Final Project Planning Document

# **Project Title: Local Event Discovery Web App**

## **Project Overview and Justification**

Our project is a Local Event Discovery Web Application that helps users find events based on their location and interests. Users can search for events by category, view event details, and optionally RSVP or get ticket links. The app integrates with the Ticketmaster Discovery API, allowing access to real-time event data.

**Why this project?**  
 - Practical real-world use case  
 - Appropriate complexity for a month-long build  
 - Combines multiple core development skills: authentication, API usage, deployment  
 - Clean separation of front-end/back-end responsibilities for teamwork

## **Roles and Responsibilities**

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| **Team Member** | **Responsibilities** |
| Deepika Chinnathambi | - Implement login/registration system  - Integrate Ticketmaster API for event search  - Design landing page  - Map integration using Google Maps API |
| Liam Wilkenson | - Database schema and backend models  - Event search results display page  - RSVP functionality and storage  - Docker setup and AWS EC2 deployment |

**Collaboration:** Both members will coordinate UI design, testing, and documentation.

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## **Project Timeline and Milestones**

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| **Week** | **Milestone** |
| Week 1 | Set up project repo, build Flask skeleton, implement login/registration |
| Week 2 | Ticketmaster API integration, database setup, search form |
| Week 3 | Event results page, RSVP system, map integration |
| Week 4 | Final testing, Docker containerization, EC2 deployment, presentation prep |

## **Technologies and Justification**

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| **Component** | **Technology** | **Reason** |
| Backend | Flask (Python) | Lightweight and familiar for both team members |
| Frontend | HTML, CSS, Bootstrap | Easy to style, mobile-friendly |
| Database | SQLite | Simple and fast setup for MVP |
| External API | Ticketmaster Discovery API | Rich event data with generous free tier |
| Deployment | Docker + AWS EC2 | Industry-standard stack for production-like deployment |
| Version Control | Git + GitHub | Team collaboration and submission tracking |