

Software Requirements Specification

Progress Presentation

Madison Dabbs
Ethan Greene
Trevor Redding
Sydney Wertz



DUKEDOM
BUILD YOUR ESTATE

Overview of Project

Purpose

- Empower customers to purchase partial ownership of real estate properties
- Reduce overall money needed to break into real estate market

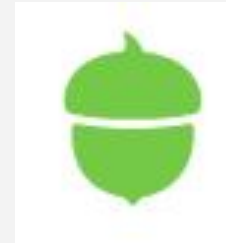
Objectives and Goals

- Provides users with software to piecemeal purchase properties and/or post properties for purchase
- Provide a streamlined user interface



Related Works

- Fundrise/Hedgefunds
- Robinhood
- Zillow



Work Completed

- **Front End**

- Branding
- Landing Page
- Navbar Pages
- Buying Pages
- Chatbot UI

- **Other**

- Work on all necessary diagrams and reports

- **Back End**

- Created housing, user, country databases
- Created method to get user information and use it to create an account
- Login methods and validation
- Used model view control paradigm to allow seamless transitions in website



Functional Requirements

- Users shall be able to search for posted listings and sort them by area and price range.
- Users will be able to posted a detailed listing, with a photo and all other necessary information, for others to purchase shares from.
- All users shall be able to view and manage all shares currently owned.
- Users who post shares must be able to view and edit their posts.
- Users should be able to "follow" a listing through the interface to track changes in the property, either by the original poster or Dukedom.
- Users shall be able to interact with an AI Chatbot that answers questions regarding Dukedom.



Nonfunctional Requirements

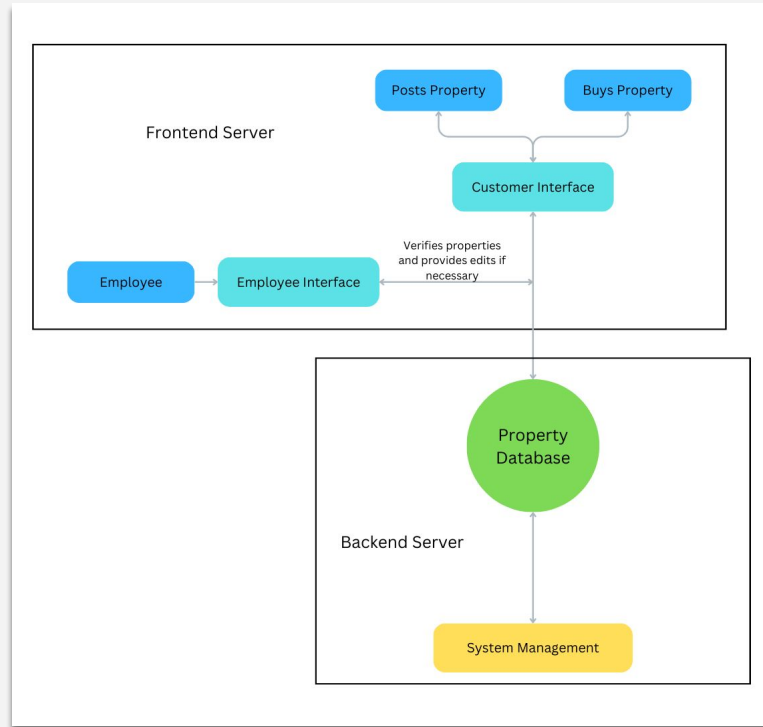
- Publication of the website under the Dukedom domain name.
- Legal documentation similar to those in investing and housing websites that disclose financial risk as well as other necessary information relating to buying both property and stocks in the user's local area.

Optional Features

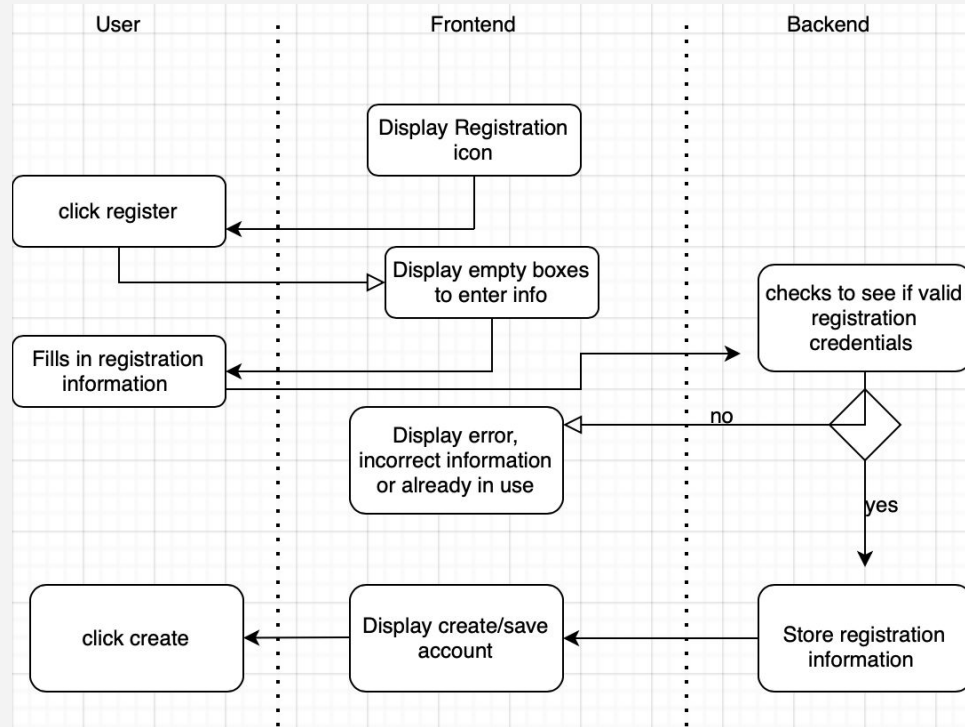
- Employee-designed interface for all Dukedom employees to allow for proper management of the database and potential interaction with customers.
- Integration with local housing data.



System Design

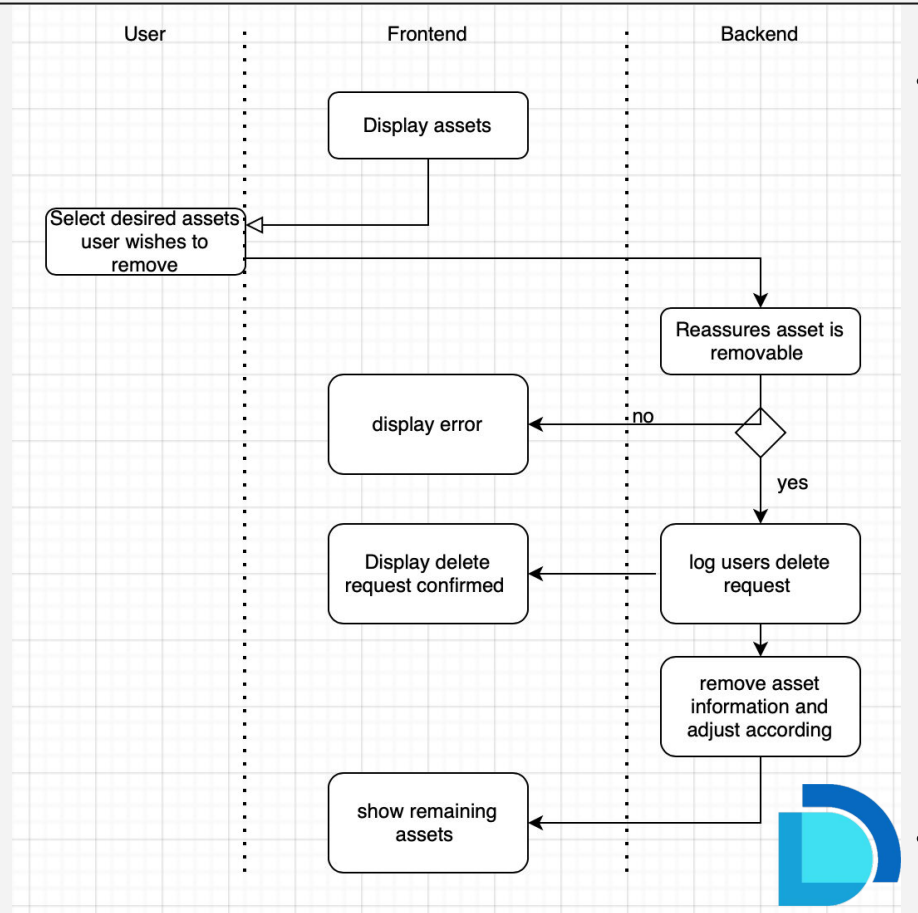


Activity Diagram - User Registration

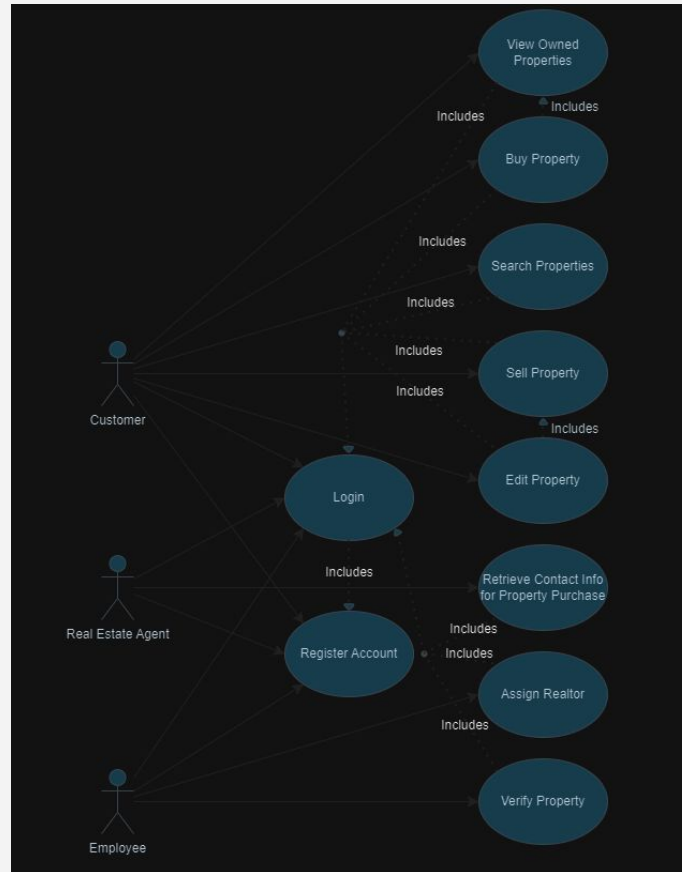


Activity Diagram

- Remove home



Use Case Diagram



Use Case 1: Login

Summary: User can input credentials in order to access Dukedom Account

Preconditions: Dukedom website must be opened on an internet-connected device
User must already have an account registered with Dukedom

Trigger: User opens the Dukedom website

Course of Events:

1. User enters login and password in prompted fields, which are always on the front page upon opening the website
2. User clicks the 'Submit' button
3. Dukedom checks the credentials against the database of registered users
4. Information matches and user is able to access account and associated information

Alternate Paths:

- 3a. User information provided is not stored in the database, display error code and return to step 1



Use Case 2: Show Available Properties

Summary: User can click a button on the Navigation Bar that will display all of the currently available properties in the database.

Preconditions: Dukedom website must be opened on an internet-connected device

Trigger: User clicks on the 'Buy' button on the Navigation Bar of the website.

Course of Events:

1. User opens the website, which displays the Home Page
2. User clicks on the 'Buy' button on the Navigation Bar
3. Dukedom moves from the Home Page to the Buy Page, which displays all currently available properties in the database

Alternate Paths:

- 1a. User logs in using valid Dukedom account and then continues to step 2
- 3a. User can also search for properties using the Search Bar on the Navigation Bar *



Use Case 3: See Property Details

Summary: User can view specific details relating to the chosen property clicked on

Preconditions: Dukedom website must be opened on an internet-connected device

Trigger: User clicks on the box that the desired property is displayed in

Course of Events:

1. The user will be presented with all of the available properties on the database from the 'Buy' page
2. The user clicks anywhere on the box containing the desired property
3. Dukedom moves from the 'Buy' page to display all of the selected property's details, including overall price, shares available, and buy-in amount
4. The user clicks the 'Purchase Shares' button to acquire shares from the property

Alternate Paths:

- 3a. User clicks on the 'Back' button to return to the 'Buy' page and view all other properties



Scenario 1: A New User Wants to Register

Individual: A new user with no account currently registered with Dukedom

Equipment: A device that is connected to the Internet

1. The user enters the Dukedom URL into an internet browser in order to arrive at the website
2. The user clicks the button stating 'Sign Up Now' under the login boxes on the Home Page.
3. The user enters in a valid email address and creates a password
4. The user is returned to the Home Page of the website and are able to access account features



Scenario 2: A User Wants to Find Property

Individual: A Dukedom user who wishes to acquire property

Equipment: A device that is connected to the Internet

1. The user navigates to the Dukedom website and logs in
2. The user clicks the button 'Buy' button to be taken to the list of all properties in the database
3. The user selects the desired property in order to view more details
4. The user adjusts how many shares of the property will be purchased, aligning with the set minimum buy in
5. The user clicks the 'Purchase Shares' button to proceed to the payment and add the shares to the account portfolio
 - a. If the user is not logged in, the user must log in now or Dukedom will not proceed with the purchase



User Interface



Home

Buy

Sell

Contact

About

Find your property

Search

2003 Galuf Way, Old
Sharlayan
EOR, 86753



\$254,000 Total
42% Available
\$12,700 Buy-In

>
Login
Interface

<
House
Tile

Log In

Enter Email

Enter Password

Submit

Need an account?
[Sign up here](#)



Challenges Faced/Backup Plan

Challenges

- Integration of php and html frontend
 - Connection of backend databases to working UI on frontend
- Validation of user through the database
- Formatting on HTML was tedious
 - Making sure the pixels were spaced properly and big enough to be legible
 - Making Boxes was my worst enemy
 - Classification learning curve for communication with CSS style sheet

Backup Plan

- Removal of optional features in order to streamline development process and give additional time for troubleshooting during testing

