Project ID	36
Problem Title	External Technical Events portal

Technical Components:

Front End	React Js
Backend	Node Js, Express Js
Data Base	MongoDB
Api	OpenApi

1.Introduction

1.1. Purpose:

The document provides a detailed overview of the Title Registration Portal, covering objectives, system characteristics, interfaces, functionalities, limitations, and responses to external inputs.

1.2. Scope of Project:

1.2.1 Title Selection and Reservation System:

- User-friendly interface for students to browse and select project titles.
- Real-time availability checks.
- Secure reservation mechanism to avoid conflicts and ensure fair title allocation.

1.2.2 Administrative Oversight and Analytics Dashboard:

- Administrative dashboard for title management, approvals, and conflict resolution.
- Notification system for critical actions and deadlines.

2. System Overview:

2.1. Users:

1. **Students**:

The project registration portal facilitates students in selecting project titles seamlessly. Students can easily browse through the available titles, reserve their preferred options, and monitor the status of title Approval.

2. **Faculty Guide :**

Faculty members play a crucial role in managing the project registration process within the portal. They are responsible for overseeing the list of available project titles, ensuring accuracy and relevance for student selection. Faculty members collaborate with administrators to address any registration issues or conflicts that may arise during the process.

3. **Admin:**

Administrators hold full access to the site, managing title availability, updating lists, and promptly resolving registration issues.

3. Features:

1. User Authentication and Registration:

- Users can securely log in to the portal using their college email IDs for authentication purposes.
- New users have the option to register and create accounts within the portal to access its functionalities.

2. Project Title Selection:

- The portal provides users, particularly students, with a curated list of available project titles.
- Users can explore titles based on categories or use a search function to find specific projects of interest.

3. Title Availability Check:

- Each project title in the portal is accompanied by real-time availability status indicators.
- Users are promptly notified if a selected title is already reserved or unavailable for registration.

4. Title Reservation and Management:

- Users, primarily students, can reserve their chosen project titles securely within the portal.
- The system incorporates validation checks to manage conflicts and ensure equitable title allocation among users.

5. Faculty Dashboard:

- Faculty can view and manage selected titles, approve or reject them, and resolve conflicts.

3. System Requirements Specification:

3.1 Functional Requirements:
User Management:

- Student registration and login, separate dashboards for Admins and Guides.

Project Classification:

- Internal and external project classifications with student input and guide selection.

Constraints:

- Team consists of 1-3 members, with at least one member in the same cluster as the chosen title.
- Only team leaders can fill the title registration form.

Approval Status:

- Students can view application status, including remarks if rejected.

Guide Dashboard:

- View and filter applications, approve or reject with remarks.

3.2. Non-Functional Requirements:

- **Performance:**
  - Fast response time and support for at least 100 concurrent users.

- **Security:**
  - Encryption of user data and restricted access to sensitive functionalities.

- **Usability:**
  - Intuitive UI with clear error messages.
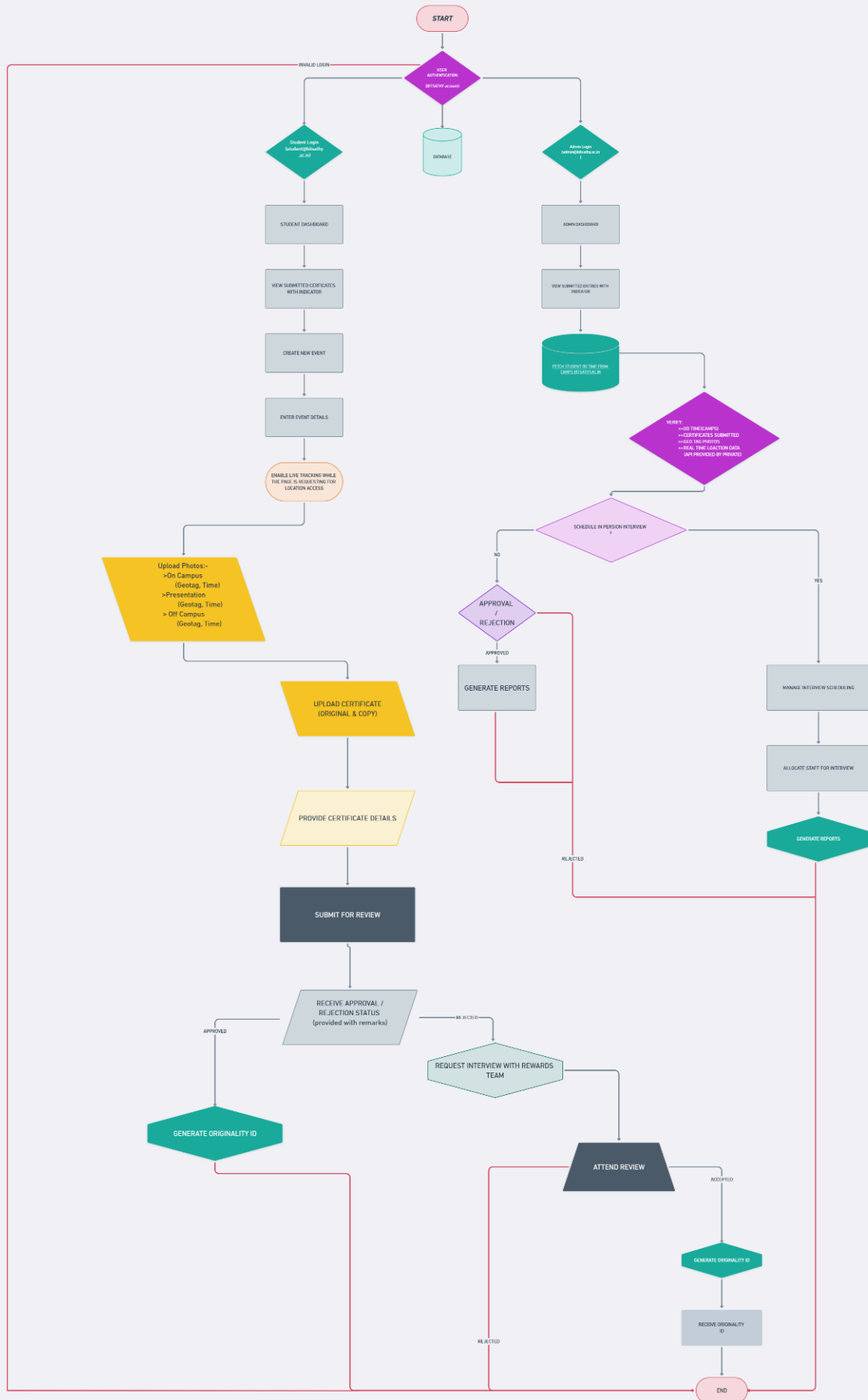
- **Reliability:**
  - 24/7 availability with backup and recovery mechanisms.

- **Scalability:**
  - Designed to handle increasing users and data, with support for future features.

This document serves as a robust foundation for developing the Title Registration Portal, clearly outlining the project's purpose, scope, users, features, and system requirements.

FLOWCHART FOR USERS:

START

USER AUTHENTICATION (BITSATHY account)

INVALID LOGIN

DATABASE

Student Login (student@bitsathy.ac.in)

Admin Login (admin@bitsathy.ac.in)

STUDENT DASHBOARD

ADMIN DASHBOARD

VIEW SUBMITTED CERTIFICATES WITH INDICATOR

VIEW SUBMITTED ENTRIES WITH INDICATOR

CREATE NEW EVENT

FETCH STUDENT DB TIME FROM CAMPUS.BITSATHY.AC.IN

ENTER EVENT DETAILS

VERIFY:-
>>DB TIME(CAMPUS)
>>CERTIFICATES SUBMITTED
>>GEO TAG PHOTOS
>>REAL TIME LOCATION DATA (API PROVIDED BY PRIVATE)

ENABLE LIVE TRACKING WHILE THE PAGE IS REQUESTING FOR LOCATION ACCESS

SCHEDULE IN PERSON INTERVIEW ?

NO

YES

Upload Photos:-
>On Campus
    (Geotag, Time)
>Presentation
    (Geotag, Time)
> Off Campus
    (Geotag, Time)

APPROVAL / REJECTION

MANAGE INTERVIEW SCHEDULING

APPROVED

GENERATE REPORTS

ALLOCATE STAFF FOR INTERVIEW

UPLOAD CERTIFICATE (ORIGINAL & COPY)

GENERATE REPORTS

PROVIDE CERTIFICATE DETAILS

REJECTED

SUBMIT FOR REVIEW

RECEIVE APPROVAL / REJECTION STATUS (provided with remarks)

APPROVED

REJECTED

REQUEST INTERVIEW WITH REWARDS TEAM

GENERATE ORIGINALITY ID

ATTEND REVIEW

ACCEPTED

GENERATE ORIGINALITY ID

RECEIVE ORIGINALITY ID

REJECTED

END

FLOWCHART FOR ADMIN: