realocator

Detailed Design Document

Published Version 3.0

DOCUMENT DETAILS			
Master File			
AMENDMENT RECORD			
Issue	*Date*	*Amended By*	*Description*
1.0	*7/09/2022*	*Rod Parker-Yules*	*Initial draft*
2.0	*8/9/2022*	*Rod Parker-Yules*	*Modified design and functionality after testing APIs to ascertain what data was available to meet MVP.* *Defined MVP project scope & future release functionality.*
2.1	*10/9/2022*	*Rod Parker-Yules*	*Updated Version 1 MVP project scope, functionality and flow charts to align with group process and scope review – based on the functional test results of 'Beta Test Release' of Version 1*
2.2	*12/9/2022*	*Rod Parker-Yules*	*Updated Version 1 Flow Chart; and future release functionality*
3.0	*13/9/2022*	*Rod Parker-Yules*	*First published release after full documentation review.*

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1 User Story

As a property buyer, I want to purchase a property in a holiday location, a beach-side suburb roughly 2 hours away from where I live.

I want to evaluate several locations, and inspect several properties in each location. I need a shortlist of properties for each location, and then I will need to plan a trip over 2-3 days to visit those locations and inspect the properties, as well as checking what amenities and community services are available.

As I will need to plan my trip, I will also need to access accommodation booking sites.

2 Project Overview

Potential property buyers could be an investor who wants to buy a property in a holiday location; someone who wants a Sea-change or Tree-change; or somebody who is looking for a holiday house out of the city where they can enjoy weekends and holidays with the family.

Often the process of working out where to start looking, locating properties in several towns across a region, planning a trip to view the properties and finding short-term accommodation based on that plan is a daunting experience. It involves accessing multiple web sites, searching for data, comparing information, and then manually planning the trip to achieve the most productive, cost effective and enjoyable trip.

realocator.com.au is a simple web app that allows people to:

- Enter a location they would like to search;
- Select a number of properties in those locations to inspect;
- Shortlist those properties; and
- Plan their trip and find accommodation for each night of the trip.

Whilst it is expected that most people will plan their trip at home on a PC or Tablet, when they are travelling, they will probably use either a Tablet or Mobile Phone.

3 Project Scope and Phases

The development will be completed in several releases.

3.1 Version 1.0

Version 1.0 will comprise a simple HTML page that includes:

- A place to type a location (city or town) to get a list of properties;
- A button to "shortlist" a property they are interested in;
- Ability to view the full property details;
- View the weather for a selected property.

All properties listed in that location on will be retrieved via the Domain API and then displayed in the realocator screen:

- The user will type the location in the box, select the 'State' and when they click the 'Save' button all properties for that location will be shown:
- The selection criteria will be limited to 'Houses' and 'Apartments' in Version 1.0;
    - The selection criteria will be expanded and user selectable in Version 2.0.

When the user clicks on the "Add to Shortlist" icon, a new button will be added to the Shortlist with the address of the selected property.

When the user clicks on each 'Shortlisted Property' button, realocator will display the weather for that location.

Users can clear the shortlist by clicking on a 'Clear Shortlist' button.

A number of links to accommodation web sites are attached in the footer. When the user clicks on an accommodation link, they are re-directed to the accommodation web site.

3.2 Version 2.0

- Add a map to make it easier for the user to look for a location;
- Add selection criteria (via drop-downs) to property search;
- Add a link to the property in Domain.com.au to view the full property details:
    - Possibly display in an i-frame;
- Move, add, delete & sort properties in the 'Shortlist'.

3.3 Version 3.0

- Add a "Trip Planner" section to allow the user to plan a trip over a single or multiple days, with confirmed viewing times, and accommodation bookings.

- Notification via email to agent of planned dates & times to confirm trip plan at any time, including during the trip;
- Expand the ‘Weather’ container to include user selected ‘Place of Interest’:
  - Types of places of interest to be chosen via a drop-down;
  - Data to be populated via the API when each location button is selected.
- Completion of functionality that was not able to be delivered in Version 3.0;
- Integration of the map, so that when user selects a location on the map, the ‘Lon’ and ‘Lat’ is saved, and the ‘Location’ text box is populated with the location name.

4 APIs and Links

4.1 Version 1.0

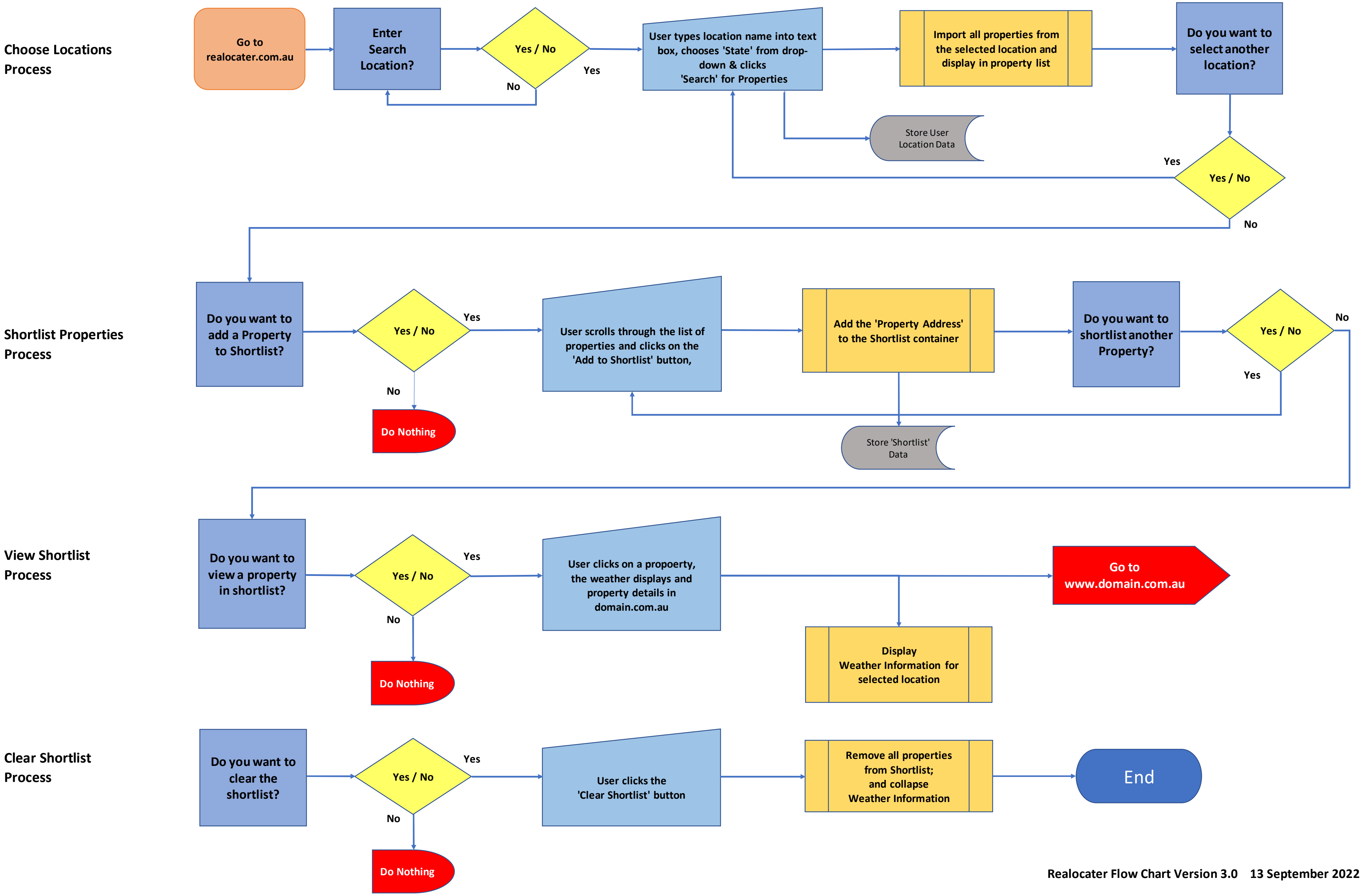
- Open Weather Map to GET weather data;
- Domain.com.au to GET saved search data;
- Redirect to Booking Site – no interaction.

5 Lessons Learnt

A number of lessons were learnt by the team including:

- Basic Project Management – the importance of breaking the project down into manageable and measurable phases, including interdependencies & risks;
- Designing the functionality of a web app based on limited information;
- Dividing the project across multiple resources and collaborating with various team members at different phases to deliver the project;
- How to evaluate a development framework for a specific purpose;
- How to use Git to create branches for collaborated development;
- How to review and accept/decline changes, and then merge the changes;
- Documentation and presentation.

Appendix A: Flow Chart


Choose Locations Process
Go to realocater.com.au
Enter Search Location?
Yes / No
No
Yes
User types location name into text box, chooses 'State' from drop-down & clicks 'Search' for Properties
Import all properties from the selected location and display in property list
Store User Location Data
Do you want to select another location?
Yes / No
Yes
No
Shortlist Properties Process
Do you want to add a Property to Shortlist?
Yes / No
Yes
No
Do Nothing
User scrolls through the list of properties and clicks on the 'Add to Shortlist' button,
Add the 'Property Address' to the Shortlist container
Store 'Shortlist' Data
Do you want to shortlist another Property?
Yes / No
No
Yes
View Shortlist Process
Do you want to view a property in shortlist?
Yes / No
Yes
No
Do Nothing
User clicks on a propoerty, the weather displays and property details in domain.com.au
Go to www.domain.com.au
Display Weather Information for selected location
Clear Shortlist Process
Do you want to clear the shortlist?
Yes / No
Yes
No
Do Nothing
User clicks the 'Clear Shortlist' button
Remove all properties from Shortlist; and collapse Weather Information
End

Realocater Flow Chart Version 3.0   13 September 2022

Appendix B: Original Project Overview

Project 1: Interactive Front-End Application

At the conclusion of each phase of this course, you'll work with a group of your fellow students to create a **project**. A project is collaborative work among a group of developers to create an application that solves a real-world problem. Projects model the experience you'll encounter in every development role at any company, from large multinational businesses to small startups. Coding is collaborative.

A project is a bit different from the Challenge assignments you've worked on so far. One of the biggest differences is that you'll no longer build an application by yourself! This has some advantages & you won't have to do all of the work, you can divide up duties, and you can share skills and knowledge with other developers and lean on their strengths. This can also be challenging if you're used to working alone. Constant communication and time management are just two of the skills you'll need practice to make sure everyone in your group works together to complete the project.

Projects won't provide you with a user story or acceptance criteria, because you and your group will create them once you decide which real-world problem your application will solve. This lack of constraints can be freeing in a way, because you have room to build what you want, but it also means that you have to decide what those constraints are before you can start working.

Finally, a project requires a presentation, because you're trying to convince an audience that it serves a purpose. Your instructional staff and fellow students are investors, and you're pitching your creation to an experience that developers are required to do frequently. Your presentation is just as important as the actual project, so take it just as seriously.

Project Requirements

You and your group will use everything you've learned over the past six modules to create a real-world front-end application that you'll be able to showcase to potential employers. The user story and acceptance criteria will depend on the project that you create, but your project must fulfil the following requirements:

- Use a CSS framework other than Bootstrap.
- Be deployed to GitHub Pages.
- Be interactive (i.e., accept and respond to user input).
- Use at least two [server-side APIs](https://coding-boot-camp.github.io/full-stack/apis/api-resources).
- Does not use alerts, confirms, or prompts (use modals).
- Use client-side storage to store persistent data.
- Be responsive.
- Have a polished UI
- Have a clean repository that meets quality coding standards (file structure, naming conventions, follows best practices for class/id naming conventions, indentation, quality comments, etc.).

- Have a quality README (with unique name, description, technologies used, screenshot, and link to deployed application).

Presentation Requirements

Use this project presentation template:

https://docs.google.com/presentation/d/10QaO9KH8HtUXj__81ve0SZcpO5DbMbqqQr4iPpbwKks/edit?usp=sharing

to address the following:

- Elevator pitch: a one minute description of your application
- Concept: What is your user story? What was your motivation for development?
- Process: What were the technologies used? How were tasks and roles broken down and assigned? What challenges did you encounter? What were your successes?
- Demo: Show your stuff!
- Directions for Future Development
- Links to the deployed application and the GitHub repository

Grading Requirements

This project is graded based on the following criteria:

Technical Acceptance Criteria: 25%

Satisfies the following code requirements:

- Application uses at least two [server-side APIs](https://coding-boot-camp.github.io/full-stack/apis/api-resources)
- Application uses client-side storage to store persistent data.
- Application doesn't use JS alerts, prompts, or confirms (uses modals instead).
- Application uses a CSS framework other than Bootstrap.
- Application is interactive (accepts and responds to user input)

Concept 10%

- Application should be a unique and novel idea.
- Your group should clearly and concisely articulate your project idea.

Deployment: 20%

- Application deployed at live URL and loads with no errors.
- Application GitHub URL submitted.

Repository Quality: 10%

- Repository has a unique name.

- Repository follows best practices for file structure and naming conventions.
- Repository follows best practices for class/id naming conventions, indentation, quality comments, etc.
- Repository contains multiple descriptive commit messages.
- Repository contains a quality README file with description, screenshot, and link to deployed application.

Application Quality: 15%

- Application user experience is intuitive and easy to navigate.
- Application user interface style is clean and polished.
- Application is responsive.

Presentation 10%

- Your group should present using a slide deck.
- Every group member should speak during the presentation.
- Your presentation should follow the Project Presentation Template

Collaboration 10%

- There are no major disparities in the number of GitHub contributions between group members.

How to Submit Your Interactive Front-End Project

- Each member of your group** is required to submit the following for review:
- The URL of the deployed application.
- The URL of the GitHub repository, with a unique name and a README describing the project.