

# EventSphereManagement



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**CO-ORDINATOR**

**MS. SANA YOUSUF**

# **Certificate**

**THIS IS TO CERTIFY THAT THE  
DISSERTATION ENTITLED**

**“LAB AUTOMATION” IS SUBMITTED BY**

**AMMAR IRFAN KOTWAL**

**MUHAMMAD SUBHAN RAEES**

**MUHAMMAD ADEEL KHAN**

**OWAIS ALAM**

**MUHAMMAD HAMMAD ALI**

**SHAHMEER KHAN**

**ZAI STUDENT1286449, IN THEIR PARTIAL  
FULFILMENT OF THE REQUIREMENT OF  
THE**

**AWARD OF THE APTECH COMPUTER  
CERTIFIED.**

# Acknowledgment

We extend our heartfelt gratitude to everyone who contributed to the successful development of the **MERN-EventSphere Management** application.

First and foremost, we thank **our dedicated team members**, whose commitment, expertise, and seamless collaboration were instrumental in bringing this project to life. Your tireless efforts ensured the application's robust functionality, intuitive design, and smooth user experience.

We are deeply grateful to **our mentors and project supervisors** for their continuous guidance and unwavering support throughout the development process. Your insightful feedback and constructive suggestions greatly enhanced the quality and efficiency of our work.

Special thanks go to **the technology providers and API services** that powered key features of this application. The reliability and performance of your tools were critical in building an efficient and responsive event management platform.

We also extend our sincere appreciation to **our testers and early users**, whose valuable feedback helped us identify improvements and fine-tune the application to better meet the needs of event organizers and participants alike.

This acknowledgment serves as a token of our appreciation for the collective effort that made the **MERN-EventSphere Management** application a success. Thank you for your continued support and belief in our vision.

# Abstract

**MERN-EventSphere Management** is a web-based application designed to streamline the planning, organization, and management of events.

Built using the MERN stack (MongoDB, Express.js, React.js, and Node.js), the platform offers a user-friendly interface for creating, updating, and tracking events in real-time.

With features such as user authentication, event registration, and admin controls, this application provides an efficient and scalable solution for event organizers and attendees.

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# **CHAPTER NO 1**

## **INTRODUCTION**

## **INTRODUCTION**

The thirst for learning, upgrading technical skills and applying the concepts in real life environment at a fast pace is what the industry demands from IT professionals today. However busy work schedules, far-flung locations, unavailability of convenient time-slots pose as major barriers when it comes to applying the concepts into realism. And hence the need to look out for alternative means of implementation in the form of laddered approach.

The above truly pose as constraints especially for our students too! With their busy schedules, it is indeed difficult for our students to keep up with the genuine and constant need for integrated application which can be seen live especially so in the field of IT education where technology can change on the spur of a moment. Well, technology does come to our rescue at such times!!

Keeping the above in mind and in tune with our constant endeavour to use Technology in our training model, we at Aptech have thought of revolutionizing the way our students learn and implement the concepts using tools themselves by providing a live and synchronous eProject learning environment!

# **CHAPTER NO 2**

# **FUNCTIONAL**

# **REQUIREMENTS**

## **Functional Requirements**

### **User Authentication:**

#### **User Registration and Login:**

- Users (organizers, exhibitors, attendees) can create accounts and log in securely.
- Differentiate user roles (admin/organizer, exhibitor, attendee) upon registration.

#### **Password Management:**

- Enable password reset/forgot password functionality.
- Implement password encryption for secure storage.

### **Admin/Organizer Dashboard:**

#### **Expo Management:**

- Create, edit, and delete expo events.
- Manage expo details: title, date, location, description, theme, etc.
- Allocate booth spaces on the floor plan.

#### **Exhibitor Management:**

- View exhibitor registrations and applications.
- Approve or reject exhibitor applications.
- Assign booth spaces and manage booth details.

#### **Schedule Management:**

- Create and manage event schedules with time slots and sessions.
- Assign speakers, topics, and locations to sessions.
- Allow changes and updates to the schedule.

#### **Analytics and Reporting:**

- Generate reports on attendee engagement, booth traffic, and session popularity.
- Display real-time analytics on expo performance.

### **Exhibitor Portal:**

#### **Registration and Profile Management:**

- Register for expos by providing company details, products/services, and required documents.
- Update exhibitor profiles, including logos, descriptions, and contact information.

## **Booth Selection and Management:**

- View available booth spaces on floor plans.
- Select and reserve booth spaces based on preferences.
- Manage booth details, such as products/services showcased and staff information.

## **Communication:**

- Communicate with organizers/admins for inquiries or support.
- Interact with neighboring exhibitors for collaboration via messaging or contact information exchange.

## **Attendee Interface:**

### **Event Information and Registration:**

- Access event details, including schedule, exhibitor list, and floor plans.
- Register for events, sessions, or workshops.

### **Exhibitor Search and Interaction:**

- Search and filter exhibitors based on categories, products, or keywords.
- View exhibitor profiles and booth locations on the floor plan.
- Initiate communication with exhibitors (chat/email) for inquiries or appointments.

### **Schedule Management:**

- Browse event schedules, sessions, and workshops.
- Bookmark or register for sessions of interest.
- Receive notifications or reminders for bookmarked sessions.

## **General System Features:**

### **Real-time Updates:**

- Ensure real-time updates for schedules, booth allocations, and any changes in event details.

### **Feedback and Support:**

- Provide a feedback mechanism for users to submit suggestions or report issues.

# **CHAPTER NO 3**

## **REQUIREMENTS**

## **SPECIFICATIONS**

## **INTRODUCTION**

The thirst for learning, upgrading technical skills and applying the concepts in real life environment at a fast pace is what the industry demands from IT professionals today. However busy work schedules, far-flung locations, unavailability of convenient time-slots pose as major barriers when it comes to applying the concepts into realism. And hence the need to look out for alternative means of implementation in the form of laddered approach.

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Keeping the above in mind and in tune with our constant endeavour to use Technology in our training model, we at Aptech have thought of revolutionizing the way our students learn and implement the concepts using tools themselves by providing a live and synchronous eProject learning environment!

## **HARDWARE REQUIREMENTS:**

- A minimum computer system that will help you access all the tools in the courses is a Pentium 166 or better.
  - 128 Megabytes of RAM or better
  - Windows 2000 Server (or higher if possible)

## **Software**

- Use software as per your requirement
- Windows OS /MongoDB/Express/React/Node.js/Notepad

# **CHAPTER NO 4**

# **ANALYSIS**

## **PROPOSED SYSTEM:**

In the proposed system, in this software once the timer is being arranged, it put up updates and uploads automatically and does not need anyone to do so. Also, it is easily available due to its speed and programming part and using it is quite an easy task and well as due to its speed the information which will be available by one or two clicks, will get available in few seconds only.

## **FEASIBILITY STUDY:**

The feasibility of the project is analysed in this phase and business proposal is put forth with a very general plan for the project and some cost estimates. During system analysis the feasibility study of the proposed system is to be carried out. This is to ensure that the proposed system is not a burden to the company. For feasibility analysis, some understanding of the major requirements for the system is essential. Three key considerations involved in the feasibility analysis are:

### **Economic Feasibility:**

This study is carried out to check the economic impact will have on the system will have on the organization. The amount of fund that the company can pour into the research and development of the system is limited. The expenditures must be justified. Thus, the developed system as well within the budget and this was achieved because most of the technologies used are freely available. Only the customized products have to be purchased.

### **Technical Feasibility:**

This study is carried out to check the technical feasibility, that is, the technical requirements of the system. Any system developed must not have a high demand on the available technical resources. This will lead to high demands being placed on the client. The developed system must have a modest requirement, as only minimal or null changes for the implementing this system.

### **Operational Feasibility:**

The aspect of study is to check the level of acceptance of the system by the user. This F includes the process of training the user to use the system efficiently. The user must not feel threatened by the system, instead must accept it as a necessity. The level of acceptance by the users solely depends on the methods that are employed to educate the user about the system and to make Online Post Office Management System him familiar with it.

## **LANGUAGE SPECIFICATION:**

### **MERN:**

A typical **MERN project** involves creating a backend API with Node.js and Express to handle requests and interact with MongoDB for data storage, while React manages the frontend, providing a seamless user experience.

This stack is widely used for building everything from simple CRUD apps to complex single-page applications.

React is a powerful frontend library used for building interactive user interfaces. Together, these technologies enable developers to create scalable, fast, and maintainable web applications using JavaScript throughout the entire stack.

### **MongoDb:**

MongoDB is a popular NoSQL database that stores data in flexible, JSON-like documents called BSON. Unlike traditional relational databases, MongoDB doesn't require a fixed schema, making it ideal for handling unstructured or evolving data. It's designed for high performance, scalability, and ease of development, allowing developers to quickly build and iterate applications. MongoDB supports powerful querying, indexing, and aggregation features, making it a preferred choice for modern web and mobile apps.

# **CHAPTER NO 5**

# **DESIGN**

# **System Design: Introduction To UML: UML Design:**

The Unified Modelling Language (UML) is a standard language for specifying, visualizing, constructing, and documenting the software system and its components. It is a graphical language, which provides a vocabulary and set of semantics and rules. The UML focuses on the conceptual and physical representation of the system. It captures the decisions and understandings about systems that must be constructed. It is used to understand, design, configure, maintain, and control information about the systems.

The UML is a language for:

- ❖ Visualizing ❖ Constructing
- ❖ Specifying ❖ Documenting

## **Visualizing:**

Through UML we see or visualize an existing system and ultimately, we visualize how the system is going to be after implementation. Unless we think, we cannot implement. UML helps to visualize, how the components of the system communicate and interact with each other.

## **Specifying:**

Specifying means building, models that are precise, unambiguous and complete UML addresses the specification of all the important analysis design, implementation decisions that must be made in developing and deploying a software system.

## **Constructing:**

UML models can be directly connected to a variety of programming language through mapping a model from UML to a programming language like JAVA or C++ or VB. Forward Engineering and Reverse Engineering is possible through UML.

# **Documenting**

The Deliverables of a project apart from coding are some Artifacts, which are critical in controlling, measuring and communicating about a system during its developing requirements, architecture, desire, source code, project plans, tests, prototypes releases, etc.

## **UML Approach:**

### **UML Diagram**

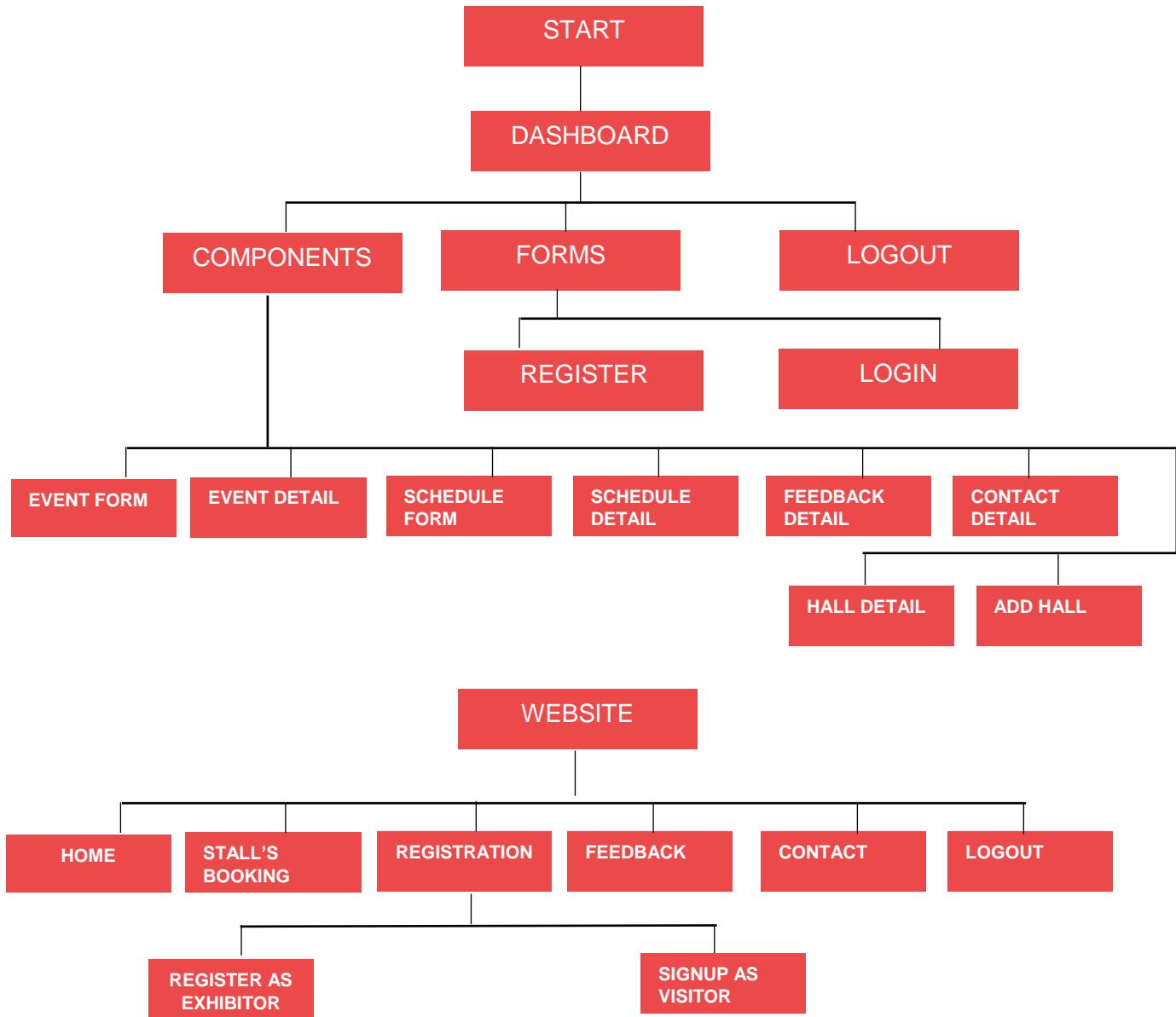
A diagram is the graphical presentation of a set of elements, most often rendered as a connected

graph of vertices and arcs. You draw diagram to visualize a system from different perspective, so a diagram is a projection into a system. For all but most trivial systems, diagram represents an elided view of the elements that make up a system. The same element may appear in all diagrams, only a few diagrams, or in no diagrams at all. In theory, a diagram may contain any combination of things and relationships. In practice, however, a small number of common combinations arise, which are consistent with the five most useful views that comprise the architecture of a software-intensive system. For this reason, the UML includes nine such diagrams:

- |                          |                        |
|--------------------------|------------------------|
| 1. Class diagram         | 6. State chart diagram |
| 2. Object diagram        | 7. Activity diagram    |
| 3. Use case diagram      | 8. Component diagram   |
| 4. Sequence diagram      | 9. Deployment diagram  |
| 5. Collaboration diagram |                        |

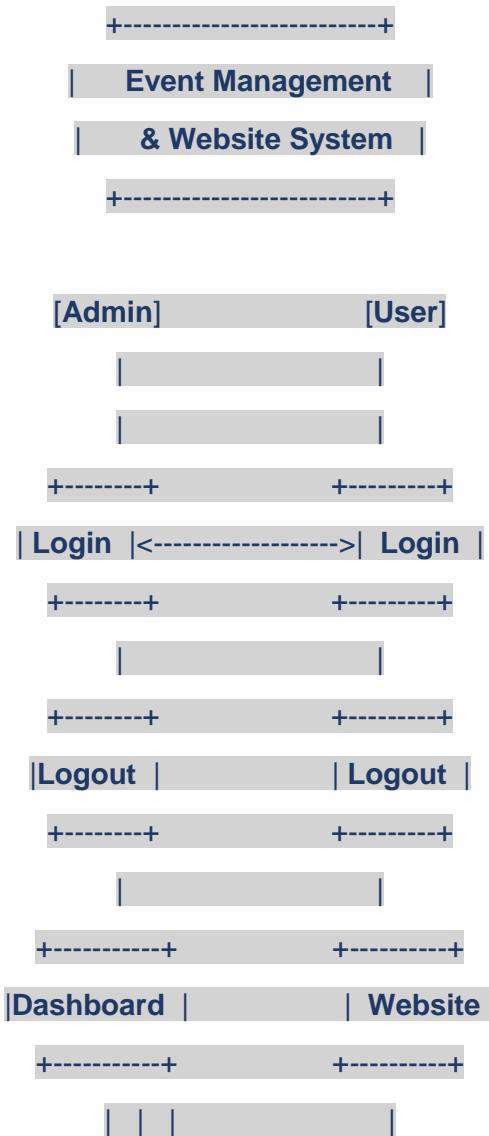
# Flow Chart:

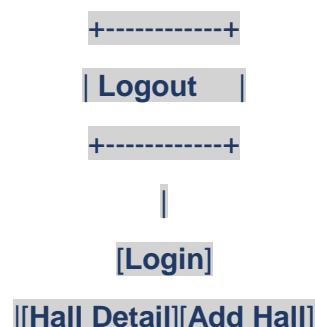
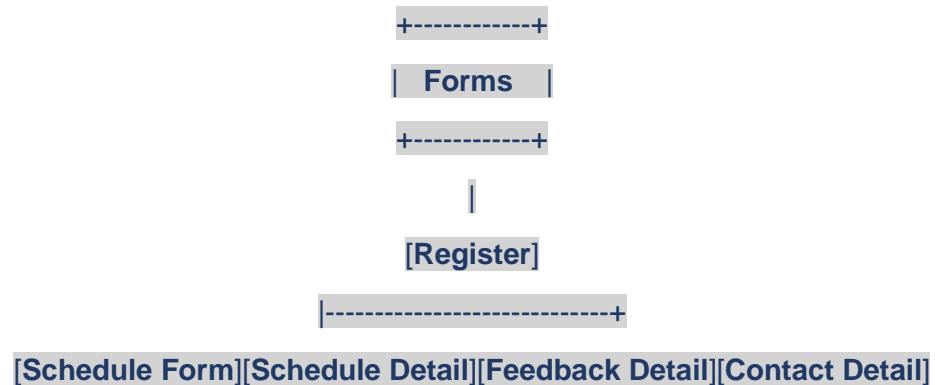
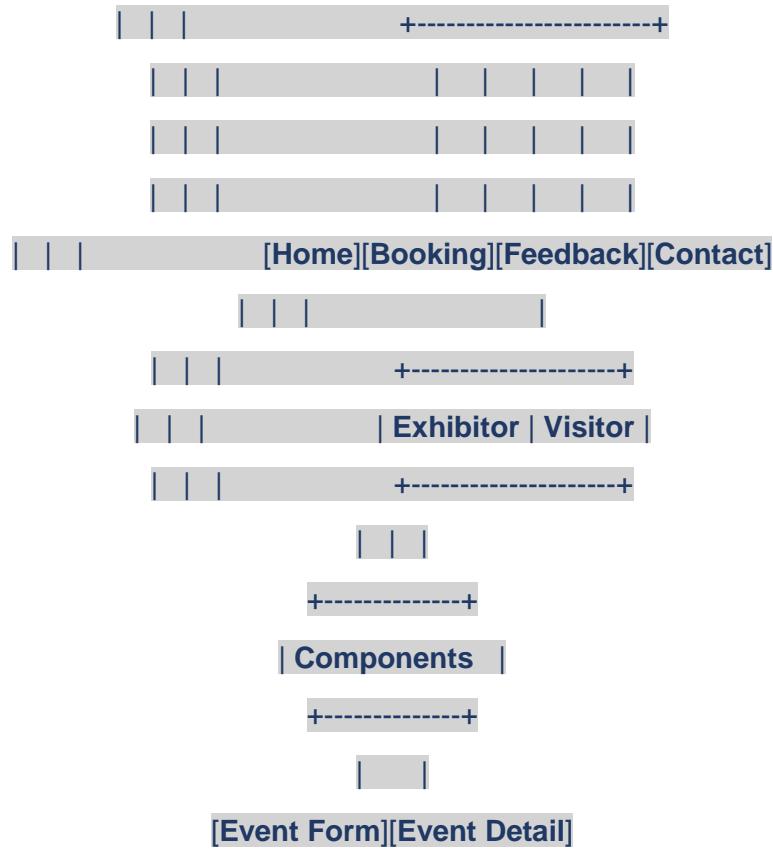
A flowchart is a type of diagram that represents a workflow or process. A flowchart can also be defined as a diagrammatic representation of an algorithm, a step-by-step approach to solving a task. The flowchart shows the steps as boxes of various kinds, and their order by connecting the boxes with arrows.



# USE CASE DIAGRAM:

A use case diagram in the Unified Modelling Language (UML) is a type of behavioural diagram defined by and created from a use-case analysis. Its purpose is to present a graphical overview of the functionality provided by a system in terms of actors, their goals (represented as use cases), and any dependencies between those use cases. Use case diagrams are formally included in two modelling languages defined by the OMG: the unified modelling language (UML) and the systems modelling language (sysML).

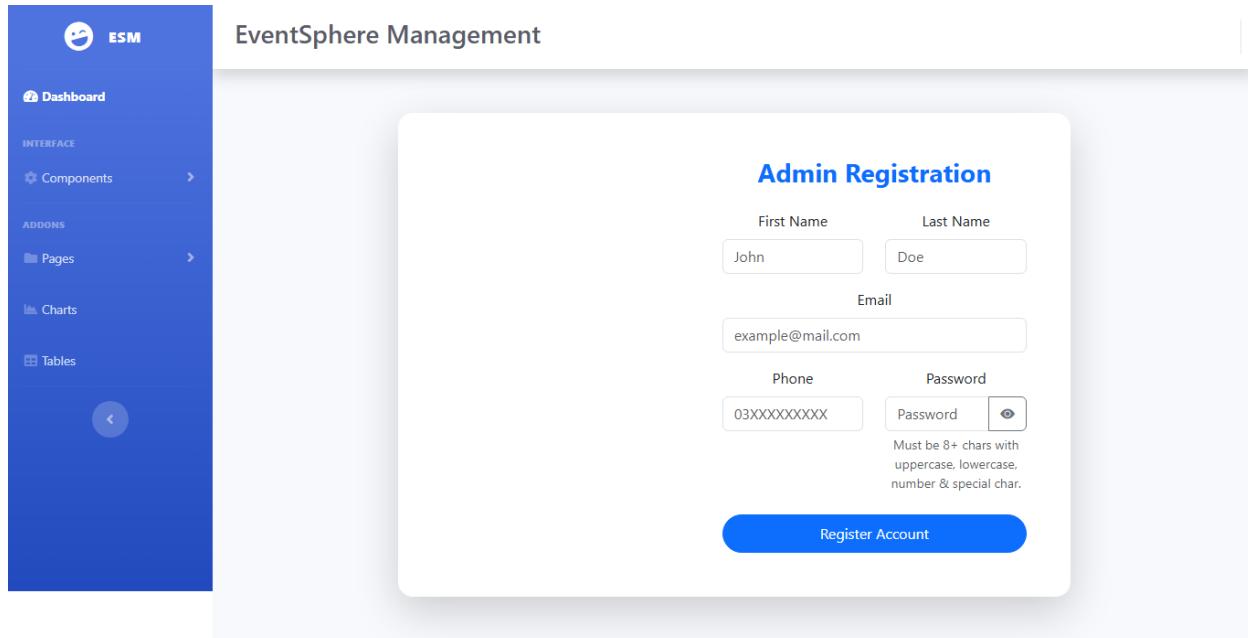




# **CHAPTER NO 6**

## **SCREEN SHOTS**

# Admin Registration



The image shows a screenshot of the EventSphere Management application interface. On the left is a blue sidebar menu with the ESM logo at the top. Below it are sections for 'INTERFACE' (Components), 'ADDONS' (Pages, Charts, Tables), and a back arrow icon. The main content area is titled 'EventSphere Management'. A central modal window is open, titled 'Admin Registration'. It contains fields for First Name (John), Last Name (Doe), Email (example@mail.com), Phone (03XXXXXXXX), and Password (a placeholder field). A note below the password field states: 'Must be 8+ chars with uppercase, lowercase, number & special char.' A blue 'Register Account' button is at the bottom of the modal. At the very bottom of the page, outside the modal, is the copyright notice 'Copyright © Your Website 2021'.



# Admin Login

Welcome Back!

Email Address

Password

Remember Me

**Login**

[Forgot Password?](#)

# Register As Exhibitor

## Register As Exhibitor

Join us as an exhibitor and showcase your innovations at the event.



Already have an account? [Login here](#)

# Login As Exhibitor

## Login as Exhibitor

Access your exhibitor dashboard by logging in below with your credentials.

Email address

Password

 (

**Login**

[Register Now as Exhibitor](#)

[Forgot Password?](#)

# SignUp As Visitor

---

## Register As Visitor

---

Please fill in your details to register for the best features.



Already have an account? [Login here](#)

# Login As Visitor

## Login as Visitor

Access your visitor dashboard by logging in with your registered email and password.

Email address

Enter your email

Password

Enter your password



Login

[Register now as visitor](#)

[Forgot Password?](#)

# Feedback

## We Value Your Feedback

Share your thoughts about our event management or anything else. We're listening!

 Address  
A108 Adam Street, New York, NY 535022

 Call Us  
+1 5589 55488 55

 Email Us  
info@example.com

Your Name

Your Email

Send us your feedback about our management or anything else...

# Feedback Details

EventSphere Management

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### Feedback Details

Feedback ID	Email	Feedback	Action
Ammar	ammar@gmail.com	ABCD	<button>Delete</button>
amar	ammar2@gmail.com	ABCDEFGHI	<button>Delete</button>
asd	ads@g.com	asdasd	<button>Delete</button>
abcd	abc	abc	<button>Delete</button>
abcd1	abc1	abc1	<button>Delete</button>
abcd	abc2	abc2	<button>Delete</button>

1 2



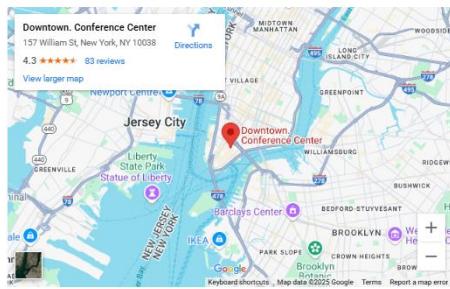
# Contact Us

## Contact

Necessitatibus eius consequatur ex aliquid fuga eum quidem sint consectetur velit

### Address

A108 Adam Street, New York, NY 535022



### Call Us

+1 5589 55488 55

### Email Us

info@example.com

Your Name

Your Email

Subject

Message

Submit

# Contact Details

EventSphere Management

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### Contact Us Details

<b>Ammar</b> Email: ammar@gmail.com Subject: ABCD Message: ABCD  <input type="button" value="Delete"/>	<b>abc</b> Email: abc Subject: abc Message: abc  <input type="button" value="Delete"/>
<b>abc1</b> Email: abc1 Subject: abc1 Message: abc1  <input type="button" value="Delete"/>	<b>abc2</b> Email: abc2 Subject: abc2 Message: abc2  <input type="button" value="Delete"/>
<b>abc3</b> Email: abc3 Subject: abc3 Message: abc3  <input type="button" value="Delete"/>	<b>abc4</b> Email: abc4 Subject: abc4 Message: abc4  <input type="button" value="Delete"/>

1 2



# Event's Form

**EventSphere Management**

**Create New Event**

Event Title      Event Theme  
 Enter event title       Enter event theme

Event Image  
 Choose File      No file chosen

Event Location  
 Enter event theme

Event Description  
 Enter event description

Start Date      End Date  
 mm/dd/yyyy       mm/dd/yyyy

**Submit Event**

Event Management

Create and manage events easily!

Copyright © Your Website 2021



# Event's Details

EventSphere Management

Copyright © Your Website 2021

### Event Details

abcd	owias
<b>Location:</b> Expo Center, Karachi	<b>Location:</b> karachi
<b>Theme:</b> abc	<b>Theme:</b> expo
<b>Start Date:</b>	<b>Start Date:</b> 2025-06-01T00:00:00.000Z
<b>End Date:</b>	<b>End Date:</b> 2025-06-02T00:00:00.000Z
<b>Description:</b> abc	<b>Description:</b> xyzzzzzzrdrdgdrgrdtufuhjyf8bjvyu7jk79g78

Update    Delete

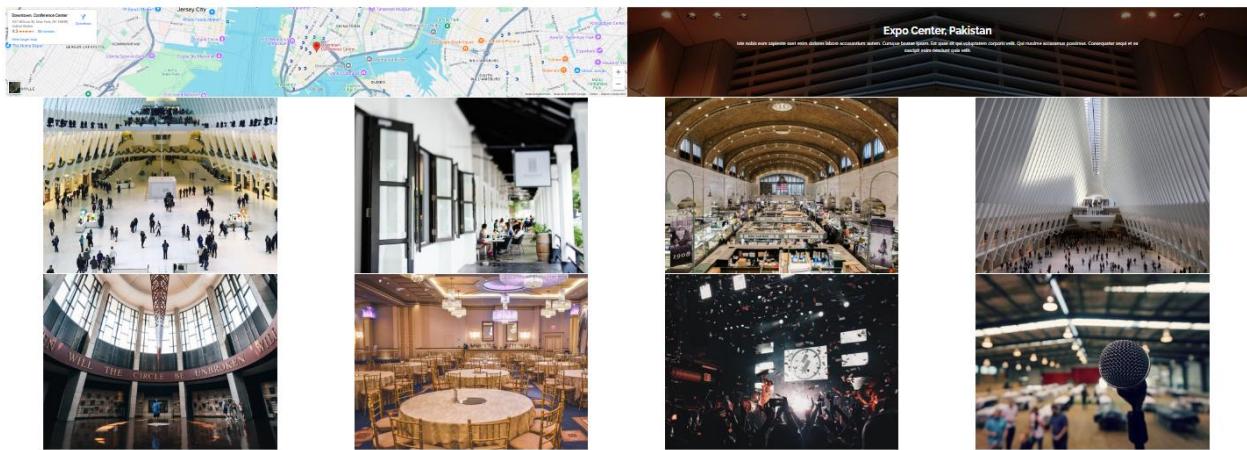
Update    Delete

1

# Event's Venue

Event Venue

Necenitibus also consequatur in eluct fugiunt admodum sita concorsive vell.



# Stall's Booking



## Book Your Stalls Or booth

|Available Booked Selected

Bronze

A	1	2	3	4	5	6	7	8	9	10	11	12	13	14
B	1	2	3	4	5	6	7	8	9	10	11	12	13	14

Silver

C	1	2	3	4	5	6	7	8	9	10	11	12	13	14
D	1	2	3	4	5	6	7	8	9	10	11	12	13	14
E	1	2	3	4	5	6	7	8	9	10	11	12	13	14
F	1	2	3	4	5	6	7	8	9	10	11	12	13	14

Gold

G	1	2	3	4	5	6	7	8	9	10	11	12	13	14
H	1	2	3	4	5	6	7	8	9	10	11	12	13	14

[Confirm Selection](#)

# Schedule Management

The screenshot displays the EventSphere Management application interface. On the left, there is a sidebar with a blue header containing a logo and the text "ESM". Below the header, the sidebar has sections for "Dashboard" and "INTERFACE". Under "INTERFACE", there is a dropdown menu for "Components" which is currently set to "CUSTOM COMPONENTS:". A list of components is shown, including Buttons, Cards, Events Form, Schedule Form, Event's Details, Schedule's Details, Feedback's Details, Contact's Details, and Rating's Details. The main content area has a white header with the text "EventSphere Management". Below the header, there is a large blue rectangular area with the text "Schedule Management" and "Create and manage schedule easily!". To the right of this blue area, there is a form titled "Create New Schedule". The form fields include "Speaker" (with the value "Owais alam"), "Topic" (with the value "PHP"), "Location" (with the value "Karachi"), "Start Date" (set to "06/01/2025"), and "End Date" (set to "06/07/2025"). At the bottom of the form is a blue "Submit Schedule" button.

# Schedule's Details

**EventSphere Management**

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### Schedule Details

	werfw	wef44w3dr
<b>Speaker:</b>	sdferw	werw3rd2
<b>Location:</b>	werfwe4rf	2wefr23
<b>Start Date:</b>	2025-06-01T00:00:00.000Z	2025-06-02T00:00:00.000Z
<b>End Date:</b>	2025-06-07T00:00:00.000Z	2025-06-06T00:00:00.000Z
<b>Action:</b>	<input checked="" type="button"/> Update <input type="button"/> Delete	<input checked="" type="button"/> Update <input type="button"/> Delete

	wedfwrq2	PHP
<b>Speaker:</b>	wefd4	Owais alam
<b>Location:</b>	3wefd	Karachi
<b>Start Date:</b>	2025-06-03T00:00:00.000Z	2025-06-01T00:00:00.000Z
<b>End Date:</b>	2025-06-05T00:00:00.000Z	2025-06-07T00:00:00.000Z
<b>Action:</b>	<input checked="" type="button"/> Update <input type="button"/> Delete	<input checked="" type="button"/> Update <input type="button"/> Delete

1



# Schedule's Show

## Event Schedule

Necessitatibus eius consequatur ex aliquid fuga eum quidem sint consectetur velit

Day 1

Day 2

Day 3

*Voluptatem nulla veniam soluta et corrupti consequatur neque eveniet officia. Eius necessitatibus voluptatem quis labore perspicatis quia.*

09:30 AM

### Registration

*Fugit voluptas iusto maiores temporibus autem numquam magnam.*

10:00 AM



### Keynote Brenden Legros

*Facere provident incident quos voluptas.*

11:00 AM



### Et voluptatem iusto dicta nobis. Hubert Hirthe

*Maiores dignissimos neque qui cum accusantium ut sit sint inventore.*

12:00 AM



### Explicabo et rerum quis et ut ea. Cole Emmerich

*Veniam accusantium laborum nihil eos eaque accusantium aspernatur.*

02:00 PM



### Qui non qui vel amet culpa sequi. Jack Christiansen

*Nam ex distinctio voluptatem doloremque suscipit iusto.*

03:00 PM



### Quos ratione neque expedita asperiores. Alejandrin Littel

*Eligendi quo eveniet est nobis et ad temporibus odio quo.*

04:00 PM



### Quo qui praesentium nesciunt Willow Trantow

*Voluptatem et alias dolorum est aut sit enim neque veritatis.*

# Rate Us

Rate Our Event

X

Your Email:



Submit Rating

# Chapter No 7

## TASK SHEET

S#	Task	Team Members Names	Status
1	<b>Analysis</b>	AMMAR IRFAN KOTWAL, QWAIS ALAM	✓
2	<b>Design</b>	MUHAMMAD ADEEL KHAN, MUHAMMAD HAMMAR ALI	✓
3	<b>Development</b>	AMMAR IRFAN KOTWAL, MUHAMMAD SUBHAN RAEES, MUHAMMAD ADEEL KHAN, QWAIS ALAM, MUHAMMAD HAMMAD ALI	✓
4	<b>Documentation</b>	MUHAMMAD SUBHAN RAEES, SHAHMEER KHAN	✓
5	<b>Finalization</b>	AMMAR IRFAN KOTWAL, MUHAMMAD HAMMAD ALI, QWAIS ALAM	✓

# Chapter No 8

## SUBMISSION CHECKLIST

S#	List Of Items	Remarks	Comments
1	<b>Do All Pages Link Togather</b>	Yes	✓
2	<b>Authorization</b>	Yes	✓
3	<b>Logics &amp; Api</b>	Yes	✓
4	<b>Database Connection</b>	Yes	✓
5	<b>Feedback Form Included</b>	Yes	✓
6	<b>Project Zip File</b>	Yes	✓

# **Chapter No 9**

## **CONCLUSION**

The MERN-EventSphere Management project successfully demonstrates the capabilities of theMERN (MongoDB, Express.js, React, Node.js) stack in building a dynamic and responsive event management system. By integrating user-friendly interfaces with robust backend functionality, the application streamlines event creation, registration, and administration. This project not only enhances the user experience through efficient event handling but also showcases scalable and maintainable full-stack development practices. It serves as a practical solution for modern event management needs and lays a solid foundation for future enhancements.

