

CIET HALL BOOKING MANAGEMENT SYSTEM

Project Report

Date: November 01, 2025

PROJECT OVERVIEW

A **web-based smart hall booking system** for CIET that streamlines the process of booking auditoriums and seminar halls online. The system automates the entire booking workflow from request submission to approval and provides real-time availability tracking.

Live Link: <https://ciet-hall-booking.onrender.com>

KEY FEATURES

- ✓ User Roles & Authentication (Staff, HOD, Principal)
- ✓ 3 Halls with Real-time Availability Calendar (60-day view)
- ✓ Flexible Time Slots (Forenoon, Afternoon, Full Day)
- ✓ Export to Calendar (.ics format) & PDF Reports
- ✓ Email Notifications for Approvals
- ✓ IST Timezone Support
- ✓ Dark/Light Mode Support
- ✓ Mobile Responsive Design
- ✓ Dashboard Analytics with Filters

TECHNOLOGY STACK

Component	Technology
Frontend	HTML5, Tailwind CSS, JavaScript
Backend	Python Flask
Database	MongoDB
Hosting	Render (Cloud)
Version Control	GitHub

MAIN MODULES

Authentication: Login/Signup with secure JWT tokens

Booking: Create and manage booking requests
Availability: Real-time hall availability calendar
Approval: HOD review and approval workflow
Reports: PDF and ICS export functionality
Dashboard: Track personal bookings and statistics

COMPLETED DELIVERABLES

- ✓ User authentication system
- ✓ Hall booking with availability calendar
- ✓ Approval workflow with HOD review
- ✓ PDF report generation
- ✓ ICS calendar export
- ✓ Mobile responsive design
- ✓ IST timezone implementation
- ✓ Dark/Light mode support
- ✓ Production deployment
- ✓ Complete GitHub repository

BENEFITS

- ✓ Saves Time - No manual paper-based booking
- ✓ Transparent - Complete visibility of bookings
- ✓ Efficient - Automated approval workflow
- ✓ Accessible - 24/7 online availability
- ✓ Mobile Friendly - Works on all devices
- ✓ Data Secure - Encrypted authentication

TESTING STATUS

Test Type	Status
Desktop Testing	✓ Passed
Mobile Testing	✓ Passed
API Testing	✓ Passed
Database Operations	✓ Passed
User Authentication	✓ Passed
Booking Workflow	✓ Passed

Tagline: Smart Booking, Better Management ■