

# **EVENT MANAGEMENT – TECHFEST 2025**

Submitted in Partial Fulfillment of the Requirements for the

Award of the Degree of

**BACHELOR OF TECHNOLOGY**

in

**COMPUTER SCIENCE AND ENGINEERING**

By

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Under the Supervision of

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**Affiliated To**

**Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY**  
**UTTAR PRADESH, LUCKNOW**

**NOVEMBER, 2025**

# **CERTIFICATE**

## **Student Declaration**

I, **Mr. Nitish Kumar**, a student of B.Tech in Computer Science and Engineering (Artificial Intelligence & Machine Learning) at Meerut Institute of Technology, hereby declare that the project titled “**Event Management– TechFest 2025**” is an original work completed by me during the academic session 2025–2026. This work has not been submitted to any other University or Institute for the award of any degree or diploma, and all sources used have been duly acknowledged.

**(Student Signature)**

**Mr. Nitish Kumar (2302921530032)**

B.Tech – CSE (AI & ML)

## **Certificate By Guide**

This is to certify that the project report entitled “**Event Management– TechFest 2025**” has been completed and submitted by **Mr. Nitish Kumar**, a student of B.Tech in Computer Science and Engineering (Artificial Intelligence & Machine Learning), in partial fulfillment of the requirements for the degree of **Bachelor of Technology** for the academic session 2025–2026. The project has been carried out under the guidance of **Dr. Praveen Kumar**, Head of the Department of Computer Science and Engineering. This is a bonafide record of the student’s work and has not been submitted elsewhere for any degree or diploma.

**(Signature of Guide / HOD)**

**Dr. Praveen Kumar**

Professor, Head CSE (AI ML)

## DECLARATION

I, **Mr. Nitish Kumar**, a student of B.Tech in Computer Science And Engineering(Artificial Intelligence & Machine Learning), studying at Meerut Institute of Technology, Meerut, hereby declare that the project entitled **Event Management – TechFest 2025**

submitted in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science And Engineering(Artificial Intelligence & Machine Learning), is a bonafide record of my original work carried out under the supervision and guidance of **Dr. Praveen Kumar**, Department of Computer Science and Engineering, Meerut Institute of Technology, Meerut.

I further declare that this project work has not been submitted to any other University or Institution for the award of any degree, diploma, or certification. The information, data, and results presented in this report are true and authentic to the best of my knowledge and belief.

This work represents my genuine efforts, learning, and understanding of front-end web development, specifically focusing on creating a modern and responsive **Event Management** for promoting and managing college-level technical and cultural events.

Signature of the Student

**Mr. Nitish Kumar (2302921530032)**

**B.Tech CSE (AI ML)**

**Meerut Institute of Technology, Meerut**

## ACKNOWLEDGEMENT

With immense pleasure and deep gratitude, I express my sincere thanks to all who supported me in completing my project “**Event Management – TechFest 2025**”, carried out in partial fulfillment of the requirements for the B.Tech in Computer Science and Engineering (Artificial Intelligence & Machine Learning) **at** Meerut Institute of Technology, Meerut (U.P.).

I extend my heartfelt thanks to **Dr. Praveen Kumar**, Head of the Department of Computer Science and Engineering, for his valuable guidance and continuous encouragement.

My sincere appreciation goes to all faculty members and staff of the department for their guidance and cooperation. I also wish to thank my **family** for their unwavering love and motivation throughout my academic journey.

Lastly, I am grateful to my **friends and classmates** for their constant support and helpful discussions during the course of this work.

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## ABSTRACT

The project “**Event Management– TechFest 2025**” has been developed to provide a simple, modern, and responsive online platform for promoting college events and managing participant registrations. With the increasing use of digital tools in academic institutions, this landing page serves as an efficient medium to display event details such as the event name, date, schedule, gallery, and registration form.

The website is built using **HTML5, CSS3, and JavaScript**, ensuring a clean UI, smooth user experience, and compatibility across different devices. For handling registrations, **Formspree** is integrated as a secure and lightweight form submission service, eliminating the need for a backend server.

This project, created by **Mr. Nitish Kumar** demonstrates the practical application of web development concepts and UI/UX principles. It fulfills its objective of offering an appealing and functional event management interface, while also laying the foundation for future upgrades like database connectivity, login systems, and automated analytics.

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## LIST OF ABBREVIATIONS / SYMBOLS

Abbreviation / Symbol	Full Form / Description
<b>HTML</b>	HyperText Markup Language
<b>CSS</b>	Cascading Style Sheets
<b>JS</b>	JavaScript
<b>UI</b>	User Interface
<b>UX</b>	User Experience
<b>API</b>	Application Programming Interface
<b>HTTP</b>	HyperText Transfer Protocol
<b>URL</b>	Uniform Resource Locator
<b>WWW</b>	World Wide Web
<b>IDE</b>	Integrated Development Environment
<b>W3C</b>	World Wide Web Consortium
<b>DOM</b>	Document Object Model
<b>IP</b>	Internet Protocol
<b>SEO</b>	Search Engine Optimization
<b>DBMS</b>	Database Management System
<b>CMS</b>	Content Management System
<b>MIT</b>	Meerut Institute of Technology
<b>B.Tech</b>	Bachelor of Technology
<b>CSE</b>	Computer Science and Engineering

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# CHAPTER 1: INTRODUCTION

## 1.1 Background

The Background section establishes the rationale for the project by highlighting the transition from traditional, manual event management to modern digital methods.

The Problem with Traditional Methods: The core issue is the inefficiency and unreliability inherent in paper-based or dispersed communication. *Printed notices* are easily missed or outdated; *offline registrations* are prone to data entry errors and difficult to audit; and *manual record-keeping* delays reporting and analysis. This creates bottlenecks in communication, leads to mismanagement of resources, and fundamentally lacks accessibility for a diverse student body.

The Solution: Digital Event Landing Page: A dedicated digital platform, specifically an event landing page, is presented as the modern, essential tool. It serves as a single source of truth, providing *real-time access* to critical information (schedules, guidelines, category details, and updates). Crucially, it integrates registration facilities, automating a key logistical step.

Project Context: The development is a direct response to the growing institutional demand for quick, organized, and professional event communication. By leveraging standard web technologies (HTML, CSS, JavaScript), the project aims to deliver a solution that is both intuitive for users and easily maintainable by organizers. This foundational technology choice ensures high compatibility and low overhead.

## 1.2 Problem Statement

The Problem Statement clearly defines the specific issue the project intends to solve within the college environment. It moves from the general need (Background) to a specific institutional deficit.

Institutional Deficiency: The central problem is the absence of a consolidated online platform for annual college events, such as *TechFest*. Events are frequent, but the digital infrastructure to support them is lacking or fragmented.

Consequences of Manual Processes: The reliance on manual or piecemeal registration/information systems directly leads to: Errors and Data Mismanagement: Inconsistent or lost participant data, making organization and follow-up difficult. Inconvenience: Time-consuming for both organizers (collecting and collating data) and students (finding information and signing up). Lack of Transparency: Updates aren't uniformly distributed, leading to confusion among participants.

The Project's Aim: The project is positioned as a direct intervention to solve these issues. It focuses on developing an effective system that ensures transparent communication, provides a seamless registration experience, and offers an organized and professional presentation of all event details, thus improving the overall user experience (UX).

### **1.3 Objectives**

The *Objectives* section outlines the deliverables and the learning outcomes of the project in clear, actionable terms.

#### **Primary Functional Objectives (The What):**

Build a Fully Responsive Landing Page: The primary deliverable must adapt flawlessly to any screen size (desktop, tablet, mobile), ensuring device compatibility and maximum accessibility.

Provide Comprehensive and Visually Appealing Information: The platform must be the complete information hub for *TechFest 2025* and be designed to be attractive and engaging (visual appeal).

Implement an Efficient Registration Process: Utilize a third-party service, specifically Formspree, to handle form submissions easily and reliably without requiring a dedicated backend server.

#### **Secondary/Educational Objectives (The How):**

Demonstrate Practical Application of Front-End Technologies: Show mastery of HTML, CSS, and JavaScript by building a functional, real-world product.

Enhance UI/UX Design Skills: Apply design principles to create an intuitive, attractive interface that optimizes user interaction and engagement.

Develop an Extensible Solution: The current front-end structure should be built modularly, allowing for future expansion to include advanced features (e.g., payment integration, admin login).

## 1.4 Scope of the Project

The *Scope* is critical as it clearly sets the boundaries of the current project phase, managing expectations and focusing the developmental effort.

Core Focus: Front-End Development: The project is strictly limited to the client-side of the application. The focus is on the visual and interactive aspects: layout design, navigation flow, content presentation, and basic user interaction.

Key Deliverable Sections: The website structure includes essential components for an event page: Introduction, Schedule, Highlights, Gallery, and the Registration Form.

Handling Data (Formspree): A major constraint and defining feature is the use of Formspree for form handling. This strategically *eliminates the need for a custom backend server, database, and server-side logic* in this initial phase, allowing for a concentrated focus on front-end quality. Exclusions (Non-Scope): To be absolutely clear, the project does not include advanced, backend-reliant features such as:

Database storage or persistence of user data. Real-time notifications or chat features. A secure administration dashboard for content management.

Conclusion on Scope: The project provides a strong, functional front-end foundation that is ready to be connected to a more complex backend system in subsequent, hypothetical phases.

## 1.5 Chapters Scheme

The *Chapter Scheme* acts as the **Table of Contents** or **Roadmap** for the reader, detailing the logical progression of the project documentation.

Chapter	Focus	Explanation
Chapter 1	Introduction	Sets the stage: Background, Problem, Objectives, Scope, and Report Structure.
Chapter 2	Literature Review & System Analysis	Explores existing event management solutions and related technologies (Lit Review), and then analyzes the specific requirements and constraints of the <i>TechFest</i> event (System Analysis).
Chapter 3	Methodology and Design Approach	Details the chosen developmental model (e.g., Agile, Waterfall), the design principles (e.g., Mobile-First, UI/UX standards), and the structural blueprint of the website (wireframes/mockups).
Chapter 4	Implementation Details	The technical core: Specifies the tools and technologies used, provides code snippets for critical functionalities, and explains the configuration/deployment steps.
Chapter 5	Results, Testing, and Evaluation	Presents the final functional outcome, documents the testing procedures (e.g., unit testing, cross-browser testing), and provides an objective evaluation against the stated objectives.
Chapter 6	Conclusion and Future Enhancements	Summarizes the project's success ( <b>Key Findings</b> ), reflects on the achieved objectives, and proposes a clear plan for <b>Future Enhancement Possibilities</b> (e.g., integrating a database, adding payment gateways).

## CHAPTER 2: LITERATURE REVIEW

### 2.1 Related Work

This section establishes that the concept of digital event management is mature and widespread, providing context for the current project.

**Breadth of Existing Solutions:** Related work is categorized across a spectrum, from simple institutional web pages (for one-off events) to sophisticated commercial event management tools (like Eventbrite or specialized campus platforms).

**Common Functionalities:** The review acknowledges that key functions like *online registration*, *event announcements*, *participant tracking*, and *communication modules* are standard features in various forms of digital event systems. This confirms the baseline necessity for these features in any modern solution.

**Demonstrated Importance:** The existence and continued development of these systems universally affirm the critical importance of digital tools in achieving operational efficiency, data centralization, and process streamlining in event logistics. The field has moved past manual methods; the conversation is now about *optimizing* the digital approach.

**The Scope of Review:** This review encompasses a range of solutions: Simple College/Departmental Sites: Often built with basic HTML/CSS for a single event. University Portals: More complex systems, frequently integrated with a central database for student/faculty authentication. Commercial SaaS (Software as a Service) Tools: Feature-rich, offering advanced ticketing, payment, and analytics.

### 2.2 Existing Systems

This section moves from simple acknowledgment to critical analysis, detailing the specific limitations of current solutions that necessitate a new approach.

**Usability and Design Flaws:**

Lack of Responsiveness: Many older or internally developed institutional websites are static and non-responsive. This is a significant drawback in a mobile-first world, leading to poor user experience (UX) and inaccessibility when accessed via smartphones or tablets.

Outdated Interfaces: Poor design, complex navigation, and a failure to adopt modern aesthetic standards can lead to low user engagement and a lack of professionalism.

### **Technical and Maintenance Overheads:**

Backend Dependency and Cost: Many sophisticated platforms require significant backend setup, database integration, and continuous server maintenance. For short-term, student-run technical festivals, this level of infrastructure is often not feasible due to limited budget, technical expertise, and resource availability.

### **Functional Overkill:**

Complex Interfaces: Commercial tools, while powerful, often suffer from feature bloat—they contain tools (like advanced financial reporting or multi-tier ticketing) that are unnecessary for a simple college fest. Their complexity can confuse the primary student user base.

Commercial Cost: The high subscription or per-use fees of commercial event management tools make them economically unsuitable for non-profit, student-level academic events where simplicity and cost-effectiveness are paramount.

## **2.3 Research Gaps**

This is the core of the chapter, where the limitations of existing systems are translated into the specific, unmet needs that the *TechFest 2025* project aims to fulfill.

**Gap 1: Simplicity vs. Complexity:** There is a pronounced gap for a lightweight, highly focused, and easy-to-navigate landing page specifically engineered for the unique requirements of a college *technical festival*. Existing solutions are either too simple (static pages) or too complex (full management suites).

**Gap 2: Third-Party Form Integration:** A significant gap is the lack of systems that offer simple, low-friction registration without a dedicated backend. By choosing to integrate a service like Formspree, the project directly addresses the need for secure, reliable data capture using only front-end technologies, bypassing the technical overhead of server maintenance.

**Gap 3: Aesthetics and Responsiveness:** Current institutional solutions often neglect modern aesthetic design and responsiveness. The project's dedicated focus on creating an aesthetically pleasing and fully responsive interface (leveraging modern CSS frameworks and design principles) fills the gap in creating a truly engaging platform tailored for a student audience.

## 2.4 Summary

The *Summary* provides the conclusion of the review, formally stating the project's purpose and how it builds upon the existing body of work.

**Conclusion:** The literature review confirms that while the field of digital event management is mature, a significant need exists for a solution that is optimized for the academic environment—specifically, one that is simple, cost-effective, highly responsive, and user-focused.

**Project Aim:** The “Event Management – TechFest 2025” landing page is positioned as the solution to these identified gaps. It will deliver a clean, responsive, interactive, and user-friendly platform that perfectly balances promotional needs with efficient participant registration.

**The Result:** By establishing these needs, the chapter successfully lays the foundation and rationale for the design choices and front-end development methodology detailed in the subsequent chapters.

## CHAPTER 3: METHODOLOGY

This chapter explains the methodology adopted for designing and developing the “Event Management – TechFest 2025” landing page. The methodological approach ensures that the system meets user expectations, performs efficiently across devices, and provides an engaging and responsive interface for event participants.

### 3.1 Requirement Analysis (Functional & Non-functional)

Requirement analysis is the crucial first step that translates the project objectives into concrete specifications.

**Functional Requirements (What the System MUST Do):** These define the core features and actions the user can perform.

**Information Dissemination:** The system must efficiently organize and display event content via distinct, navigable sections: Event Introduction (overview/theme), Schedule (timing/location details), Gallery (visual promotion), and a dedicated Registration Form.

**Registration Handling:** The system must enable users to submit their personal and event selection details through the form. This submission must be reliably routed using the integrated Formspree service to the organizers.

**Non-functional Requirements (How the System MUST Behave):** These criteria govern the quality, performance, and usability of the system.

**Performance:** The system must exhibit fast loading times (optimized assets and minimal external dependencies) to prevent user drop-off.

**Responsiveness/Compatibility:** It must ensure seamless functionality and visual consistency across the entire range of potential user devices (desktops, tablets, and mobile phones).



Usability (UI/UX): The interface must be simple, intuitive, and visually clean to enhance user satisfaction and minimize confusion. Navigation must be consistent and logical.

Reliability: The core function (registration form submission) must be reliable and consistent, ensuring every user submission is successfully processed by the third-party handler (Formspree).

Simplicity: The underlying code structure should be clean and maintainable, facilitating easy updates for future events.

### **3.2 Technology Stack / Tools Used**

This section justifies the choice of fundamental front-end technologies, which are ideal for developing a static, fast, and highly compatible landing page.

HTML5 (Structure): Used as the foundational markup language to define the semantic structure of the page (headers, sections, forms, lists). HTML5 elements ensure accessibility and provide a robust framework for content organization.

CSS3 (Style and Responsiveness): Essential for all visual presentation. CSS3 handles the aesthetic design (colors, typography), layout management (Flexbox or Grid), and, most critically, responsiveness through the use of media queries. It also allows for sophisticated visual enhancements like animations and transitions to improve user engagement.

JavaScript (Interactivity): Incorporated to add dynamic client-side behavior. This includes features like smooth scrolling effects, validation checks on the form fields, dynamic menu toggles for mobile viewports, and interactive gallery features.

External Tool: Formspree (Form Handling): A key tool selection. Formspree acts as the form submission backend, securely receiving the data and forwarding it to the organizers' email addresses. This strategic use of a third-party service allows the project to meet the functional requirement for registration while adhering strictly to the scope limitation of remaining front-end only.

Development Tools: Visual Studio Code (VS Code): Used as the primary text editor, offering features like syntax highlighting, integrated terminal, and extensions that boost development efficiency. Browser Developer Tools: Crucial for live testing, debugging JavaScript errors, and validating CSS responsiveness across simulated devices during the implementation phase.

### **3.3 System Workflow**

The system workflow explains the step-by-step interaction model from the user's perspective, emphasizing the linear and streamlined nature of the front-end application.

#### **Phase 1: Access and Discovery:**

User Access: The workflow begins when a participant accesses the publicly hosted URL of the landing page.

Initial View: The user is immediately presented with the essential event details (Date, Theme, Introduction) prominently displayed above the fold.

#### **Phase 2: Navigation and Information Gathering:**

Structured Navigation: The user utilizes the navigation menu to jump between sections (Schedule, Gallery, Highlights). This smooth, client-side navigation (often enhanced by JavaScript smooth scrolling) ensures a positive UX.

Information Consumption: The user reviews the content relevant to them (e.g., checking event rules or the day's schedule).

#### **Phase 3: Registration and Completion (The Critical Path):**

Form Interaction: The user arrives at the Registration Form section. Data Input: They fill out the required details. (Optional: Client-side JavaScript validation checks for completeness). Submission: Upon clicking the submit button, the form data is securely packaged and submitted directly to the Formspree endpoint (not a custom server). Formspree Processing: Formspree receives the data, processes it, and forwards it immediately to the organizer's designated email address. Confirmation: The user

receives a confirmation message (either a redirect to a thank-you page or an in-page confirmation), completing the transaction.

### **3.4 Implementation Approach**

This section details the specific, ordered steps taken in the development lifecycle, adhering to an iterative, component-based methodology often used in front-end projects.

#### **Step 1: Wireframing and Conceptual Design:**

Purpose: To define the skeletal structure and content hierarchy (placement of the logo, navigation, main call-to-action buttons, and sectional flow) before writing any code. This ensures a logical, user-friendly layout.

#### **Step 2: HTML Framework Construction:**

Purpose: Building the backbone of the page using semantic HTML5 tags. All text, images, and form elements are placed, but without any styling, focusing purely on content and structure.

#### **Step 3: CSS Styling and Responsiveness (The Bulk Work):**

Styling: Applying CSS rules for visual aesthetics, typography, and color palette in line with the *TechFest 2025* branding.

Layout: Implementing Flexbox and/or Grid systems for complex section layouts.

Responsiveness: Utilizing the mobile-first approach, where CSS is initially written for small screens, and then media queries are systematically added to adjust the layout and scaling for larger screen sizes (tablets and desktops).

#### **Step 4: JavaScript Interactivity Integration:**

Adding dynamic elements like scroll effects, mobile hamburger menu functionality, and any necessary form validation logic.

### **Step 5: Formspree Integration and Testing:**

The final step involves configuring the HTML form's action attribute to point to the unique Formspree endpoint. Rigorous testing is performed to ensure successful, secure, and reliable data transmission upon submission

## **3.5 Deployment**

Deployment is the final stage that makes the project accessible to the end-user, validating the system's real-world utility.

Hosting Strategy (Static Site Hosting): The project is designed for static site hosting, which is inherently simple, fast, and low-cost (often free).

Platform Options: Services like GitHub Pages, Netlify, or Vercel are ideal choices. These platforms specialize in serving HTML, CSS, and JavaScript files globally via a Content Delivery Network (CDN), ensuring maximum uptime and speed.

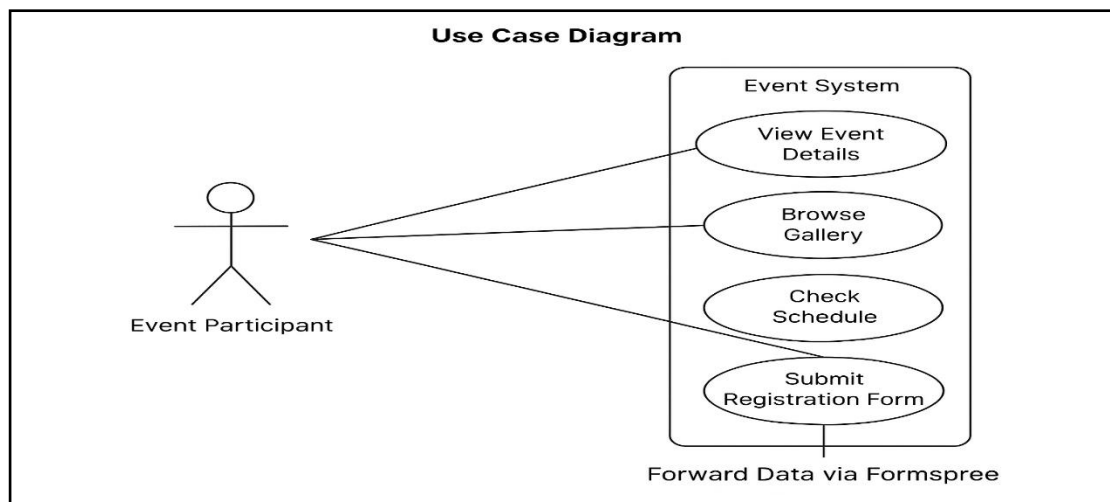
Deployment Process: The process typically involves linking the project repository (e.g., on GitHub) to the chosen hosting service. The service automatically deploys the files, providing a publicly accessible URL (Domain Name).

Outcome: Successful deployment means the landing page is fully functional and accessible by all target participants, meeting the core requirement of transparent, accessible event communication.

## CHAPTER 4: SYSTEM DESIGN

### 4.1 Use Case Diagram

The **Use Case Diagram** describes the interaction between the user and the system. In this project, the primary actor is the event participant, who can view event details, browse the gallery, check schedules, and submit the registration form. The system responds by displaying relevant information and forwarding the registration data via Formspree. This interaction highlights a straightforward user journey with minimal complexity, suitable for a static front-end platform.



**Figure 4.1: Use Case Diagram of the System**

The Use Case Diagram defines the external behavior of the system by outlining the capabilities provided to the Actor.

**Primary Actor: The Event Participant:** This is the sole entity interacting directly with the system's functionalities.

#### **Key Use Cases (System Capabilities):**

**View Event Details:** The core function, including accessing the introduction and general guidelines.

**Check Schedules:** Viewing the static, detailed timetable for the technical festival.

Browse Gallery/Highlights: Interacting with visual content to see past events or featured segments.

Submit Registration Form: The key transaction; entering data and initiating the submission process.

System Boundary and Response: The system's response is limited to displaying content (rendering HTML/CSS/JS) and, for registration, invoking the external Formspree service.

Significance: This diagram highlights the project's minimal complexity and streamlined user journey, confirming that the design meets the goal of a simple, focused event landing page.

## 4.2 ER Diagram

Although the project does not include a database, the **ER Diagram** can be represented conceptually to illustrate data associated with the registration process. The main entity is the participant, with attributes such as name, email, phone number, and event details being captured through the registration form. Since Formspree handles submission externally, there is no internal relational database, but the conceptual ER model helps in understanding the required data fields and their significance.

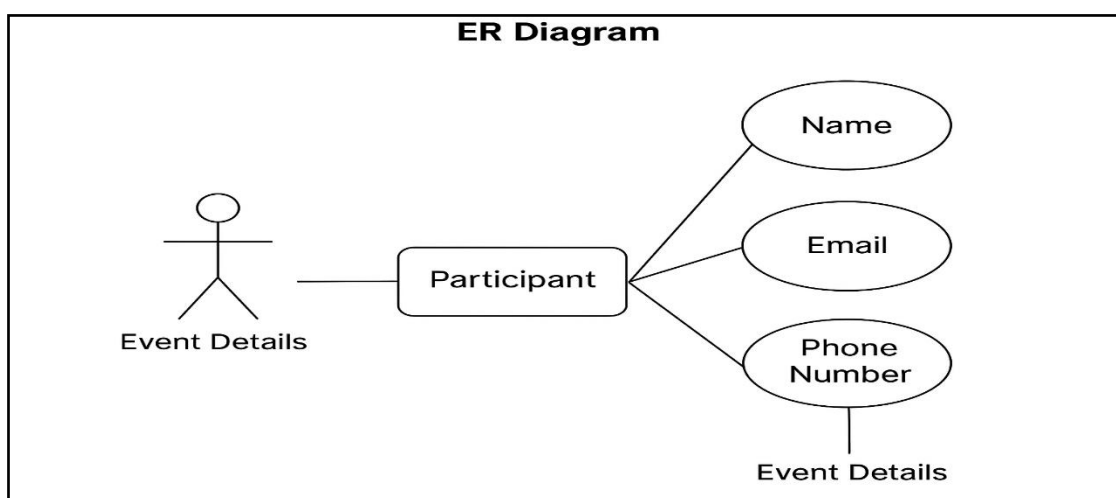


Figure 4.2: ER Diagram of the System

While a physical database is absent, the Entity-Relationship (ER) Diagram is used conceptually to model the data structure required for the registration process. This is a crucial design step, regardless of the storage mechanism.

Main Entity: Participant: Represents the individual registering for the event.

**Attributes (Captured Data):**

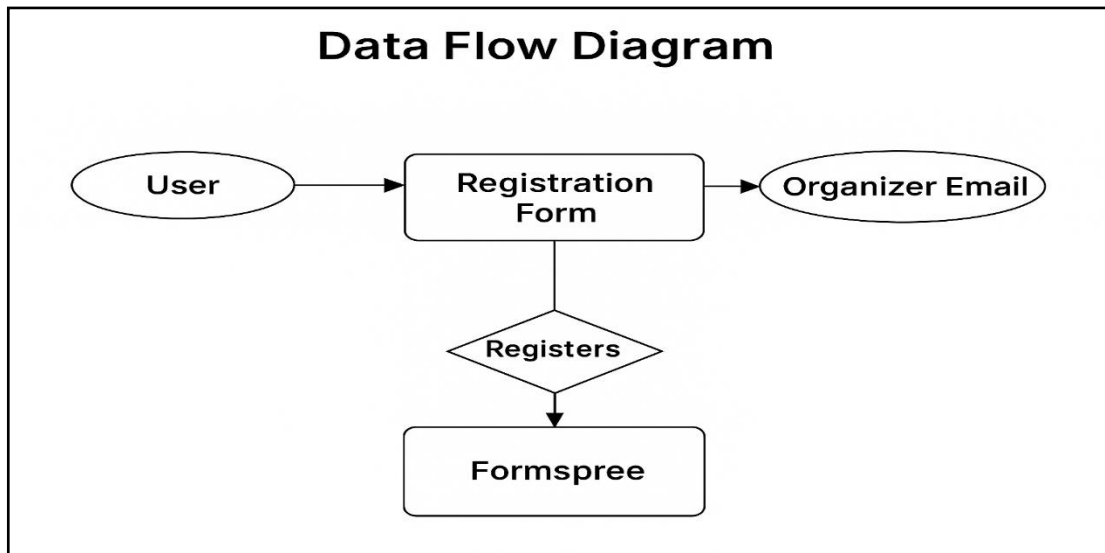
Primary Identification: Name (Full Name), Contact Information: Email (required for communication), Phone Number

Event-Specific Data: Event Details (e.g., choice of competition, team name, college ID). Relationship (Conceptual): There is no defined relationship to another internal entity, as the data simply flows *out* of the system.

**Significance:** The conceptual ER diagram validates that all necessary data fields for event logistics are included in the registration form design, serving as a template for the HTML form input names. It separates the data requirement from the storage technology.

### **4.3 Data Flow Diagram**

The **Data Flow Diagrams (DFDs)** illustrate how information moves through the system. At the basic level, data flows from the user to the registration form and is then sent to Formspree, which processes and forwards the data to the organizer's email. Higher-level DFDs show how users access different sections of the site—such as the homepage, schedule, gallery, and registration—where each section provides static content rendered through HTML, CSS, and JavaScript.



**Figure 4.3: Data Flow Diagram of the System**

The Data Flow Diagram (DFD) visually maps the path of information, providing a functional view of data processing within and outside the system.

**Level 0 (Context Diagram):** The highest-level view shows the User interacting with the "Event Landing Page System" and the resulting data (Registration Details) being outputted to the external Formsfree Service and ultimately the Organizer.

**Level 1 (Detailed Flow):** This breaks down the flow into key processes:

Process: Content Display: Static content (HTML/CSS/JS) is loaded from the hosting server and rendered to the User.

Process: Navigation: User input triggers client-side JavaScript to scroll to a new section.

Process: Registration Submission: User data is collected via the HTML form and sent as an HTTP request (the Data Flow) to the external Formsfree Service.

**Significance:** The DFD clearly isolates the system's role (rendering content) from the external service's role (processing form data), validating the architecture defined in the scope.



## 4.4 Activity Diagram

The **Activity Diagram** explains the sequence of actions a user follows while interacting with the landing page. The process begins with the user opening the website, navigating to different event sections, reviewing details, and choosing to register. Once the registration form is filled and submitted, the activity completes with confirmation handled by Formspree. This flow ensures that users experience a smooth and logical navigation pattern.

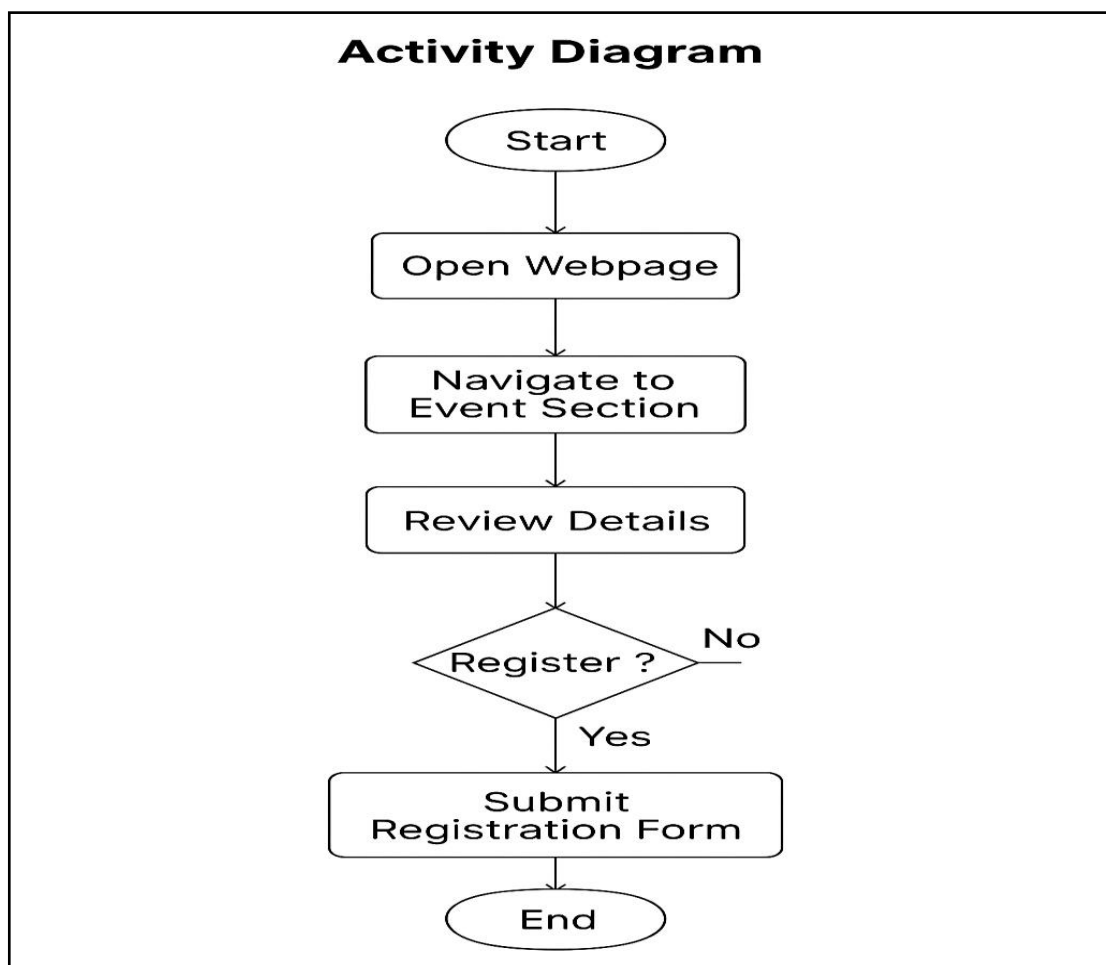
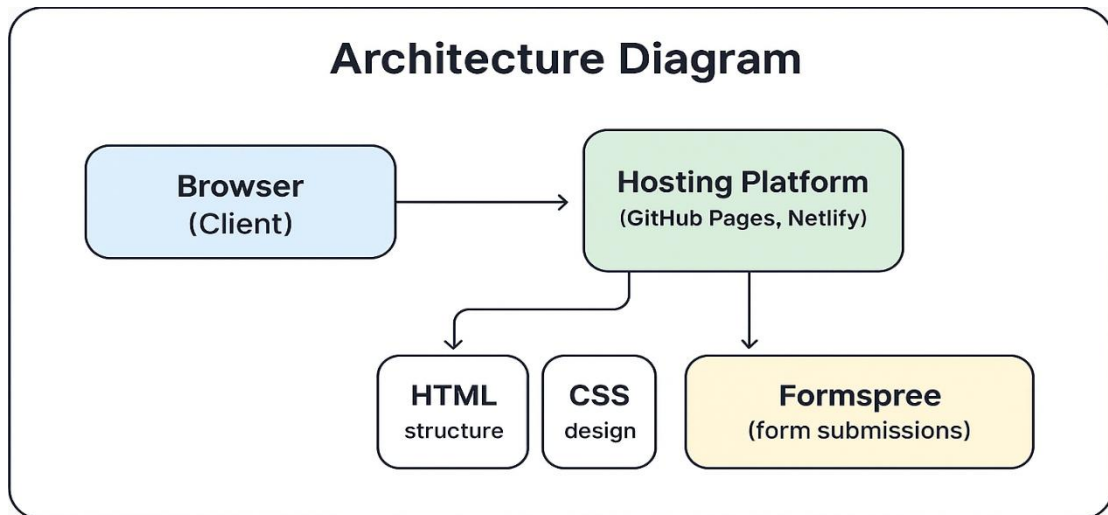


Figure 4.4: Activity Diagram of the System

## 4.5 Architecture Diagram

The **Architecture Diagram** represents the overall structure of the system as a client-side web application. The architecture includes the browser as the client, which loads the website files stored on a hosting platform such as GitHub Pages or Netlify. HTML

provides the structure, CSS shapes the design, JavaScript handles dynamic interactions, and Formspree acts as an external service for managing form submissions. Since there is no backend, the architecture remains lightweight and optimized for fast performance.



**Figure 4.5: Architecture Diagram of the System**

The Architecture Diagram is the most crucial design model for this project, visually representing the structural relationship between all components.

### **Three Key Layers/Components:**

**Client (The Browser):** The user's device (desktop/mobile) running the browser. This is the execution environment for the entire application.

**Presentation/Logic Layer (Front-end Files):** The static files themselves.

**HTML:** Structure, **CSS:** Styling/Design/Responsiveness, **JavaScript:** Interactivity/Form Validation

**Hosting Platform (e.g., Netlify/GitHub Pages):** The server that stores and serves the static files globally via a CDN.

**External Service (Formspree):** The third-party endpoint used for handling the critical form submission data.

Communication Flow: The diagram shows the Client requesting files from the Hosting Platform and, separately, sending data directly to the External Service upon form submission.

Significance: It confirms the lightweight, three-tier, client-side architecture that eliminates the need for a complex application server, database server, or custom backend code, fulfilling the project's scope limitations and performance goals.

## 4.6 Screens and Module Descriptions

This section outlines the actual realized components of the front-end design, linking the abstract design diagrams back to the user interface.

**Homepage/Introduction Module:** Purpose: The user's first impression; to display the central event banner, theme, and a brief overview. Design Focus: High visual impact, clear Call-to-Action (CTA) for registration, and easy initial navigation access.

**Schedule Module:** Purpose: To present the event timetable, sessions, and locations in a clear, legible format (e.g., using a responsive table or list). Design Focus: Readability and structured data presentation.

**Gallery/Highlights Module:** Purpose: Visual promotion using images or short video clips from previous events to generate excitement and engagement. Design Focus: Responsive image layouts (e.g., CSS Grid or Flexbox) and potentially interactive carousels (JavaScript).

**Registration Module (The Core Transaction):** Purpose: To capture necessary participant data via a form that is securely linked to the Formspreet endpoint. Design Focus: Simplicity, clear input labels, validation feedback, and a conspicuous submit button. Significance: This provides a detailed overview of the physical output of the design process, setting the

## CHAPTER 5: RESULT & DISCUSSION

### 5.1: Navigation Bar and Responsive Menu Layout

The navigation bar provides quick access to key sections such as Home, About, Schedule, Gallery, Testimonials, and Register. On smaller screens, the navigation bar collapses into a hamburger menu for seamless mobile navigation.



Figure 5.1: Navigation Bar and Responsive Menu Layout

### 5.2: Hero Section – Background Image/Video with CTA Button

This section contains a full-width hero banner with a background image/video, event title, and subtitle. The “Register Now” button directs users to the registration form, improving user engagement and call-to-action effectiveness.

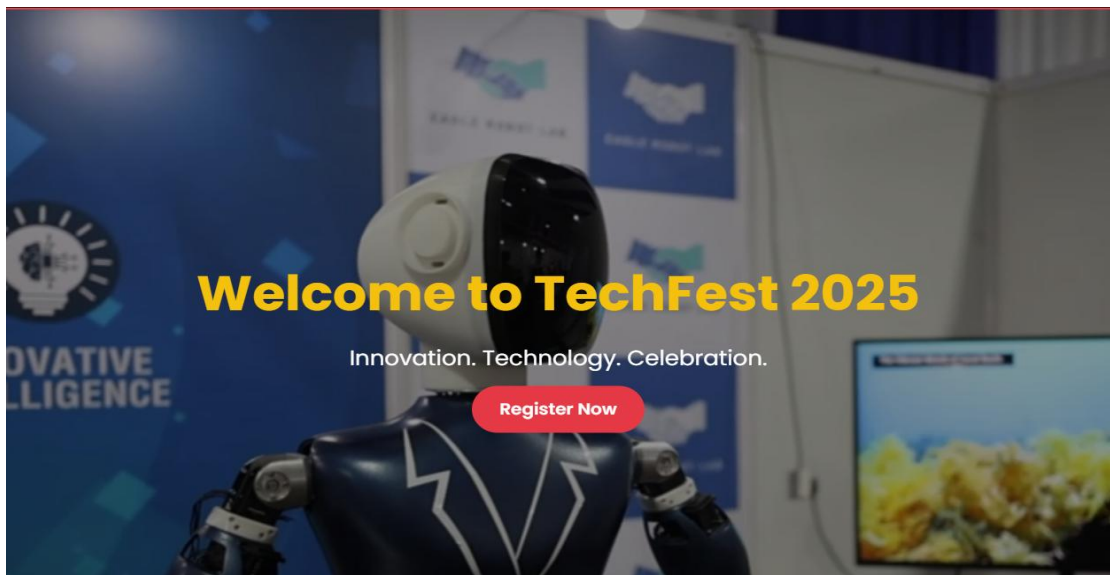


Figure 5.2: Hero Section – Background Image/Video with CTA Button

**Figure 5.3: Event Schedule Section (Event Cards)**

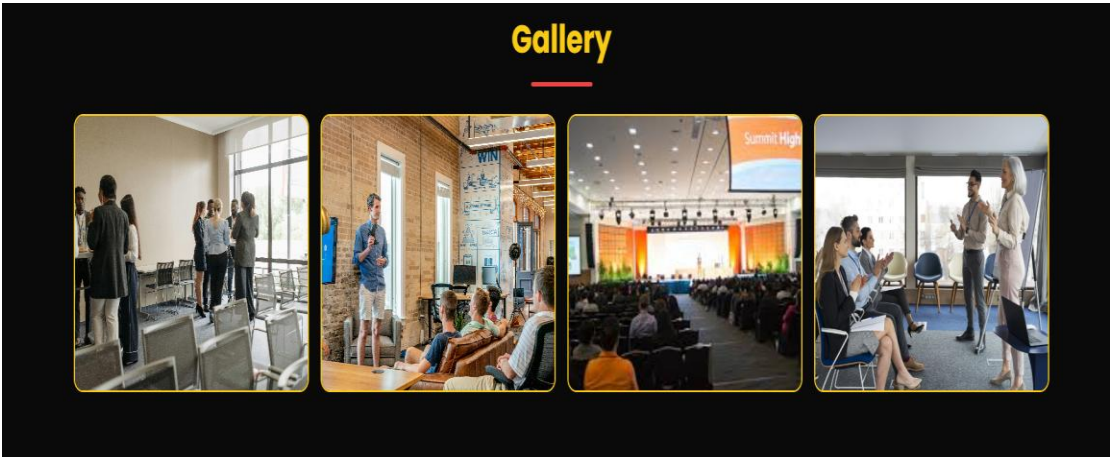
The event schedule displays event sessions in card format. Each card includes the event title, time, venue, and speaker details. The structure improves readability for attendees planning their participation.



**Figure 5.3: Event Schedule Section (Event Cards)**

**5.4: Gallery Lightbox View**

Clicking any image opens a lightbox view for a better visual experience.



**Figure 5.4: Gallery Lightbox View**

## 5.5: Testimonials Section – Participant Feedback

User testimonials are displayed in slider format. Each card includes participant name, photo, and feedback. This builds trust and credibility for the event.



Figure 5.5: Testimonials Section – Participant Feedback

## 5.6: Registration Form

The registration form captures user details such as name, email, phone, event selection, and message. Submission is handled through Formspree API for secure and reliable data collection.

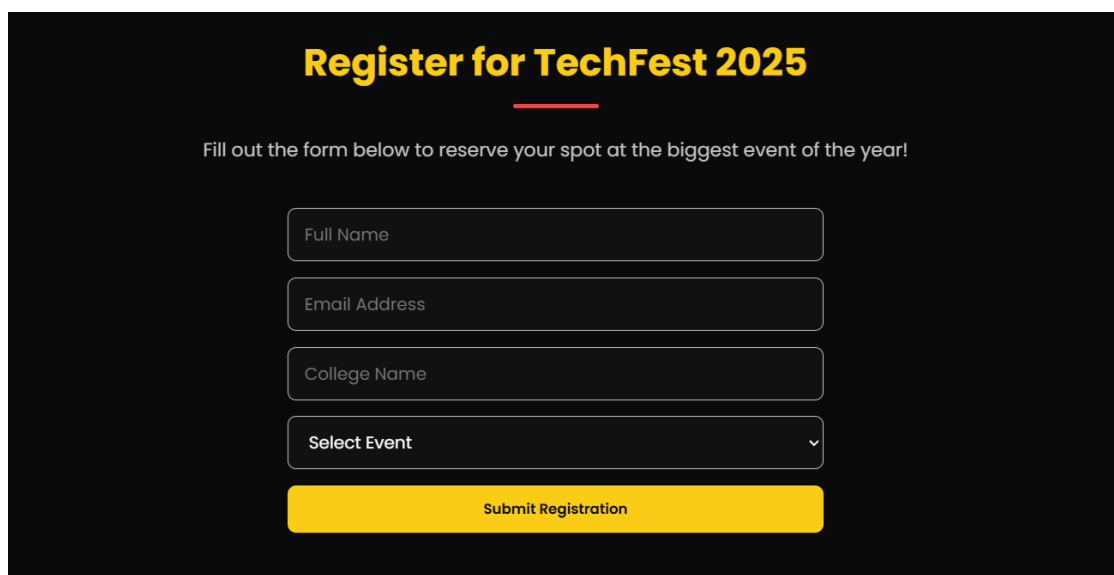
The image shows a registration form on a dark background. At the top, the title "Register for TechFest 2025" is displayed in yellow. Below the title, a subtitle in white text reads "Fill out the form below to reserve your spot at the biggest event of the year!". The form consists of four input fields: "Full Name", "Email Address", "College Name", and "Select Event" (a dropdown menu). Below these fields is a large yellow button labeled "Submit Registration".

Figure 5.6: Registration Form

## 5.7: Footer Section – Social Media & Contact Links

The footer includes contact information, social icons, and quick navigation links, ensuring accessibility to all essential information.

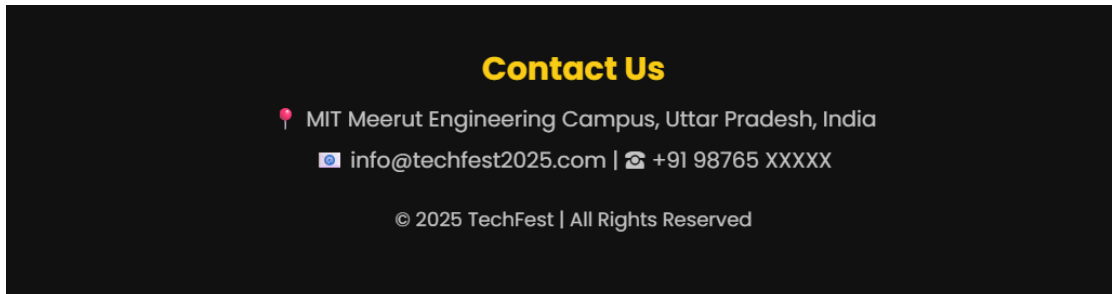


Figure 5.7: Footer Section – Social Media & Contact Links

## 5.8: Desktop Preview – Full Home Page Layout

A full-page screenshot showing how the homepage appears on a wide desktop screen.

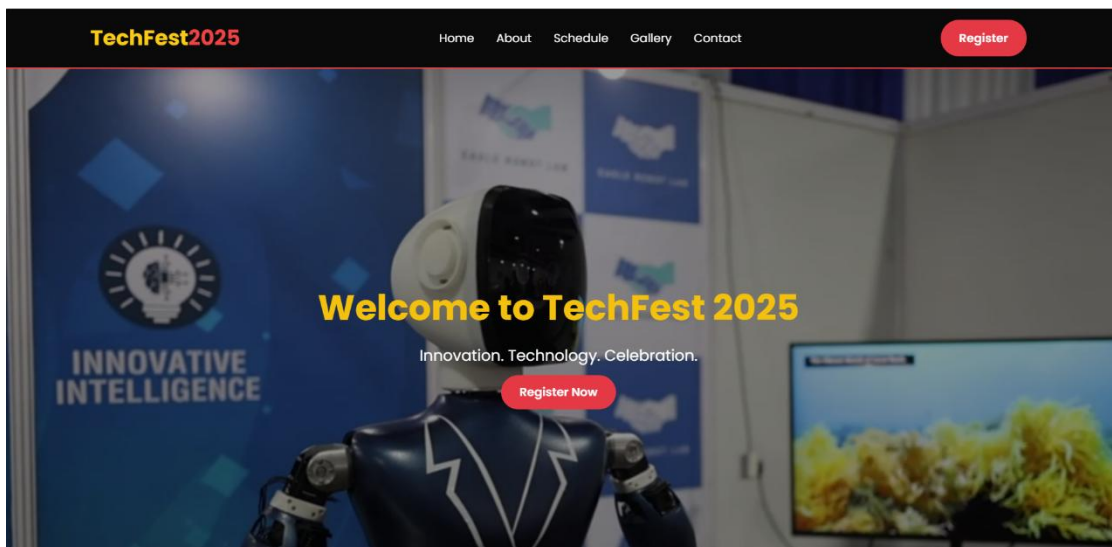


Figure 5.8: Desktop Preview – Full Home Page Layout

## 5.9: Mobile View – Event Schedule Cards

Event cards stack vertically for mobile, ensuring clean, readable formatting.

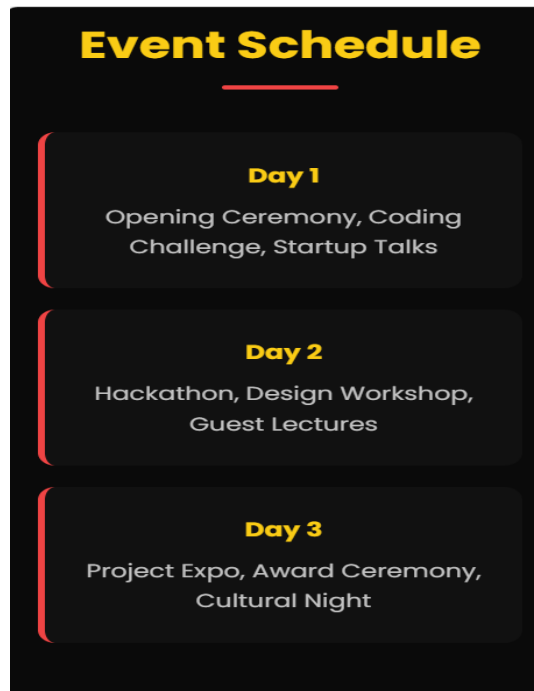


Figure 5.9: Mobile View – Event Schedule Cards

## 5.10: Mobile View – Registration Form

Form fields stack vertically and resize properly for touch interactions.

A mobile view of a registration form. The title "Register for TechFest 2025" is at the top in yellow. Below it is a subtitle "Fill out the form below to reserve your spot at the biggest event of the year!". There are four form fields: "Full Name", "Email Address", "College Name", and "Select Event" (a dropdown menu). At the bottom is a yellow button labeled "Submit Registration".

Figure 5.10: Mobile View – Registration Form



## **CHAPTER 6: CONCLUSION**

### **6.1 Summary of Outcomes**

The development of the Web-Based Event Registration System successfully achieved its primary objective by delivering a modern, high-quality front-end solution specifically tailored for promoting college technical festivals and streamlining participant registration. The project stands as a practical demonstration of mastery in standard web technologies (HTML5, CSS3, JavaScript), resulting in an interface characterized by its clean design, intuitive navigation, and exceptional responsiveness, ensuring consistent performance and aesthetics across all devices, including mobile phones, tablets, and desktops. Crucially, the system meets the functional requirement for secure data collection through the strategic integration of Formspree, which handles form submissions externally without the complexity and maintenance overhead of a custom backend. The immediate and tangible outcome is a simple yet highly effective digital platform that significantly enhances user engagement and offers organizers a reliable tool for initial data capture and transparent event communication.

### **6.2 Limitations**

Despite its success within the defined scope, the current system architecture inherently introduces several limitations that justify future developmental phases. The conscious decision to exclude a dedicated backend database means the system cannot internally store, retrieve, or efficiently manage participant data post-submission, relying solely on Formspree's email delivery method which complicates large-scale data analysis and tracking. Consequently, the platform lacks administrative controls, preventing organizers from non-programmatically updating event schedules, changing announcements, or generating real-time registration reports, necessitating manual file updates for any content change (static content management). Furthermore, the absence of server-side logic means automated services, such as confirmation emails, payment processing, or personalized reminders, are unavailable, restricting the system's ability to automate communications. Finally, relying on client-side scripts limits advanced security features like robust server-side validation, highlighting the need for a more secure and dynamic environment to support expanded functionalities.

## 6.3 Future Scope

The existing front-end structure establishes a strong foundation, creating significant opportunities for future expansion to evolve the system into a complete event management platform. The foremost priority is the integration of a robust backend database (such as MySQL, Firebase, or MongoDB), which would enable efficient data persistence, complex querying, and advanced analytics. This database would support the creation of a secure admin dashboard, empowering organizers to dynamically manage content, track registrations, and generate vital reports without requiring code changes. Functionality could be vastly improved by adding essential features like automated email notifications (for confirmation, reminders, and QR-based entry passes) and payment gateway integration (e.g., Razorpay or Stripe) for paid events. Further enhancements could include creating a user login system for personalized experiences (history tracking, badge downloads), implementing advanced search and filtering capabilities, and even incorporating AI-powered recommendations for suggested events. Ultimately, the system could transition from a web landing page to a fully accessible, cross-platform mobile application built using frameworks like Flutter or React Native, ensuring maximum reach and convenience for all event participants.

## CHAPTER 7: REFERENCES

- [1] W3Schools, “HTML Tutorial.” Available: <https://www.w3schools.com/html/>
- [2] W3Schools, “CSS Tutorial.” Available: <https://www.w3schools.com/css/>
- [3] W3Schools, “JavaScript Tutorial.” Available: <https://www.w3schools.com/js/>
- [4] MDN Web Docs, “HTML, CSS and JavaScript Documentation.” Available: <https://developer.mozilla.org/>
- [5] Formspree, “Form Submission Service Documentation.” Available: <https://formspree.io/>
- [6] Bootstrap, “Bootstrap Documentation.” Available: <https://getbootstrap.com/>
- [7] GeeksforGeeks, “Web Development Articles and Resources.” Available: <https://www.geeksforgeeks.org/>
- [8] Freepik, “Free Images and Graphic Resources.” Available: <https://www.freepik.com/>
- [9] Stack Overflow, “Developer Q&A Platform.” Available: <https://stackoverflow.com/>
- [10] TutorialsPoint, “Web Technology Tutorials.” Available: <https://www.tutorialspoint.com/>