Aung Paing Soe, Kyaw Soe Han, William Ngo, Trong Le

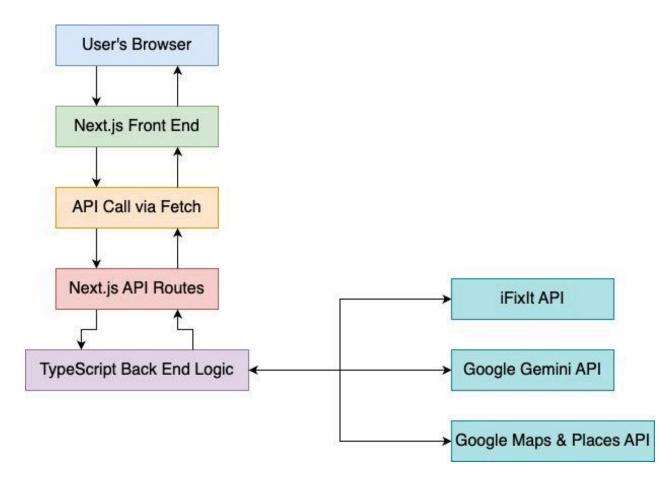
Professor Abucejo

CS 160, Section 01

15 May 2025

Final Project: Architectural Diagrams

Block Architecture



Layer Diagram



User Interface Components (React, Next.js) Client-Side Operations (TypeScript Functions) App Styling (CSS)

Application Layer

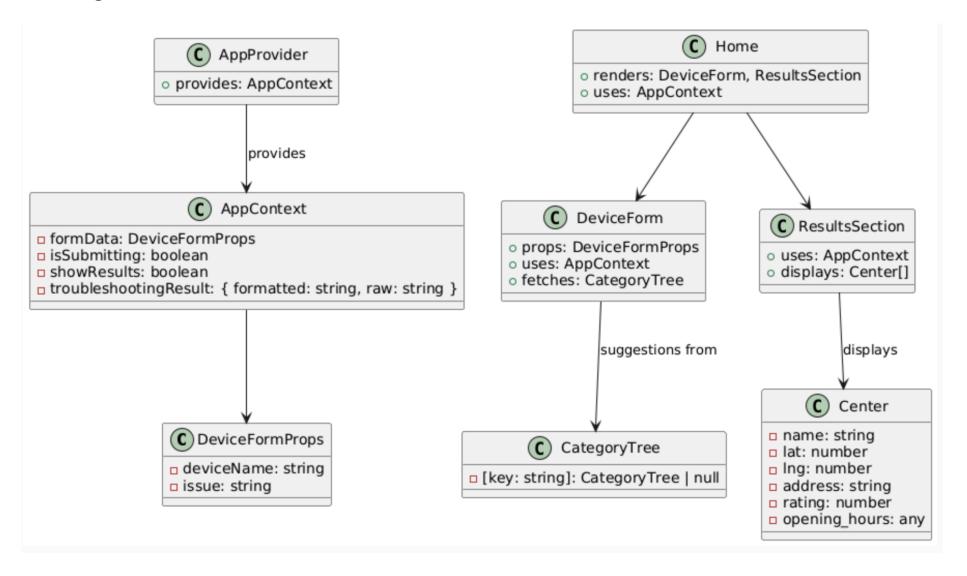
Utility Functions (TypeScript) Context & State Management (React App Context) Data Validation Service (Suggest devices for selection) Interfaces (TypeScript)

Troubleshooting Guide Service (Generate guide based on user input) Repair Guide Service (Redirect using Search Query) Repair Shop & Recycling Center Locator Services (Handle Search Criterias)

Data Layer

External API Calls
(Google Maps/Places API, iFixIt API, Google Gemini API)

Class Diagram



Sequence Diagram

