

RealEase: Comprehensive Real Estate Insights Platform

Milestone 2 Overview

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Milestone Overview

Developed front-end components

Advanced backend integration

Initiated ROI and home comparison tools

Focused on API research and testing

Milestone Two Plan

Task	Completion %	Donovan	Jonathan	Enrique	To Do
ROI Tool	65%	10%	80%	10%	Upscale the tool to implement APIs
Investigate JavaScript functions and card layout on home screen	65%	80%	10%	10%	Continue to improve functionality
Working Website Demos	65%	60%	20%	20%	Continue to add features to the demos
Improve on early stage demo, increase size, improve layout, and determine caching vs. API calls	40%	20%	20%	60%	Compare Flask vs MERN and plan optimal data retrieval methods for different features
Frontend Development & Card Display	80%	70%	10%	20%	Refine card layout and test user interactions
Database Schema and Backend Integration	70%	50%	30%	20%	Finalize schema adjustments based on API integration needs
API Research and Testing	60%	40%	30%	30%	Refine API list and assess functionality for seamless backend integration
Home Comparison Tool (Early Stages)	30%	20%	20%	60%	Design comparison criteria and data inputs for enhanced user experience
Front End Layout, Logo, and Color Scheme	90%	70%	15%	15%	Logo is complete; continue accent color research for improved visual appeal
Testing	80%	30%	20%	50%	Develop further test cases as more features progress through implementation

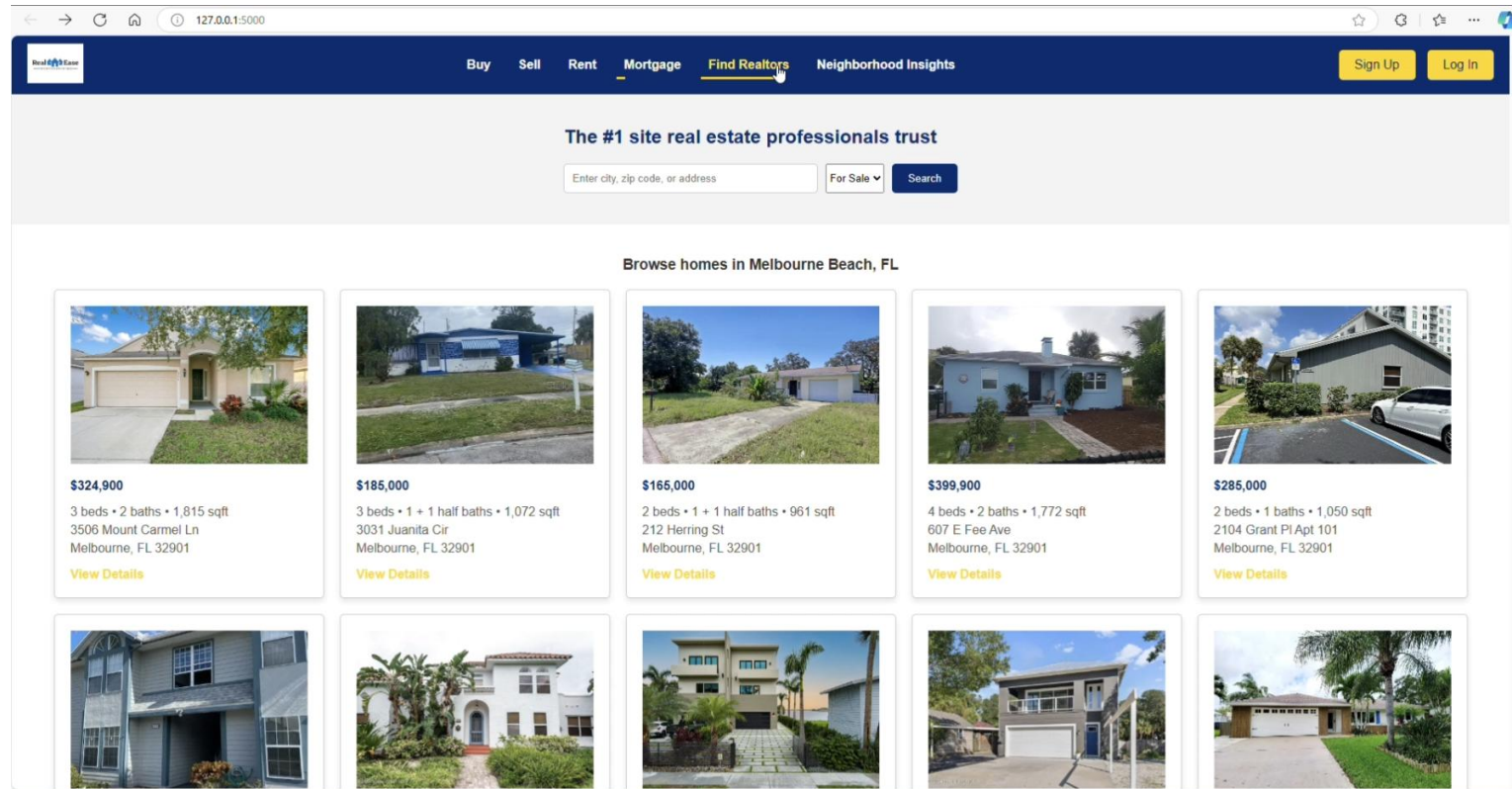
Task 1: Frontend Development and Card Display

Developed dynamic property cards for user interaction on the home screen.

Improved user interface for better engagement.

Task 1 Continued:

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



Task 2: Database Schema & Backend Integration



Created and integrated a MongoDB-based schema to support data storage.



Laid groundwork for seamless front-end and back-end communication.

Task 3: Flask Integration Exploration



Researched Flask integration to enhance ROI tool functionality.



Developed strategies to leverage Python with MERN stack for future features.

Task 4: API Research & Testing

Compared Express and Flask for backend operations.

Established groundwork for API-driven data management

Milestone Three Plan

Task	Donovan		Jonathan		Enrique	
1. Continue to research and test out caching vs python scrapping, and investigate scheduled API calls	implement/test	40%	Research	20%	Demo	40%
2. Planning and begin development of home comparison tool and ROI calculator	Design	30%	Design	30%	Design	40%
3. Look into the exact data we want to use for the open search vs. Neighborhood insights dashboard	Implementation and test	20%	Research and early testing	50%	Test	30%
4. Refining API List and Continued Testing of current product	Refine and test	70%			Test and Demo	30%

Task 1: Caching vs. Python Scraping & 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: Home Comparison Tool & ROI Calculator Development

```
Real-Time-ROI-Calculator --zsh -- 80x24
: $250,000.00
$10,000.00
$5,000.00
: $3,000.00/year
000.00/year

low Analysis:
-----
$2,500.00
ge: $1,145.80
es: $500.00
sh Flow: $187.54

trics:
-----
year): $13,900.00
years): $67,821.82
(1 year): 92.67%
(5 years): 40.74%
return: 15.00%
nt: 6.7 years
of Return (10 years): 42.34%

nbailey@Borz Real-Time-ROI-Calculator %
```



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 3: Data Selection for Open Search & Insights Dashboard

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

Guidance on Data Retrieval Planning

- Emphasis on unified data pull strategies to maintain performance.

Demo Development:

- Iterative improvement based on client feedback to enhance user experience.

Front-End Design Recommendations

- Focus on cohesive brand identity with SVG logo integration.

Main Menu Search Demo

The screenshot displays a real estate website interface. At the top, a dark blue navigation bar contains the following links: Buy, Sell, Rent, Mortgage, Find Realtors, and Neighborhood Insights. On the right side of this bar are two yellow buttons: "Sign Up" and "Log In". Below the navigation bar is a light gray banner with the text "The #1 site real estate professionals trust". Underneath this banner is a search bar with the placeholder text "Enter city, zip code, or address", a dropdown menu set to "For Sale", and a "Search" button. The main content area is titled "Browse homes in Melbourne Beach, FL" and features a grid of ten property listings. Each listing includes a photograph of the property, its price, and its specifications (beds, baths, and square footage). The first five listings in the top row are: 1) \$324,900, 3 beds • 2 baths • 1,815 sqft, 3506 Mount Carmel Ln, Melbourne, FL 32901; 2) \$185,000, 3 beds • 1 + 1 half baths • 1,072 sqft, 3031 Juanita Cir, Melbourne, FL 32901; 3) \$165,000, 2 beds • 1 + 1 half baths • 961 sqft, 212 Herring St, Melbourne, FL 32901; 4) \$399,900, 4 beds • 2 baths • 1,772 sqft, 607 E Fee Ave, Melbourne, FL 32901; 5) \$285,000, 2 beds • 1 baths • 1,050 sqft, 2104 Grant Pl Apt 101, Melbourne, FL 32901. The bottom row contains five more listings, each with a photo but no text details visible. Each listing has a "View Details" link below it.

Real Estate Key

Buy Sell Rent Mortgage Find Realtors Neighborhood Insights Sign Up Log In

The #1 site real estate professionals trust

Enter city, zip code, or address For Sale Search

Browse homes in Melbourne Beach, FL

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Melbourne, FL 32901
[View Details](#)

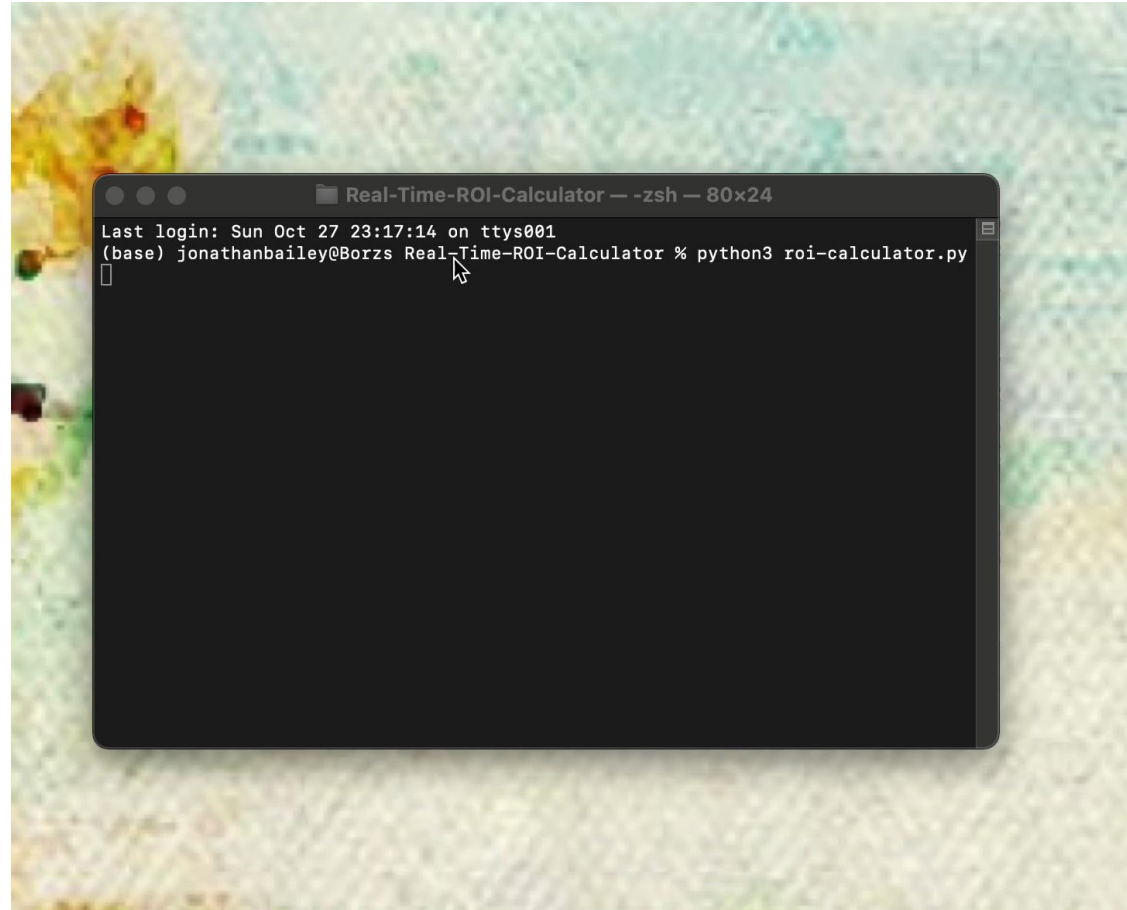
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ROI Calculator Demo



Questions?

