Software Requirements Specification

Introduction

This document main purpose is to define the requirements of the website calendar for the staff of Mahindra University which helps to schedule there meetings and everything.

The website application :

* Provides basic information about the particular staff
* Able to contact with other staff.
* Reschedule at their convenience.
* User friendly.

References:

* Mahindra University portal.
* Normal mobile calendars.
* Outlook.

Audience:

* University administration.
* Staff

Perspective:

This website is very helpful for the staff in their professional and personal life and it is a private website only for Mahindra staff.

**Functional Requirements:**

* **User Authentication**
  + Secure login using university credentials
  + Role-based access for staff and administrators.
* **Calendar Management**
  + Staff members
* **Calendar Management** can create personal and shared calendars
  + Users can set availability and view shared calendars.
  + Automatic conflict detection when scheduling meetings
* **Meeting Scheduling**
  + Staff can send meeting invites with proposed time slots.
  + Automatic notification for meeting confirmations or conflicts.
  + Integration with third-party calendars for synchronization.
* **Academic Calendar**
  + Centralized academic calendar accessible to all staff.
  + Administrators can update university events and deadlines.
* **Notifications & Reminders**
  + Email and web notifications for upcoming meetings and events.
  + Customizable reminder settings.

**Security:**

* Data encryption for sensitive information.
* Role-based access control to restrict unauthorized actions.

**Technology Stack:**

* Frontend: React.js
* Backend: Node.js with Express.js
* Database: PostgreSQL
* Authentication: OAuth (Google, Microsoft SSO)
* Calendar API Integration: Google Calendar API, Microsoft Outlook API
* Hosting: AWS/Azure

**Development Phase:**

* Requirement Analysis & Planning
* UI/UX Design
* Backend & Database Development
* Frontend Development
* API Integration & Testing
* Deployment & Maintenance

**Success Criteria:**

* Successful deployment and accessibility to MU staff.
* Secure authentication and role-based access.
* Accurate synchronization of calendar events.
* Positive user feedback and minimal downtime.
* Efficient scheduling and meeting conflict resolution.