

UniEvent

**STREAMLINING EVENT MANAGEMENT AT THE
COLLEGIATE LEVEL**

OBJECTIVE

To streamline the university event proposal and approval process through an automated platform

- Eliminates manual paperwork and delays
- E-mail Notifications for students
- Role-based logins for students, faculty, mentors, and management
- Real-time updates on upcoming events

PROJECT OVERVIEW

Project Name: UniEvent – Automated University Event Management System

Type: Web Application

Tech Stack: MongoDB, HTML, CSS, Node.js, Express.js, Bootstrapping

Modules:

- Event Proposal Workflow
- Approval Chain
- Role-Based Dashboards

REQUIREMENTS COLLECTION (SDLC PHASE 1)

Stakeholders Consulted:

- Club Heads
- Club Mentors
- Management
- Students

Techniques Used:

- Use Case Development – to define system interactions
- Ethnography – study of current event submission forms, approval documents

Sources of Requirements

- Stakeholder Interviews (Students, Mentors, Admins)
- Observation of existing event approval practices
- Feedback from student clubs and management
- Review of institutional policies and approval hierarchies

FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS

Functional Requirements

- Role-Based Login System (Student, Mentor, Management, Admin)
- Event Proposal Submission
- Multi-Level Approval Workflow
- Conflict Detection
- Event Tracking & Status
- Event Calendar with Registration
- Notification System (Email alerts)
- Role-Specific Dashboards
- Document Uploads
- MongoDB Integration for persistent storage

Non-Functional Requirements

- Responsiveness – Mobile-friendly UI
- Scalability – Handle growing user base
- Security – Role-based authentication
- Performance – Fast load & query speed
- Reliability – Error handling & system uptime
- Usability – Intuitive UX for non-tech users
- Maintainability – Modular MVC architecture
- Portability – Cross-browser support
- Auditability – Logging actions & changes
- Email Deliverability – Reliable notification delivery

SYSTEM DESIGN & ARCHITECTURE (SDLC PHASE 2)

Design Pattern : **MVC (Model-View-Controller)**

Model: MongoDB – Events, Users, Approvals

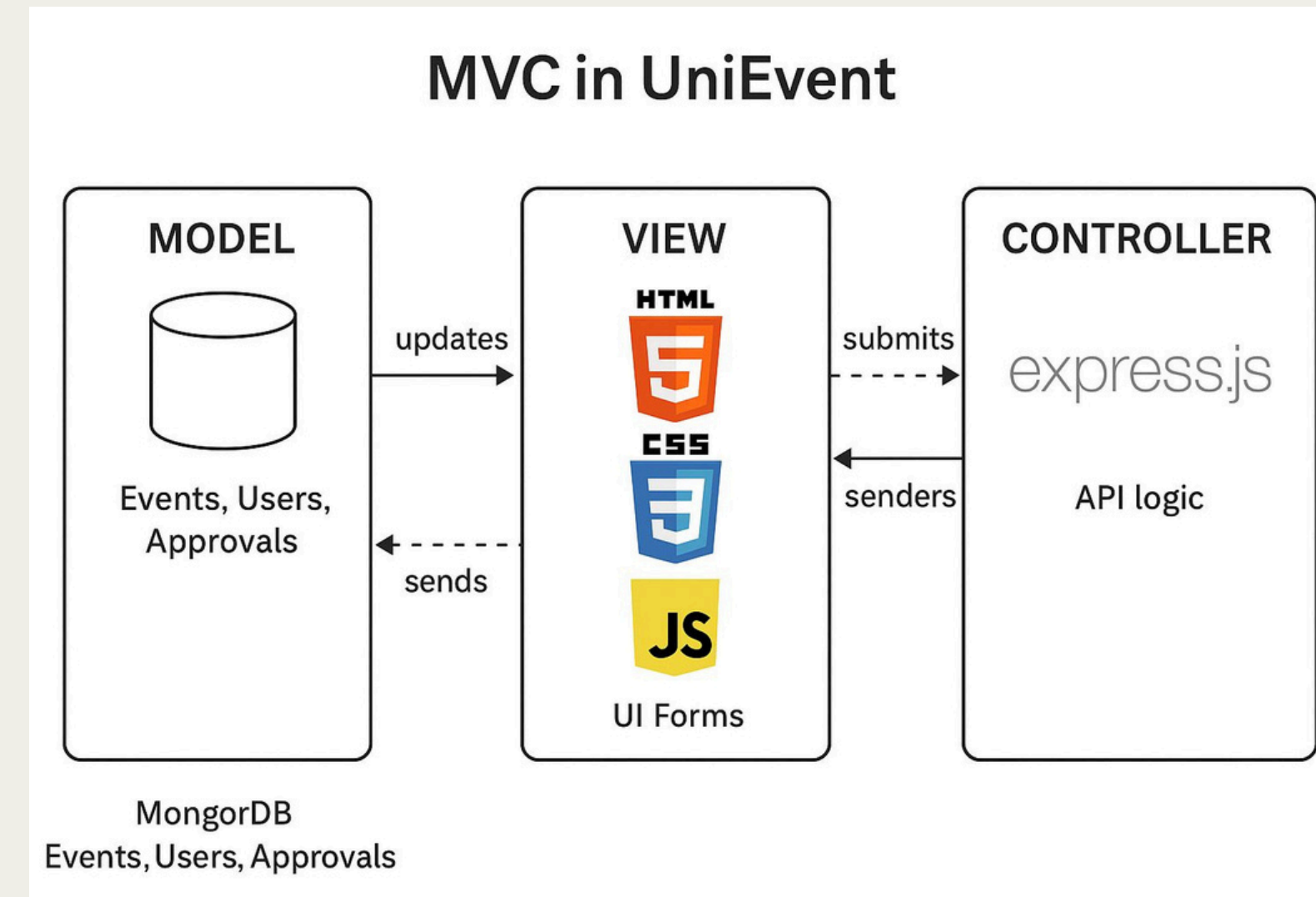
View: HTML, CSS, JS – UI

Controller: Express.js API logic

Login Roles & Flow:

Student » Club » Mentor » Management Approval

Architectural Pattern: Waterfall Model & **Partial** Agile Implementation

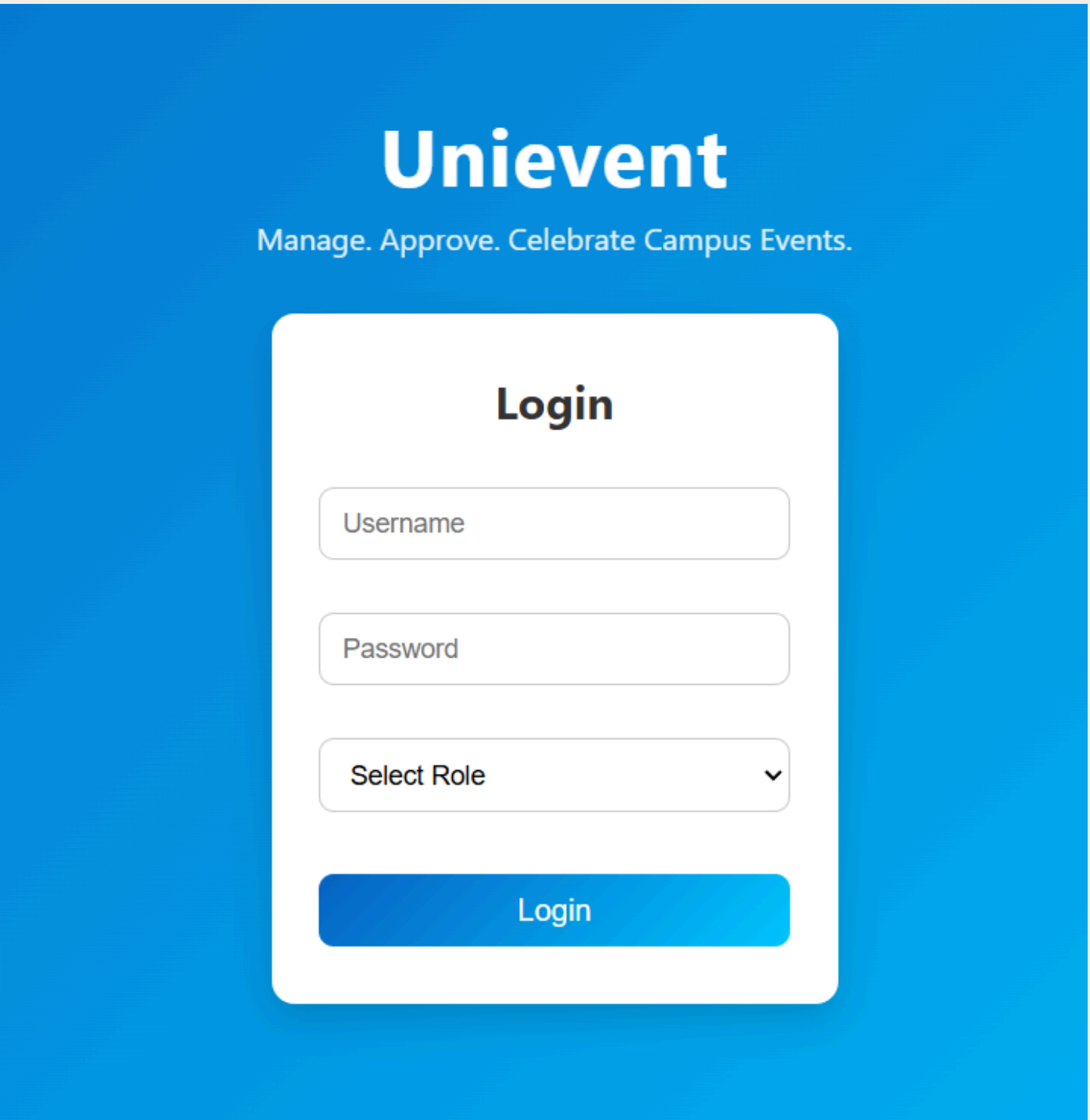


FRONTEND DEVELOPMENT

Tech Used: HTML, CSS, JS, Bootstrapping

Key Features:

- Login pages for roles
- Event creation form
- Event tracking interface
- Upcoming events view
- Responsive & clean design

A screenshot of a login form for a system called 'Unievent'. The form is white with rounded corners and is centered on a solid blue background. At the top of the form, the word 'Unievent' is written in a large, bold, white sans-serif font. Below it, the tagline 'Manage. Approve. Celebrate Campus Events.' is written in a smaller, white sans-serif font. The form itself has a title 'Login' in a bold, black sans-serif font. Below the title are three input fields: a text field for 'Username', a text field for 'Password', and a dropdown menu labeled 'Select Role' with a small downward arrow icon. At the bottom of the form is a large, blue button with the word 'Login' in white text.

Unievent

Manage. Approve. Celebrate Campus Events.

Login

Username

Password

Select Role ▼

Login

Management Dashboard

Total Clubs

28

Including academic, cultural, tech, etc.

Pending Permissions

0

Awaiting management approval

Approved Events

0

This semester





Faculty Advisors

19

Assigned to various clubs

Club Permissions

Manage club approval requests

| Event | Club | Status | Actions |
|------------|------------|------------------|--|
| jaba-music | 2025-05-08 | Faculty Approved | <div><div>Note: musical night</div><div> View Document</div><div><div>✔ Approve</div><div>✖ Reject</div><div> Resend</div></div></div> |
| hh | 2025-05-07 | Faculty Approved | <div><div>Note: ggg</div><div> View Document</div><div><div>✔ Approve</div><div>✖ Reject</div><div> Resend</div></div></div> |

Notes

Instructions for management

Use the "Approve" button to grant permissions to clubs. If not ready, use "Resend" to request changes or "Reject" to deny the request.

Student Dashboard

Event Calendar



today

May 2025




month

week

day

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|-----|-----|-----|-----|-----|-----|
| 27 | 28 | 29 | 30 | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| | | | | | | |
| | | | | | | |

Events in this view:

- aeon
 -  Fri May 09 2025
 -  05:30
 -  elt-5
 - Conducted by: Drama Club
 - Description : technical fest

Club

Drama Club
Head: Priya Sharma

Submitted Events
3
Including pending and approved

Submit Event Request

Event Name:

Date:

Event Note:

Explain event purpose, plan, etc.

Upload Document:

Choose File

No file chosen

Submit Request

| Submitted Events | | | | | |
|------------------|------------|------------------|------------------|----------------------|--------------------|
| Event | Date | Status | Feedback | Document | Action |
| Movie Screening | 2025-05-04 | Pending | - | View | - |
| presentation | 2025-05-07 | Feedback Sent | add about budget | View | - |
| force-fight | 2025-05-05 | Pending | - | View | - |
| jaba-music | 2025-05-08 | Faculty Approved | add songs list | View | - |
| hh | 2025-05-07 | Faculty Approved | - | View | - |
| dance | 2025-05-09 | Faculty Approved | - | View | - |
| pot | 2025-05-09 | Approved | - | View | <div>Publish</div> |

Faculty Dashboard

Assigned Club

Drama Club
Cultural Activities

Pending Events

0
Awaiting your approval

| Event Approvals – Drama Club | | | | |
|--|------------|-------------------------------------|--------------------------|---|
| Only events from your assigned clubs are shown | | | | |
| Event Name | Date | Note | Document | Actions |
| Movie Screening | 2025-05-04 | As it is Star Wars Day of the world | View Doc | <div><div>Approve</div><div>Reject</div><div>Resend</div></div> |
| presentation | 2025-05-07 | presentation about starwars | View Doc | <div><div>Approve</div><div>Reject</div><div>Resend</div></div> |
| force-fight | 2025-05-05 | fight for star wars fans | View Doc | <div><div>Approve</div><div>Reject</div><div>Resend</div></div> |
| jaba-music | 2025-05-08 | musical night | View Doc | <div><div>Approve</div><div>Reject</div><div>Resend</div></div> |
| hh | 2025-05-07 | ggg | View Doc | <div><div>Approve</div><div>Reject</div><div>Resend</div></div> |

BACKEND DEVELOPMENT

Stack: Node.js + Express.js

Responsibilities:

- Backend logic and routing
- Role-based authentication
- Event Request and approval
- API Testing

DATABASE DESIGN & SOURCING

Database: MongoDB

Data Sourcing:

- Clubs from Instagram
- Students from MU Outlook
- Faculty from MU Webpace
- MU Databases

Collections in MongoDB:

Users, Events, Approvals, Clubs

$\times + \dots$

...

▶ local

0

1

Type a query: { field: 'value' } or [Generate query](#) ✨

Options ▶

 DELETE

```
_id: ObjectId('68178160890b4c670a69fa29')
club_name: "IET"
event_title: "TechXplore"
event_description: "A national-level engineering conclave showcasing innovations and tech ..."
event_date: "2025-09-10"
event_time: "10:00"
event_venue: "Tech Convention Hall"
budget_document: "budget_EVT102.pdf"
```

My Queries

CONNECTIONS (1)

Search connections

localhost:27017

Clubs

Club.descriptions

Event_requests

Login_credentials_Students

Engineering_2021

Engineering_2022

Engineering_2023

Engineering_2024

Engineering_faculty

Law_2020

Law_2021

Law_2022

Law_2023

Law_2024

Law_faculty

Management_2022

Management_2023

Management_2024

Management_faculty

Media

Student

profile.Engineering_2021

profile.Faculty_SOL

profile.Faculty_ECISOE

profile.Faculty_SOM

admin

config

local

| | | | | | | | | |
|--|------------|---------------------|----------|-------------------|--------------------|--|-------------------|---------|
| localhost:27017 > Login_credentials_Students | | | | | Open MongoDB shell | | Create collection | Refresh |
| Sort by Collection Name | | | | | View | | | |
| Engineering_2021 | | | | | | | | |
| Storage size: | Documents: | Avg. document size: | Indexes: | Total index size: | | | | |
| 49.15 kB | 1.3 K | 140.00 B | 1 | 32.77 kB | | | | |
| Engineering_2022 | | | | | | | | |
| Storage size: | Documents: | Avg. document size: | Indexes: | Total index size: | | | | |
| 49.15 kB | 1.3 K | 140.00 B | 1 | 53.25 kB | | | | |
| Engineering_2023 | | | | | | | | |
| Storage size: | Documents: | Avg. document size: | Indexes: | Total index size: | | | | |
| 49.15 kB | 1.3 K | 140.00 B | 1 | 36.86 kB | | | | |
| Engineering_2024 | | | | | | | | |
| Storage size: | Documents: | Avg. document size: | Indexes: | Total index size: | | | | |
| 49.15 kB | 1.3 K | 140.00 B | 1 | 49.15 kB | | | | |
| Engineering_faculty | | | | | | | | |
| Storage size: | Documents: | Avg. document size: | Indexes: | Total index size: | | | | |
| 20.48 kB | 28 | 165.00 B | 1 | 36.86 kB | | | | |
| Law_2020 | | | | | | | | |
| Storage size: | Documents: | Avg. document size: | Indexes: | Total index size: | | | | |
| 24.58 kB | 223 | 123.00 B | 1 | 20.48 kB | | | | |
| Law_2021 | | | | | | | | |
| Storage size: | Documents: | Avg. document size: | Indexes: | Total index size: | | | | |
| 24.58 kB | 334 | 134.00 B | 1 | 40.96 kB | | | | |

PROJECT MANAGEMENT TOOLS

Tools Used-

GitHub: Version control & collaboration

Team Coordination:

Tasks, Issues, Pull Requests via GitHub

Manual progress tracking via weekly updates

TESTING & VALIDATION (SDLC PHASE 3)

Testing Methods:

- Unit Testing – APIs
- Integration Testing – Frontend-Backend-Databases
- User Testing – Role login and event flows

Bug Fixes:

- Login credential mismatches
- Event approval issues

CONTRIBUTIONS

Team Roles:

- Akash: Frontend development, Backend development
- Varshitha: Frontend design
- Zaahid: Database setup support, Documentation
- Khyathi: Database setup
- Mihir: Documentation, Data sourcing
- Sathwika: Backend support, GitHub, Jira, Deployment

Thank you!
