

# RealEase: Comprehensive Real Estate Insights Platform

Milestone 1 Briefing

By Donovan Murphy, Jonathan  
Bailey, and Enrique Obregon



# New Logo and Visual Identity

RealEase is now equipped with a refined **color scheme** and a professional **logo**.

Advisor feedback: Convert the logo to an **SVG** format for optimal web performance.

# Milestone One Task Matrix

Task	Completion %	Donovan	Jonathan	Enrique	To do
Investigate tools	85%	50%	20%	30%	Investigate javascript functions and card layout on the home screen.
Hello World demos	75%	20%	10%	60%	Improve on early stage demo, increase the size, improve layout, and figure out what we want to cache vs call.
Requirement Document	100%	20%	60%	20%	Done, just make sure to go back and update if we incur any roadblocks.
Design Document	100%	80%	20%	20%	Done, just need to build on wireframes.
Test Plan	100%	20%	20%	60%	As features progress, add more test cases.
Narrow Down List of API's	60%	40%	10%	10%	Done, we have our set list of API's and have begun testing them.
Front End Layout, logo, and color scheme	90%	70%	15%	15%	Logo is complete, but continue to research other options for accent color.

# Task 1: Software Stack Selection



The team finalized the **MERN stack** (MongoDB, Express, React, Node.js) for the project due to its scalability, flexibility, and efficiency in handling real-time data.



The decision was backed by our advisor and aligns well with the project's data-heavy requirements.

# Task 2: Narrowing API List

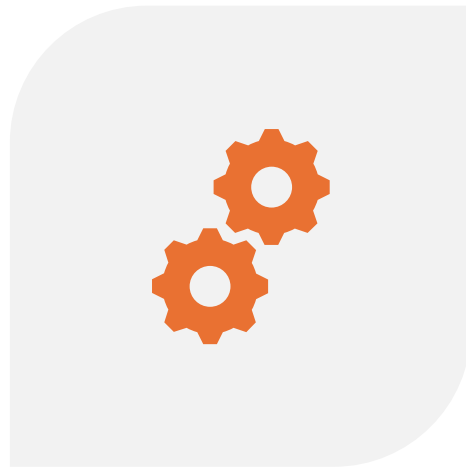


After reviewing several real estate and neighborhood data APIs, we chose to focus on **Realty in US** for our demo.

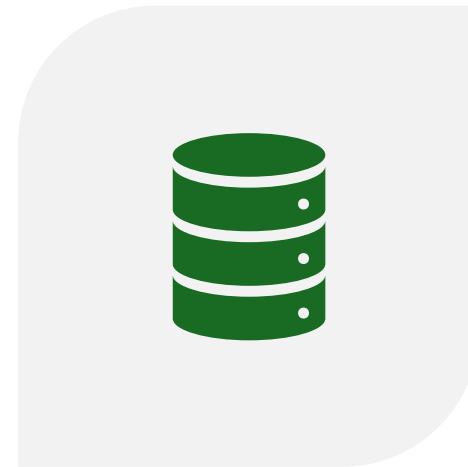


We also tested other APIs, such as **Crime Data** and **SchoolDigger**, to ensure they align with future features like the **Neighborhood Insights Dashboard**.

# Task 3: API Integration & Hello World Demo



THE TEAM SUCCESSFULLY RAN A **HELLO WORLD DEMO**  
BY INTEGRATING THE **REALTY IN US** API.

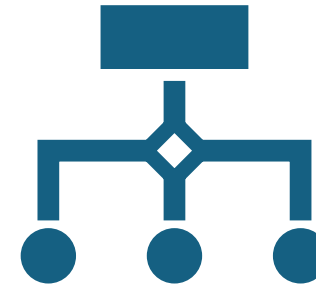


WE ENCOUNTERED SOME TECHNICAL CHALLENGES  
RELATED TO API KEY HANDLING AND DATA FORMATTING,  
BUT THESE WERE RESOLVED WITH THE ADVISOR'S  
GUIDANCE.

# Task 4: Document Completion



**Requirements, Design, and Test Documents** were completed after several iterations and refinements based on faculty advisor feedback.



Focus was placed on ensuring detailed, modular descriptions of the platform's core features and how data flows through the system.

# Milestone Two Plan

Task	Donovan	Jonathan	Enrique
<b>1. Continue to develop DB schema, caching, and investigate scheduled API calls</b>	implement/test 40%	Research 20%	Demo 40%
<b>2. Continue Planning and begin development of the front end website and how we want to query and display results.</b>	Design 30%	Design 30%	Design 40%
<b>3. Begin looking into 3 features and plan integration with the data set.</b>	Implementation and test 20%	Research and early testing 50%	Test 30%
<b>4. Refining API List and Continued Testing</b>	Refine and test 70%		Test and Demo 30%



# Task 1: Database Schema, Caching, and Scheduled API Calls

The team will finalize the MongoDB schema, ensuring it handles property, neighborhood, and user data effectively.

We'll investigate **caching mechanisms** to optimize frequently accessed data and explore **scheduled API calls** to keep the platform updated with the latest data.

# Task 2: Front-End Development



Continued development of the **front-end** in React, focusing on displaying results from user searches, including **Neighborhood Insights**, property listings, and ROI calculations.



We will also implement **responsive design** for improved user experience on different devices.

# Task 3: Feature Integration



Begin integrating data from the APIs into key features like the **Neighborhood Insights Dashboard**, **Home Comparison Tool**, and **ROI Calculator**.



Plan how data will be displayed and queried for each feature to ensure seamless functionality.

## Task 4: Testing and Refining API Integrations

We will continue testing the APIs, focusing on error handling and ensuring smooth data retrieval.

The team will refine fallback strategies for instances where APIs return incomplete or slow data.

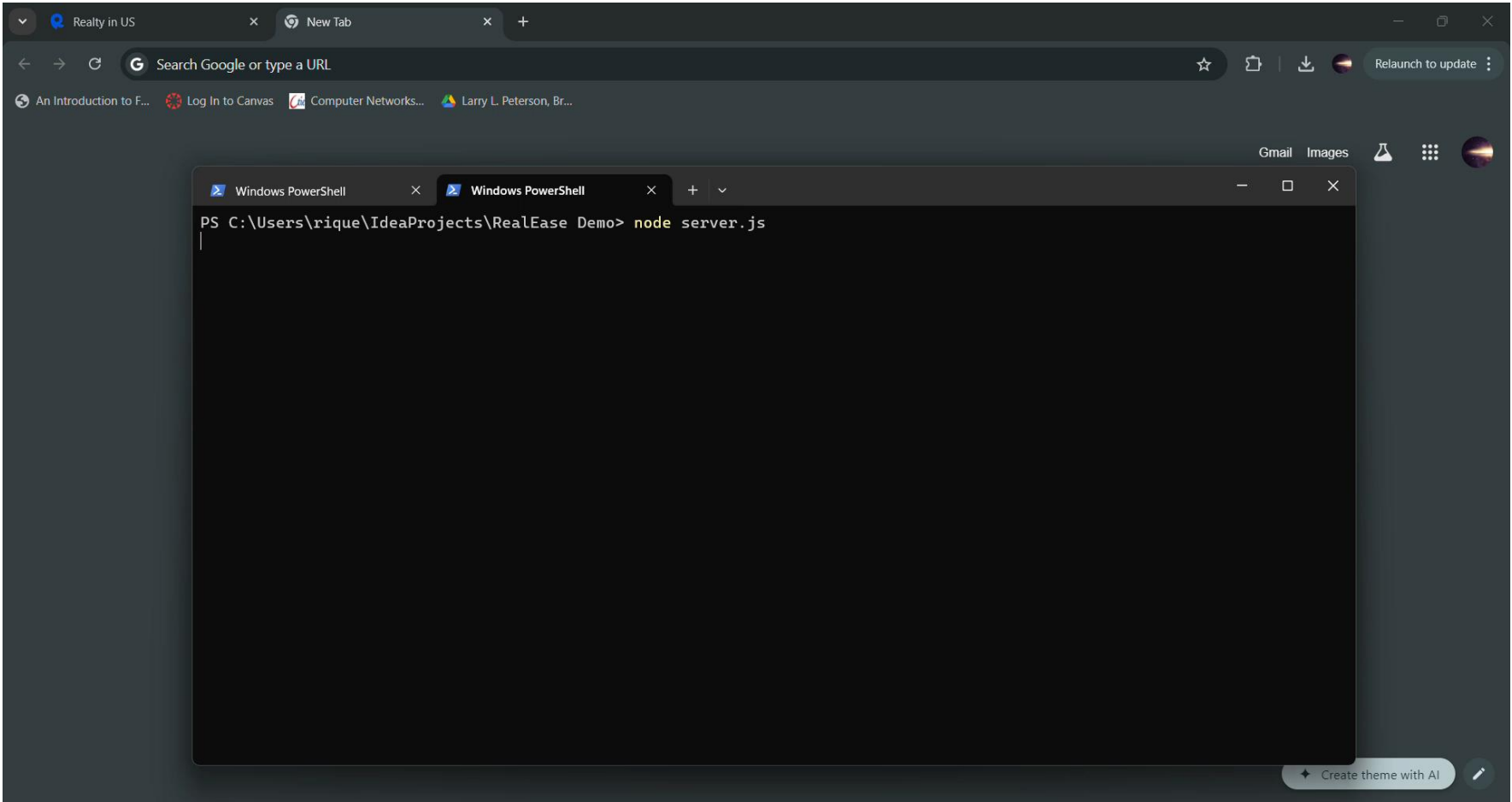
# Faculty Advisor Feedback

Advisor was pleased with the **color scheme** and provided guidance on the **logo** design, recommending we use **SVG** format for scalability.

**Hello World demo** was completed following specific suggestions on API integration.

Advisor emphasized the importance of detailing how **data is stored** and **cached** for each feature, and how users will **navigate** the platform.

# Hello World Demo



Questions?

