

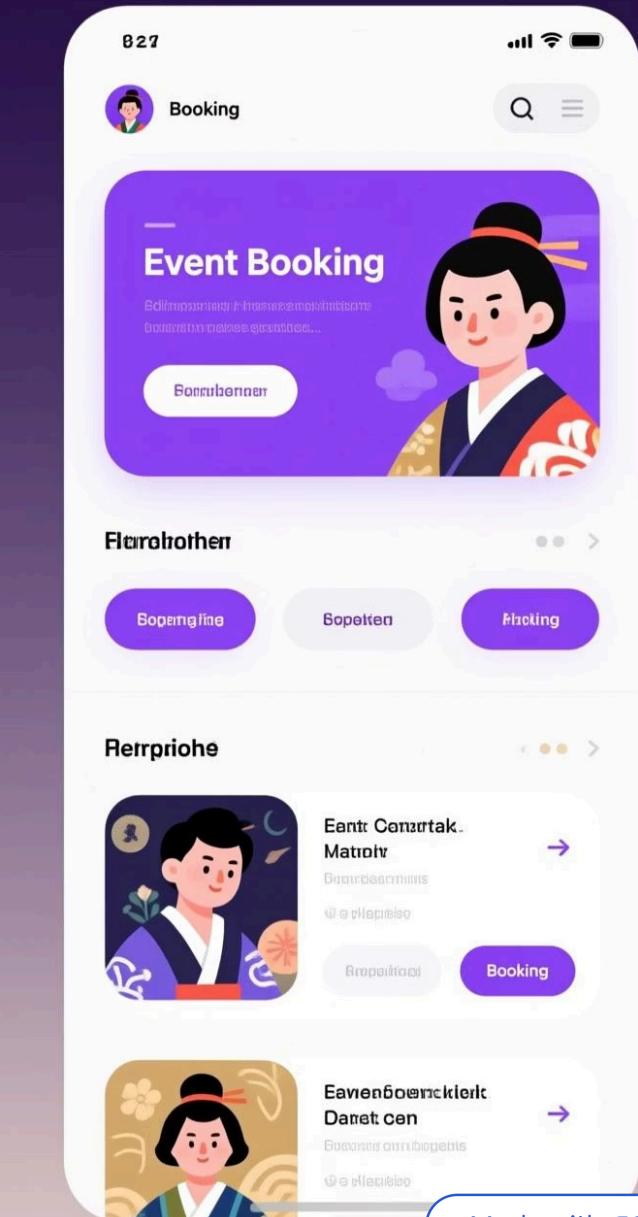
# Online Event Booking Website

A modern full-stack web application transforming how people discover and book events

 FULL STACK PROJECT

 ACADEMIC PORTFOLIO

Prepared by: Tejasri Ramyapriya Makkina



# The Challenge We're Solving

## User Pain Points

- Manual booking processes waste valuable time
- Difficulty finding comprehensive event details
- No centralized system to track registrations
- Risk of duplicate bookings causing confusion

## Organizer Challenges

- Managing events across spreadsheets and emails
- Limited visibility into attendee data
- Inefficient booking tracking systems
- Time-consuming manual processes

Existing event management solutions are often expensive, overly complex, or difficult to navigate—leaving a clear gap in the market for accessible alternatives.



# Our Solution: Simplicity Meets Functionality



## Browse & Book

Users discover and register for events seamlessly through an intuitive interface



## Secure Access

Role-based authentication ensures data privacy and appropriate permissions



## Admin Control

Event organizers manage everything from a centralized dashboard



## Zero Cost

Built entirely with free tools, making it accessible for any organization

# What We Set Out to Achieve

01

## User-Friendly Design

Create an intuitive event booking system accessible to all technical skill levels

02

## Secure Authentication

Implement robust login systems with proper authorization controls

03

## Booking Intelligence

Prevent duplicate registrations through smart validation logic

04

## Comprehensive Dashboards

Provide clear visibility for both attendees and administrators

05

## Public Deployment

Deploy the platform for access from any device, anywhere

06

## Hands-On Learning

Gain practical full-stack development experience with modern technologies



160  
140  
120

Time Period	Market Value
Q1	139
Q2	132
Q3	158
Q4	145
Q1 (Projected)	165

# Market Opportunity & Project Scope

## Market Research Insights

The event management software market is experiencing rapid growth, driven by the shift toward digital experiences. Platforms like BookMyShow and Eventbrite demonstrate strong market validation, yet smaller organizers still lack affordable, easy-to-use alternatives.

This gap represents a significant opportunity for cost-effective solutions tailored to educational institutions and community organizations.

## Target Applications

- College festivals and academic conferences
- Professional workshops and training sessions
- Industry seminars and networking events
- Community gatherings and local meetups

- Future expansion possibilities include integrated payment gateways, QR code ticketing systems, automated email notifications, and AI-powered event recommendations.

# System Features Overview



## User Experience

- Streamlined signup and login process
- Intuitive event browsing interface
- One-click booking functionality
- Personal dashboard to view all registrations



## Admin Capabilities

- Create and publish new events instantly
- Edit event details and descriptions
- Remove outdated or cancelled events
- Upload and manage event imagery
- Monitor booking analytics and metrics



## Core Platform Features

- Fully responsive design for all devices
- Enterprise-grade security protocols
- Real-time database synchronization
- Duplicate booking prevention system

# Technology Stack



## Frontend Development

**React.js** powers the dynamic user interface with component-based architecture, while **Tailwind CSS** provides utility-first styling for rapid, responsive design implementation.



## Backend & Database

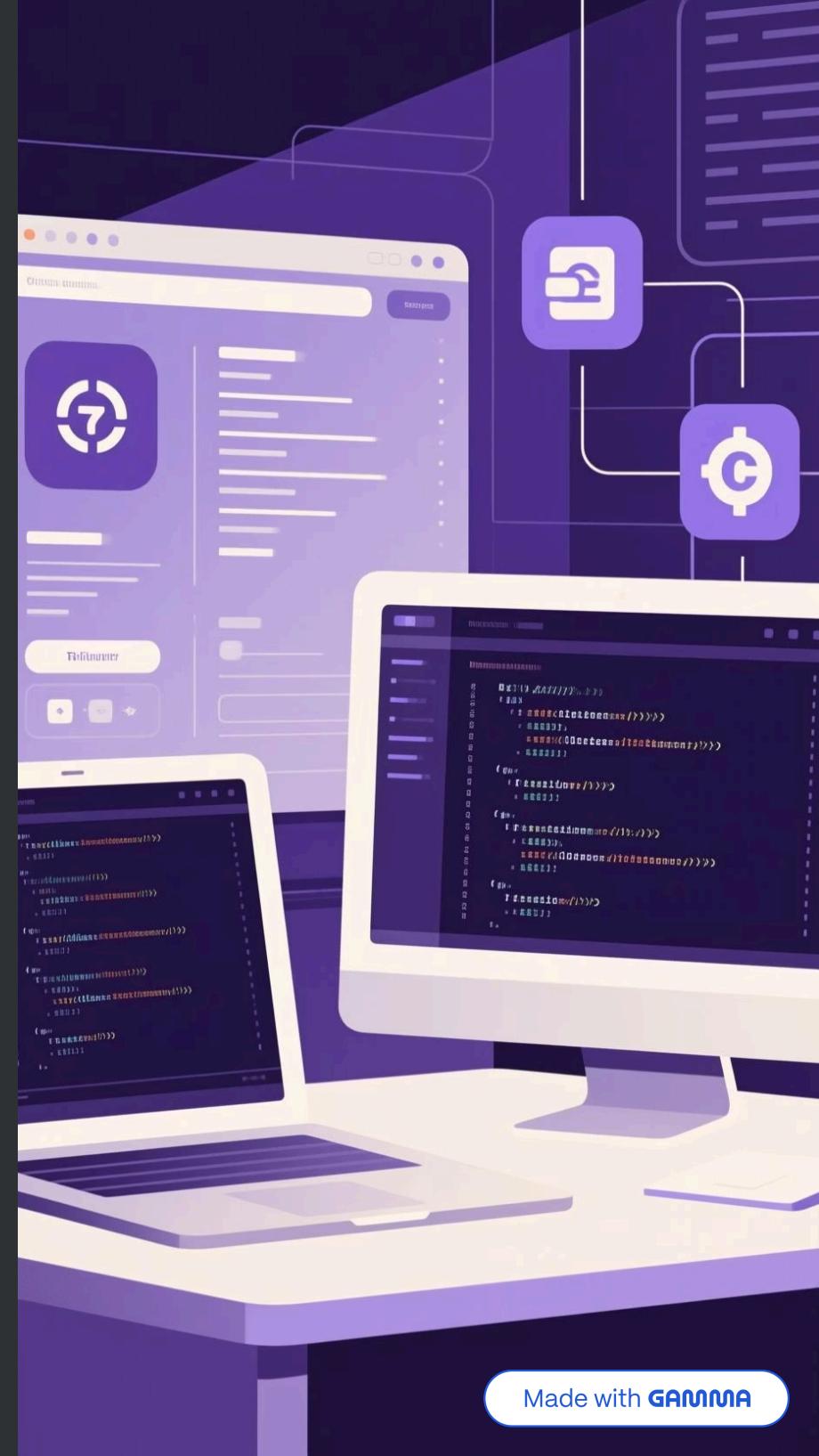
**Supabase** serves as the complete backend solution, offering PostgreSQL database management, built-in authentication services, and cloud storage capabilities—all in one platform.



## Deployment & Tools

**Vercel** hosts the application on their free tier with automatic deployments. Development workflow utilizes **GitHub** for version control and **VS Code** as the primary IDE.

- This technology stack was carefully selected to balance powerful functionality with zero-cost deployment, making it ideal for academic projects and small organizations.



# How the System Works



## React Frontend

User interface handles all interactions and API communications

## Supabase Backend

Manages authentication, database operations, and file storage

## PostgreSQL Database

Stores event data, user information, and booking records

## Real-time Response

Updates delivered instantly back to the user interface

The application follows a modern three-tier architecture pattern: the presentation layer (React) communicates with the application layer (Supabase API), which interfaces with the data layer (PostgreSQL). **Vercel's edge network** ensures fast global content delivery, while Supabase handles all backend complexity including authentication tokens, database queries, and file uploads.



# Strengths & Current Limitations

## Key Advantages

- **100% Free Infrastructure**

No hosting or database costs using free-tier services

- **User-Friendly Interface**

Intuitive design requires minimal training

- **Scalable Architecture**

Can easily grow with increasing user demand

- **Secure by Design**

Industry-standard authentication protocols

- **Real-time Updates**

Instant synchronization across all devices

## Known Limitations

- No Payment Integration**

Currently limited to free events without ticket sales functionality

- Storage Constraints**

Free tier provides limited space for event images and media

- Internet Dependency**

Requires stable connection for all operations—no offline mode

# Project Outcomes & Future Vision

## Successfully Delivered

Built a production-ready full-stack event booking platform meeting all project objectives and technical requirements

## Skills Developed

Gained hands-on experience with modern web development, database design, authentication systems, and cloud deployment

## Real-world Impact

Created a practical solution addressing genuine pain points in event management for educational and community organizations

## Future Enhancement Roadmap



### Payment Integration

Add Stripe or PayPal for paid event ticketing



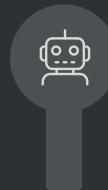
### Email Automation

Automated booking confirmations and reminders



### QR Code Tickets

Digital tickets with scannable entry codes



### AI Recommendations

Personalized event suggestions using machine learning



### Mobile Application

Native iOS and Android apps for enhanced accessibility