ARCHITECTURE

ARCH1: Chosen Architecture

Client-Server architecture with an N-tier design

ARCH2: Architecture Diagram

Presentation Layer (User Interface - UI) (Web/Mobile)

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Business Logic Layer (Kivy + Backend Logic)

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Data Layer (SQLite Database)

ARCH3: Layer Responsibilities

Presentation Layer

- Built using Kivy for cross-platform compatibility

- Responsible for rendering the UI on Windows, Mac, Linux, Android, and iOS

- Handles user input, navigation, and simple validations

- Communicates with the backend to send and receive data

Business Logic Layer

- Coordinates between the UI and database

- Implements core functionalities like user authentication, event management, and profile updates

- Uses Python to manage API requests/responses and enforce rules

- Integrates with the SQLite3 API

Data Layer

- Uses SQLite3 for lightweight, embedded database storage

- Manages user data, events, reminders, and settings locally

- Ensures persistent offline storage for mobile and desktop compatibility