



BANNARI AMMAN INSTITUTE OF TECHNOLOGY
An Autonomous Institution Affiliated to Anna University - Chennai, Accredited by NAAC with A+ Grade
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Project ID: 12

Project title: VENUE BOOKING

Technical Components

Component	LAMP Stack
Backend	Linux, Apache, PHP
Frontend	HTML, CSS, Java Script
Database	MySQL
API	REST ful services

Problem Statement

The manual process of managing venue bookings within educational institutions leads to several challenges, including:

Double Bookings: Venues being booked for multiple events simultaneously.

Inefficient Utilization: Suboptimal use of available venues.

Administrative Burden: Significant effort required to manage and coordinate bookings manually.

Lack of Visibility: Difficulty in tracking venue availability and bookings.

Project Flow

Purpose: To develop a centralized venue management system that efficiently handles venue bookings, resolves scheduling conflicts, and provides a real-time view of venue availability.

Scope: This system includes user authentication, venue booking requests, conflict checks, and a real-time dashboard for managing venue schedules. It integrates with existing systems to ensure efficient and conflict-free venue management.

Business Context: The venue management system is aimed at enhancing the utilization of available venues and reducing scheduling conflicts, thus improving organizational efficiency. Primary stakeholders include students, faculty, administrative staff, and event organizers.

Consideration

- All users possess active institution accounts for authentication.
- Users have regular access to internet-enabled devices.

Dependencies

- Integration with the institution's authentication system for user login.
- Consistent performance and availability of the existing scheduling server.

User Personal:

- **Student:** Needs to book venues for club meetings or study groups.
- **Faculty:** Requires venues for lectures, exams, and special events.
- **Admin Staff:** Manages venue bookings, resolves conflicts, and approves requests.

User Stories:

- **As a student,** I want to book a venue for my study group, so I can have a quiet place to study.
- **As a faculty member,** I need to ensure my venue bookings for exams do not conflict with other events.
- **As an admin staff,** I want to view and manage all venue bookings to resolve conflicts efficiently.

Functional Requirements:

- **User Authentication:** Secure login using the institution's authentication system.
- **Venue Booking Request Form:** Users input venue, date, time, and purpose of booking.
- **Conflict Resolution:** Automatic detection of booking conflicts with options for adjustment.
- **Dynamic Dashboard:** Real-time viewing and interaction with venue schedules.
- **Priority Algorithm:** Automated prioritization of bookings based on predefined rules.

FLOW CHART

