



High Level Design Document

Introduction

This High Level Design (HLD) document outlines the architecture and core components for **Evently - Event Listing Portal**. Evently is a web-based portal enabling users to browse and search local events, with filtering by date, category, and location. The design focuses on clarity, modularity, and ease of implementation using modern frontend technologies.

System Architecture Overview

Architecture Summary:

Evently is a single-page application (SPA) built with React, utilizing a modular component structure. The frontend interacts with a mock or static data source for event listings.

| Module/Component | Role/Responsibility |
|------------------------|---|
| UI Layer | Renders pages, handles user interactions |
| Event List Component | Displays event listings with applied filters |
| Filter Component | Provides UI for filtering by date, category, location |
| Event Detail Component | Shows detailed info for a selected event |
| Data Layer | Fetches and manages event data (static/mock) |
| Routing | Manages navigation between main views |

Component Interactions

| Interaction Sequence |
|--|
| 1. User accesses portal; UI Layer loads main view |
| 2. Filter Component captures user filter selections |
| 3. Filtered criteria passed to Data Layer |
| 4. Data Layer retrieves and filters event data |
| 5. Event List Component displays filtered events |
| 6. User selects event; Event Detail Component displays event details |

Data Flow Overview

| Source | Data Flow Description | Destination |
|------------|--|------------------|
| User Input | Filter criteria (date, category, location) | Filter Component |



| | | |
|------------------|---------------------|------------------------|
| Filter Component | Filtered parameters | Data Layer |
| Data Layer | Filtered event list | Event List Component |
| Event List | Selected event ID | Event Detail Component |
| Data Layer | Event details | Event Detail Component |

Technology Stack

| Layer/Function | Technology/Framework |
|--------------------|--------------------------|
| Frontend Framework | React |
| Styling | Tailwind CSS, CSS |
| Language | JavaScript, HTML |
| Routing | React Router (if needed) |
| Data Source | Static JSON/mock data |

Scalability & Reliability

- **Scalability:** Modular React components enable easy extension (e.g., new filters, pagination). Static data can be replaced with API integration for future growth.
- **Reliability:** Stateless frontend ensures high reliability; minimal dependencies reduce failure points.
- **Security:** No sensitive data handled; standard frontend security practices apply.

End of Document