# Eventify - Event Scheduler Documentation

## Overview

**Eventify** is a comprehensive Event Manager Application developed using the **MERN stack**. The application includes robust features such as user authentication, role-based access control, CRUD operations, and dynamic data visualization with pagination, data tables, and modern theming. The system supports secure JWT-based authentication, comprehensive data validation, and an intuitive user interface (UI).

Eventify allows:

* **Users** to create and join approved events, as well as manage their profiles.
* **Administrators** to manage events, users, and monitor system activities.

## Core User Roles

1. **Regular Users (Event Participants)**
   * Register for and participate in events
   * Manage personal profiles and event-related activities
2. **Administrators (System Managers)**
   * Oversee all events and user activities
   * Manage user accounts and system configurations
   * Access comprehensive reports and analytics

## Application Structure

### 1. Landing Page (Public Access)

* **Modern Hero Section:** Highlights upcoming featured events.
* **Quick Statistics:** Displays total events, registered users, and successful gatherings.
* **Featured Events:** Carousel or grid layout showcasing highlighted events.
* **Call-to-Action (CTA):** Registration and login prompts for new and returning users.
* **About Section:** Provides an overview of the platform’s purpose and features.
* **Footer:** Contains essential links, contact information, and social media icons.

### 2. Authentication Pages

* **Login Page:** Secure email/password-based login.
* **Registration Page:** User registration form with necessary details.
* **Forgot Password:** Password recovery functionality via email.
* **Email Verification:** Secure verification process for new registrations.

## Admin Dashboard and Functionalities

### 1. Admin Dashboard

* **Overview Metrics:** Displays total users, total events, and active events.
* **Activity Feed:** Tracks recent activities within the system.
* **Quick Actions:** Shortcuts for frequently used admin functionalities.
* **System Health Metrics:** Provides system performance and health indicators.

### 2. User Management

* **User List View:** Displays all registered users with advanced filtering options.
* **User Details:** View user profiles, including names, emails, and account statuses.
* **Account Control:** Activate or deactivate user accounts.
* **Search Functionality:** Advanced search options for user accounts.
* **Activity Logs:** Detailed logs of user actions for auditing purposes.

### 3. Event Management

* **Event Listings:** Displays all events categorized as upcoming, ongoing, or past.
* **Approval System:** Approve or reject event submissions.
* **Event Details:** Comprehensive view of event information.
* **Featured Events:** Ability to promote events on the landing page.
* **Category Management:** Manage event categories for better organization.

### 4. Reports and Analytics

* **User Growth Analytics:** Tracks growth trends in user registrations.
* **Event Participation:** Insights into user engagement with events.
* **Peak Usage Times:** Identifies high-traffic periods.
* **Popular Categories:** Analysis of the most engaged event categories.
* **Revenue Reports:** (If applicable) Detailed financial reporting.

## User Dashboard and Functionalities

### 1. User Dashboard

* **Event Calendar:** Displays upcoming events.
* **Registered Events:** List of events the user is registered for.
* **Activity Feed:** Overview of recent activities.
* **Quick Actions:** Shortcuts for frequent user operations.

### 2. Event Discovery

* **Search Functionality:** Search events based on keywords.
* **Category Browsing:** Explore events categorized by type.
* **Featured Events:** Section highlighting popular or recommended events.
* **Bookmarked Events:** Option to save events for future reference.

### 3. Event Details

* **Event Information:** Comprehensive details about each event.
* **Registration Option:** Register or book tickets for events.

### 4. My Events

* **Registered Events:** List of events the user is currently registered for.
* **Event History:** Record of past event participation.
* **Event Tickets:** Access and manage event tickets.
* **Cancellation:** Option to cancel event registrations.

### 5. Profile Management

* **Personal Information:** Edit and update personal details.
* **Password Management:** Change or reset passwords securely.

## Security and Best Practices

* **JWT Authentication:** Secure token-based authentication for session management.
* **Data Validation:** Robust validation both on the client and server sides.
* **Role-Based Access Control:** Restricts access based on user roles.
* **Responsive UI:** Optimized for both desktop and mobile devices.
* **Scalable Architecture:** Built with scalability and performance in mind.

## Conclusion

Eventify provides an efficient, secure, and user-friendly platform for managing events. With a focus on both user and administrative needs, the application offers extensive features for event discovery, management, and analytics, ensuring a seamless experience for all stakeholders.