Software Requirement Specification for Skill Training Portal

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SEAT NUMBER:	116
PROJECT ID:	36
PROBLEM STATEMENT:	EXTERNAL TECHNICAL EVENTS
	PORTAL

Technical Components:

Components	Tech Stack
Frontend	React
Backend	Spring Boot
Database	MySQL
API	RESTful services

Implementation Timeline:

Phase	Deadline	Status	Notes
Stage 1	02/05/2024	In Progress	Planning and Requirement gathering
Stage 2		In Progress	Desing and Prototyping
Stage 3			DB Designing
Stage 4			Backend Implementation
Stage 5			Testing & Implementation

Purpose:

- Facilitate Event Registration: Allow students to easily register for upcoming events and view event details.
- Track Participation: Provide a means for students to track their attendance and involvement in events.
- Enable Activity Logging: Allow users to log specific activities with geo tags and photos.
- Monitor Student Performance: Enable administrators to monitor student performance and event participation.

Scope:

The scope of the Event Management System includes features such as user registration and authentication for students and administrators, event listing with details like event name and date, event registration functionality for users, tracking of user participation, activity logging with geo tags and photos, admin tools for overseeing users and events, a responsive user interface for easy navigation, and backend development to handle data storage and business logic.

Considerations:

- User Experience (UX):
 - o Ensure the system has an intuitive and user-friendly interface.
 - o Design for responsiveness across different devices.
- Security:
 - o Implement secure authentication and data privacy measures.
 - Use role-based access control to manage user permissions.
- Performance:
 - o Build a scalable system architecture to handle growing user and data loads.
 - o Optimize database queries and use caching for improved performance.
- Event Management Features:
 - o Enable easy event registration and attendance tracking for users.
 - o Provide tools for activity logging with geo tags and photos.
- Administrator Tools:
 - Develop a dashboard for administrators to monitor student performance and manage approvals.
 - o Implement workflows for reviewing and approving event-related activities.
- Integration and Extensibility:
 - o Design a flexible API for integrating with third-party services.
 - o Build a modular architecture to support future feature enhancements.
- Testing and Quality Assurance:
 - o Conduct thorough testing including unit testing, integration testing, and user acceptance testing (UAT).

o Provide comprehensive documentation and support for developers and users.

Roles:

Student (User)

- Privileges:
 - ➤ View event details and participation status.
 - ➤ Log activities with geo tags and photos.
 - Access personal dashboard to track performance and event involvement.
- Responsibilities:
 - Maintain accurate user profile information.
 - > Participate responsibly in registered events.
 - ➤ Provide necessary details when logging activities

Administrator (Admin)

- Privileges:
 - Manage user profiles and accounts.
 - ➤ Review and approve event registrations and activity logs.
 - Monitor overall student performance and event statistics.
- Responsibilities:
 - Ensure smooth operation of the Event Management System.
 - > Maintain data integrity and security.
 - > Provide support and assistance to users as needed.
 - ➤ Utilize administrative tools effectively for event management and oversight.

Functional Requirements:

User Management:

- User Registration and Authentication
 - > Users (students and administrators) can register with the system.
 - Authentication mechanisms (e.g., username/password) for secure login.
- User Profile Management
 - ➤ Users can view and update their profile information.

Event Management:

- Event Attendance Tracking
 - Enable users to mark their attendance for events they have registered for.
 - > Provide status updates (attended, not attended) based on user input.

Activity Logging:

- Activity Log Creation
 - Users can log activities related to events.
 - ➤ Capture activity details like geo tags and photos.

Administrator Tools:

- Admin Dashboard
 - > Dashboard for administrators to manage users and events.
 - ➤ View summary statistics (total users, upcoming events).
- Event Approval
 - Admins can approve event registrations submitted by students.

User Interface:

- Responsive UI Design
 - > User-friendly interface using React.js.
 - > Consistent navigation and design elements across the application.

System Architecture:

- Backend Development
 - ➤ Backend services developed using Java with Spring Boot.
 - > RESTful APIs for frontend-backend communication.
- Database Integration
 - > Use MySQL database to store user profiles, events, and activity logs.

Security and Authentication:

- Secure Authentication
 - > Implement secure login and user authentication.
 - Encrypt sensitive user data (e.g., passwords).

Testing and Support:

- Testing
 - ➤ Conduct unit testing and integration testing for frontend and backend components.
- Documentation and Support
 - > Prepare technical documentation and user guides.
 - > Provide support for system users and address any issues or inquiries.

Key Functionalities:

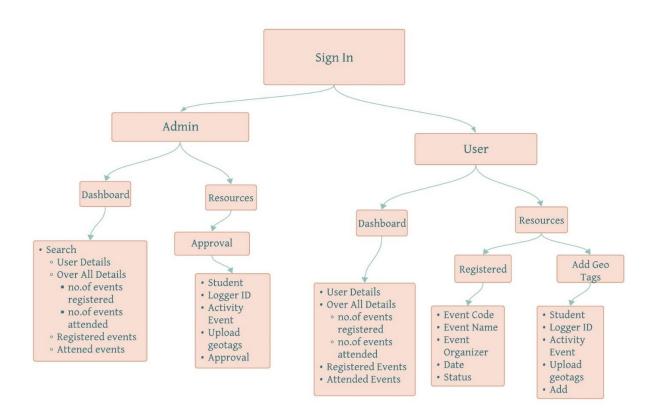
- User registration and authentication.
- Event listing and registration.
- Participant tracking for event attendance.

- Activity logging with geo tags and photos.
- Administrator dashboard for managing users, events, and approvals.
- User profile management.
- Responsive user interface using React.js.
- Backend implementation with Java (Spring Boot) and MySQL database.

Project Goals:

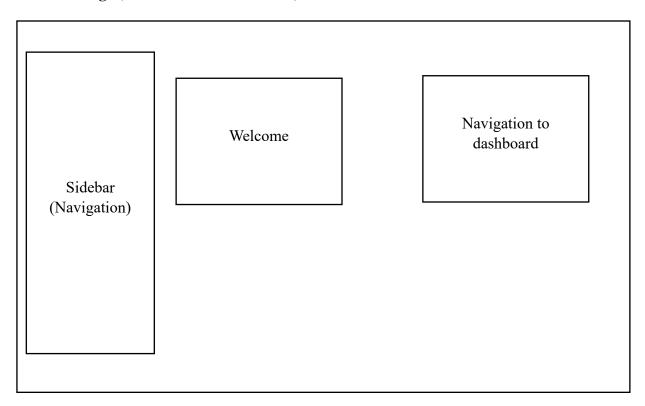
The project aims to develop an efficient Event Management System that simplifies event registration for users while enabling them to track participation status and log activities with geo tags and photos. Administrators will have tools to oversee event approvals, monitor student performance, and manage event-related data effectively.

Flow chart:

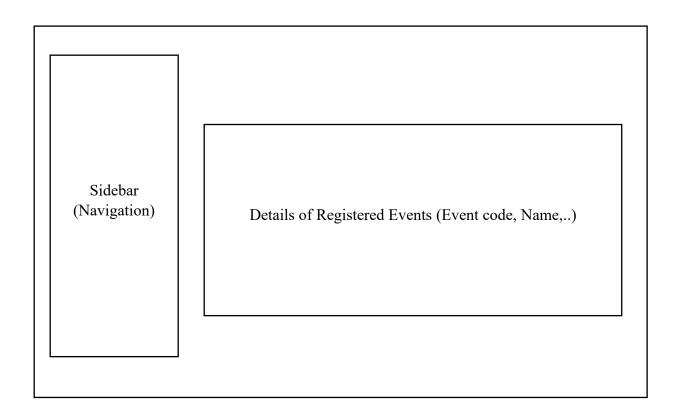


UI Design:

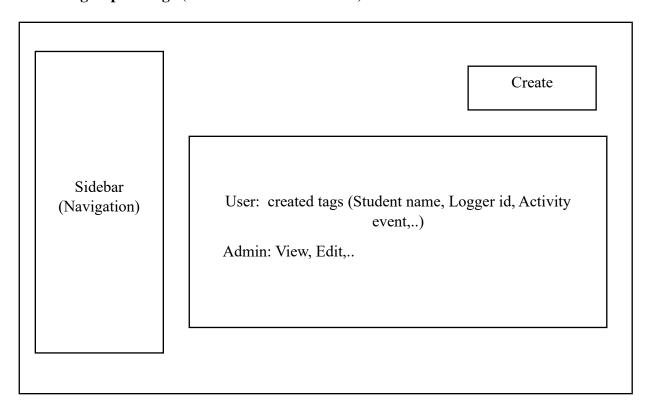
Home Page (Both Student and Admin):



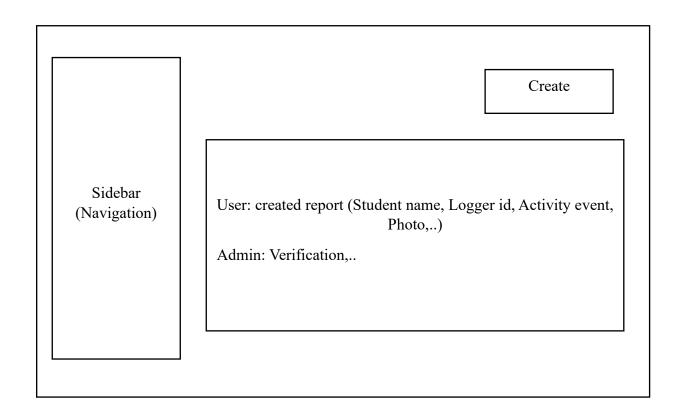
Event Registered Page (Student):



Geo Tag Report Page (Both Student and Admin):



Create Report (Both Student and Admin):



Dashboard (Both Student and Admin):

Student Details,
Photo

Sidebar
(Navigation)

Events Details: (Registered Events, Attended Events,...)
Student: Attended Events (Event Code, Name,...)
Admin: Attended Events (Event Code, Name, Time IN, OUT,...)