Affordable Housing Search Application

Technical Design Document

Group 1

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Document Changes

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| --- | --- | --- | --- |
| Revision # | Date | Author | Comments |
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Abstract

## Objective

Requirements

## Legend

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| --- | --- |
| **Term** | **Definition** |
| Actor | Defines who the requirement pertains to |
| User | Client-side actor that will access the web application |
| Dev | Server-side actor that develops the web application |
| U#.# | Requirement ID pertaining to Actors of type “User” |
| D#.# | Requirement ID pertaining to Actors of type “Dev” |

## Product Requirements

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| **Requirement ID** | **Requirement** | **Actor** |
| U1.0 | **Affordable Housing Search landing page** | User |
| U1.1 | *Header* | User |
| U1.1.1 | *Navigation Menu* | User |
| U1.1.1.1 | Home | User |
| U1.1.1.2 | About | User |
| U1.1.1.3 | Search Page | User |
| U1.1.1.4 | Contact/Feedback Link | User |
| U1.2 | *Main Content* | User |
| U1.2.1 | Feature Image | User |
| U1.2.2 | Brief Site description | User |
| U1.2.3 | Button that links to interactive map/housing search | User |
| U1.3 | *Footer* | User |
| U1.3.1 | *Navigation Menu* | User |
| U1.3.1.1 | Home | User |
| U1.3.1.2 | About | User |
| U1.3.1.3 | Search Page | User |
| U1.3.1.4 | Contact/Feedback Link | User |
| U1.3.2 | Terms of Service |  |
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| **Requirement ID** | **Housing Filters User Requirements** | **Actor** |
| U2.0 | Housing Filters | User |
| U2.1 | “Filters” button opens filters form | User |
| U2.1.1 | “Filters Button shows running total of filter selections. | User |
| U2.1.2 | “X” button or icon to close the “Filters” form. | User |
| U2.2 | Pet Policy Options: | User |
| U2.2.1 | Pet Friendly | User |
| U2.2.2 | No Pets | User |
| U2.2.3 | Cats | User |
| U2.2.4 | Dogs | User |
| U2.3 | Unit Amenities | User |
| U2.3.1 | Washer and Dryer Hookup | User |
| U2.3.2 | Washer and Dryer | User |
| U2.3.3 | Dishwasher | User |
| U2.3.4 | Patio / Balcony | User |
| U2.3.5 | Microwave | User |
| U2.3.6 | High Speed Internet | User |
| U2.3.7 | Wheelchair Access | User |
| U2.3.8 | Furnished | User |
| U2.4 | Community Amenities | User |
| U2.4.1 | Controlled Access | User |
| U2.4.2 | Fitness Center | User |
| U2.4.3 | Pool | User |
| U2.4.4 | Covered Parking | User |
| U2.4.5 | Garage | User |
| U2.5 | Price Range | User |
| U2.5.1 | Units under $1000 | User |
| U2.5.2 | Units $1001 - $1500 | User |
| U2.5.3 | Units $1501 - $2000 | User |
| U2.5.4 | Units $2001 + | User |
| U2.6 | Property by Property Name from Dropbox | User |
| U2.6.1 | List of all properties in Database | User |
| U2.7 | Bedrooms | User |
| U2.7.1 | Studio | User |
| U2.7.2 | 1 | User |
| U2.7.3 | 2 | User |
| U2.7.4 | 3+ | User |
| U2.8 | Bathrooms | User |
| U2.8.1 | 2 | User |
| U2.8.2 | 2 1/2 | User |
| U2.8.3 | 3+ | User |
| U2.9 | Energy Efficiency \*Total utility costs | User |
| U2.9.1 | < $100 | User |
| U2.9.2 | $101 - $150 | User |
| U2.9.3 | $150 - $200 | User |
| U2.9.4 | $200 + | User |
| U2.10 | “Appy Filters” Button to apply the selected filters | User |
| U2.11 | “Clear Filters” Button to clear the form. | User |
| U2.12 | If filter selections return 0 results “User sees “No Matches Found” | User |

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| **Requirement ID** | **Requirement** | **Actor** |
| U3.0 | Housing Details | User |
| U3.1 |  |  |
| U3.2 |  |  |
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| **Requirement ID** | **Requirement** | **Actor** |
| U4.0 | Google Maps | User |
| U4.1 |  |  |
| U4.2 |  |  |
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# Technical Requirements

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| **Requirement ID** | **Requirement** | **Actor** |
| D1.0 | **Affordable Housing Search landing page** | Dev |
| D1.1 | *Non-functional Requirements* | Dev |
| D1.1.1 | Mobile Responsiveness | Dev |
| D1.1.2 | Meet Web Content Accessibility Guidelines | Dev |
| D1.1.3 | Obtain permission for any copyrighted material | Dev |
|  | Cross-Browser compatibility |  |
|  | Page must load within 2 seconds |  |
| D1.2 | *Links - General* | Dev |
| D1.2.1 | Use an exit notification to identify and disclaim links to external sites. | Dev |
| D1.2.2 | Provide a user-friendly message for 404-error a page. | Dev |
| D1.3 | *Navigation Menu* | Dev |
| D1.3 | Text Hyperlink to an About page that explains the sites use, purpose, and partners. | Dev |
| D1.3 | Text Hyperlink to a Search page that features interactive map | Dev |
| D1.3 | Hyperlink to contact form that routes to appropriate contact | Dev |
| D1.4 | *Main Content* | Dev |
| D1.4.1 | Button that links to interactive map/housing search | Dev |
| D1.5 | *Footer* |  |
| D1.5.1 | Hyperlink to Terms of Service page | Dev |
| D1.6 | Display a statement of content ownership or management | Dev |

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| **Requirement ID** | **Housing Filters Developer Requirements** | **Actor** |
| D2.0 | Housing Filters | Dev |
| D2.1 | “Filters” Button opens the Filters form | Dev |
| D2.1.1 | Keep running total of filters selected displayed inside “Filters” selector.  (On landing page) | Dev |
| D2.1.2 | An icon or Button “X” will close the form. | Dev |
| D2.2 | Selector type for Pet Policy U2.2.1 – U2.2.4 , medium buttons | Dev |
| D2.3 | Selector type for Unit Amenities U2.3.1 – U2.3.8 , checkbox | Dev |
| D2.4 | Selector type for Community Amenities U2.4.1 – 2.4.5 , checkbox | Dev |
| D2.5 | Selector type for Price Range U2.5.1 – U2.5.4 , dropbox | Dev |
| D2.6 | Selector type for Property U2.6.1 , dropbox | Dev |
| D2.7 | Selector type for Bedrooms U2.7.1 – U2.7.4 , dropbox | Dev |
| D2.8 | Selector type for Bathrooms U2.8.1 – U2.8.3 , dropbox | Dev |
| D2.9 | Selector type for Energy Efficiency U2.9.1 – U2.9.4 , dropbox | Dev |
| D2.10 | “Apply Filters” button will incorporate filters and initiate search. | Dev |
| D2.11 | “Clear Filters” button will reset the Filters form to an empty state. | Dev |
| D2.12 | If filter selection returns 0 results | Dev |
| D2.12.1 | AlertBox “No Matches Found” | Dev |
| D2.12.2 | Clear Filters Form | Dev |

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| **Requirement ID** | **Requirement** | **Actor** |
| D3.0 | Housing Details | Dev |
| D3.1 |  |  |
| D3.2 |  |  |
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| **Requirement ID** | **Requirement** | **Actor** |
| D4.0 | Google Maps | Dev |
| D4.1 |  |  |
| D4.2 |  |  |
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# Technical Design

## Implementation

## Testing

Communications Plan

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| Communications Plan | |
| **Project:** Energy Efficient Apartment Search | Start Date: 5/9/2022 |
| **Project Managers:**  Joanna Smith  Gary Johnston  Natalie Ayala  Octavian Carteleanu  Devante McFarlane | Estimated Completion Date: |
| **Methods of Communications:** | Valencia email, Discord for chat discussions, ClickUp for Project Management, Zoom |
| Objectives | |
| Establish report with team members |  |
| Meet with professor for project requirements |  |
| Develop Technical Requirements Document |  |
| Develop database |  |
| Design web application |  |
| Develop web application |  |
| Test web application |  |
| Revise web application |  |
| Deploy web application |  |
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# Expected Outcomes

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| --- | --- | --- | --- | --- | --- |
| Type | Date | Assignees | Method | Time | Purpose |
| Project Requirements Meeting | 5/18/2022 | Project Team  Project Stakeholders | Zoom | 1 hour | To discuss with the stakeholders what the requirements of the project are. |
| Scrum Meeting | Weekly on  Mondays at 7:00 pm | Project Team | Discord or Zoom | 30 min | Discuss progress, establish and assign tasks during next sprint. |
| Informal Progress Updates | Asynchronous | Project Team | Discord | N/A | Discuss and development milestones, issues, complications, etc. |
| Planning Documentation Submission | 5/23/2022 | Joanna Smith | Canvas Submission |  | Establish project tasks, set deadlines and assign team members |
| Prototype Submission | 6/5/2022 |  | Canvas Submission |  |  |
| Test Plan Submission | 6/12/2022 |  | Canvas Submission |  |  |
| Technical Documentation Submission | 6/5/2022 |  | Canvas Submission |  |  |
| Beta Version Submission | 6/26/2022 |  |  |  |  |
| Beta Test and Revision Report Submission | 7/4/2022 |  | Canvas Submission |  |  |
| User Documentation |  |  | Canvas Submission |  |  |
| Developer Documentation | 7/17/2022 |  |  |  |  |
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Project Plan

Graphical user interface

Description automatically generated

Graphical user interface, application

Description automatically generated