ELEVATE LABS

Internship Project - A Report On "Event Management & RSVP System"

Introduction-

The Event Management & RSVP System based application allows users to register, log in, create events, view upcoming events, and RSVP to events they wish to attend. It is designed to streamline the process of organizing events and managing attendee responses. The system ensures a smooth experience for both event organizers and participants.

Abstract-

This project aims to provide a simple yet effective platform for event management and RSVP tracking. By leveraging modern web technologies, the system enables secure user authentication, event creation, and real-time RSVP management. The backend is built with Node.js, Express, and MongoDB, while the frontend uses React for a responsive and user-friendly interface.

Tools Used-

Node.js – Backend Runtime Environment

Express.js- Backend web framework

MongoDB - Database for storing users and events. Mongoose is a ODM for MongoDB

React-Frontend library for building UI

Axios - HTTP client for API requests

Bcryptjs- Password hashing for security

Postman- API testing

Visual Studio Code- Coding platform

Git-Version control and deployment

Steps Involved In Building The Project-

1.Project Setup

- Initialized Node.js and React applications in separate folders (server and client).
- Installed necessary dependencies for both backend and frontend.

2.Backend Development

- Set up Express server with MongoDB via Mongoose.
- Created Mongoose models for User and Event.
- Implemented auth routes (register/login) with JWT and password hashing.
- Built event routes for creating, listing, and RSVPing events.
- Enabled CORS and JSON middleware.

3.Frontend Development

- Built React components for auth, event creation, and listing.
- Handled navigation and protected routes based on auth state.
- Used Axios for API communication and localStorage for JWT-based sessions.
- · Added real-time feedback and error handling.

4.Testing & Debugging

- Tested APIs with Postman.
- Fixed auth, validation, and integration issues.
- Handled edge cases to ensure smooth UX.

Conclusion:

The Event Management RSVP System successfully demonstrates the development of a full-stack web application with user authentication, event management, and RSVP functionality.