

Swinburne University of Technology

COS30043 - Interface Design and Development

6.3HD - Design Document

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Last Date of Submission: 06/08/2023

1. Introduction

This document outlines the design and development of a single-page web app for searching cocktails based on names, categories, alcoholic volumes, ingredients, and other functionalities. The frameworks used for this project are VueJS and Bootstrap. This document is a comprehensive application overview, including the requirements, design, implementation, and deployment. The web app will enable users to search for cocktails and view detailed information about each cocktail, including ingredients, instructions for mixing, and sample images. The app's front end will be built using VueJS, with the grid design and layout strapped together using Bootstrap. The backend will be powered using [TheCocktailDB](#) API, an open and free-of-charge database of drinks and cocktails worldwide. In addition, the Axios library will also be used to make HTTP requests in our browser environment. The document will further detail the application's structure, design, and implementation.

2. Requirements

A. Functional Requirements

The app contains five main functionalities: generate a random cocktail; search cocktail by name, ingredients, alcoholic volumes, categories, and glassware; view the detailed instructions, images, and ingredients of each cocktail; look up ingredients; view ingredient details.

1. Generate a random cocktail: A new and random cocktail featured as a drink of the day.
2. Search cocktails by name, ingredients, alcoholic volumes, categories, and glassware: Each filter can be used independently or together to find the user's best drink.
3. View a cocktail's details: The image, name, category, alcoholic volume, glassware, instructions for mixing, and ingredient will be presented in a comprehensive card view that can be used to look up other drinks with the same components.
4. View all ingredients: All ingredients used for mixing the cocktails will be presented in a search view, with each one shown in a card with the image, name, and will re-route you to the Ingredient Detail view on click.
5. View an ingredient's details: The image, name, type, alcoholic by volume (ABV), and description will be shown in a card view similar to the Cocktail Detail view.

B. Non-functional Requirements

The app contains three non-functional requirements: responsiveness, usability, and accessibility.

1. Responsiveness: The website automatically adjusts its layout and content to fit different screen sizes and devices, whether the user is accessing the website using a desktop, a phone, or a tablet.
2. Usability: The app was designed with a clear and intuitive user interface, making it easy for users to search for cocktails, view detailed information about each cocktail, and save their favourite recipes.
3. Accessibility: The accessibility of the app can be interpreted from the high-contrast display of all pages and interactive elements.

3. Design Architecture

1. Front-end:
 - a. VueJS: Power the app using custom and reusable templates on the view.
 - b. Vue Router: Navigate between different views in our single-page application.
 - c. Bootstrap: Create a grid structure to style the app in a logical and user-friendly interface.
 - d. Axios: Promise-based HTTP client for the browser and node.js.
2. Back-end: [TheCocktailDB API](#): An open, crowd-sourced database of drinks and cocktails worldwide.

4. Implementation

The main structure includes:

src/

- |— apis
 - | — CocktailAPI.js: Helper functions to send requests and receive responses from API
- |— App.vue
- |— assets
 - | — cocktail.png
 - | — logo.png
- |— components
 - | — AlcoholicFilter.vue: Drop-down menu to filter search results
 - | — AlcoholicSearch.vue: Buttons for the AlcoholicView
 - | — CategoryFilter.vue: Drop-down menu to filter search results
 - | — CategorySearch.vue: Buttons for the CategoryView
 - | — CocktailPreview.vue: Template for SearchView to pass in data and display
 - | — GlassFilter.vue: Drop-down menu to filter search results
 - | — GlassSearch.vue: Buttons for the GlassView
 - | — IngredientFilter.vue: Drop-down menu to filter search results
 - | — IngredientPreview.vue: Template for IngredientView to pass in data and display
- |— main.js: Import necessary modules
- |— router
 - | — index.js: Router
- |— views
 - | — AboutView.vue: About page
 - | — AlcoholicView.vue: View to select alcoholic options
 - | — CategoryView.vue: View to select category options
 - | — CocktailDetail.vue: View detailed information of the selected cocktail
 - | — GlassView.vue: View to select glassware options
 - | — HomeView.vue: Home page
 - | — IngredientDetail.vue: View detailed information of the selected ingredient
 - | — IngredientView.vue: List all ingredients that are used in cocktails
 - | — SearchView.vue: Display search results from other's views passed in parameters

5. Screenshots of the web app

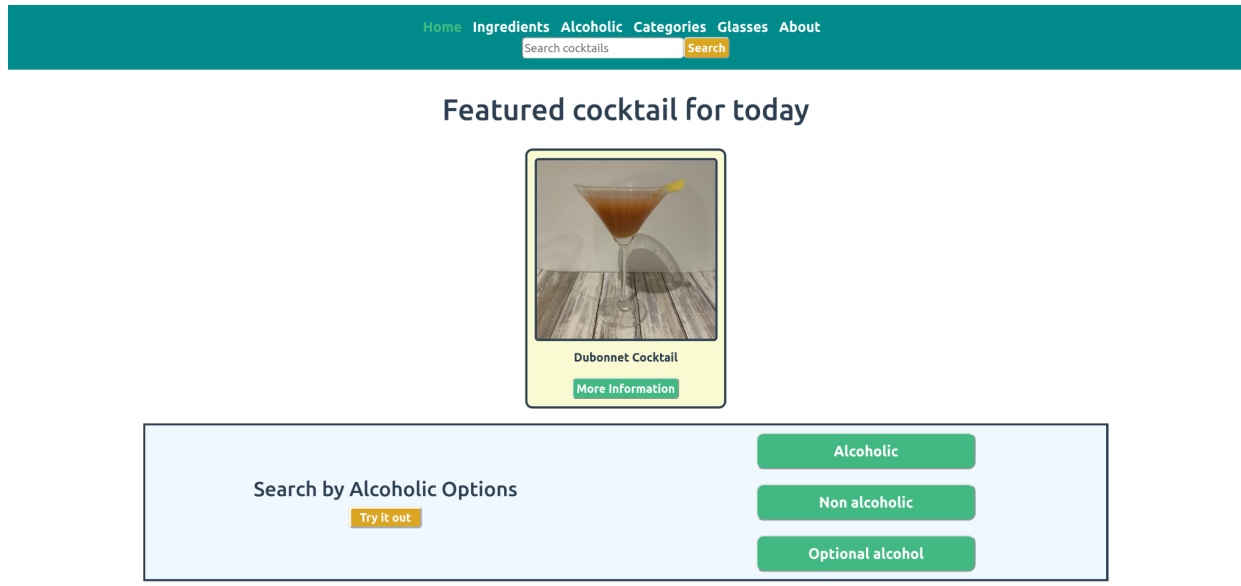


Figure 1: Home Page

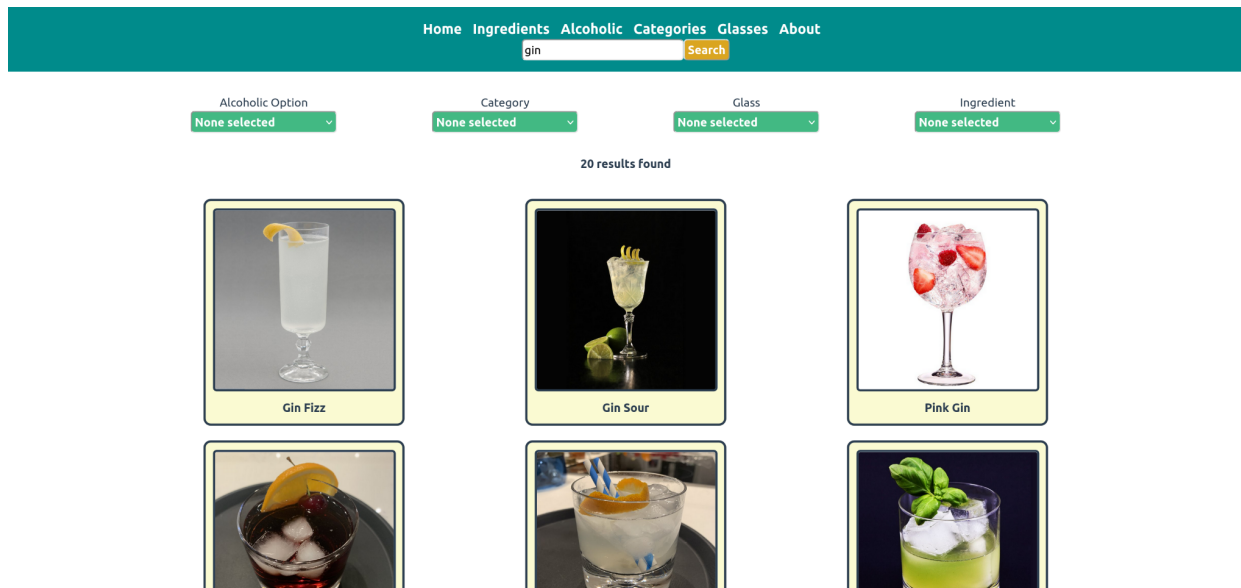



Figure 2: Search Page

[Home](#)
[Ingredients](#)
[Alcoholic](#)
[Categories](#)
[Glasses](#)
[About](#)

Cocktail Information



Name
Gin Tonic
Category
Cocktail
Alcoholic
Yes
Glass
Highball glass


Instructions
 Fill a highball glass with ice, pour the gin, top with tonic water and squeeze a lemon wedge and garnish with a lemon wedge.

Ingredients
4 cl Gin
10 cl Tonic Water
1 Slice Lemon Peel
cubes Ice


Figure 3: Cocktail Information Page

[Home](#)
[Ingredients](#)
[Alcoholic](#)
[Categories](#)
[Glasses](#)
[About](#)


Ingredients




7-Up




Absolut Citron



Ale








Figure 4: Ingredient Page

[Home](#) [Ingredients](#) [Alcoholic](#) [Categories](#) [Glasses](#) [About](#)

[Search](#)

Ingredient Information



Name
Champagne
Type
Wine
Alcoholic
Yes
Alcoholic by volume
13%

Description

Champagne (French: [ʃɑ̃.paɾɛ]) is a sparkling wine and type of alcoholic drink produced from grapes grown in the Champagne region of France following rules that demand, among other things, secondary fermentation of the wine in the bottle to create carbonation, specific vineyard practices, sourcing of grapes exclusively from specific parcels in the Champagne appellation and specific pressing regimes unique to the region.[1] It contains the drug alcohol (also known formally as ethanol), and is used recreationally. Some use the term Champagne as a generic term for sparkling wine, but in many countries, it is illegal to label any product Champagne unless it both comes from the Champagne region and is produced under the rules of the appellation. The primary grapes used in the production of Champagne are black Pinot noir and Pinot Meunier but also white Chardonnay. Champagne appellation law only allows grapes grown according to appellation rules in specifically designated plots within the appellation to be used in the production of champagne. Champagne became associated with royalty in the 17th, 18th, and 19th centuries. The leading manufacturers made efforts to associate their Champagnes with nobility and

Figure 5: Ingredient Information Page

[Home](#) [Ingredients](#) [Alcoholic](#) [Categories](#) [Glasses](#) [About](#)

[Search](#)

Alcoholic Options

[Alcoholic](#)[Non alcoholic](#)[Optional alcohol](#)

Figure 6: Alcoholic Options Page

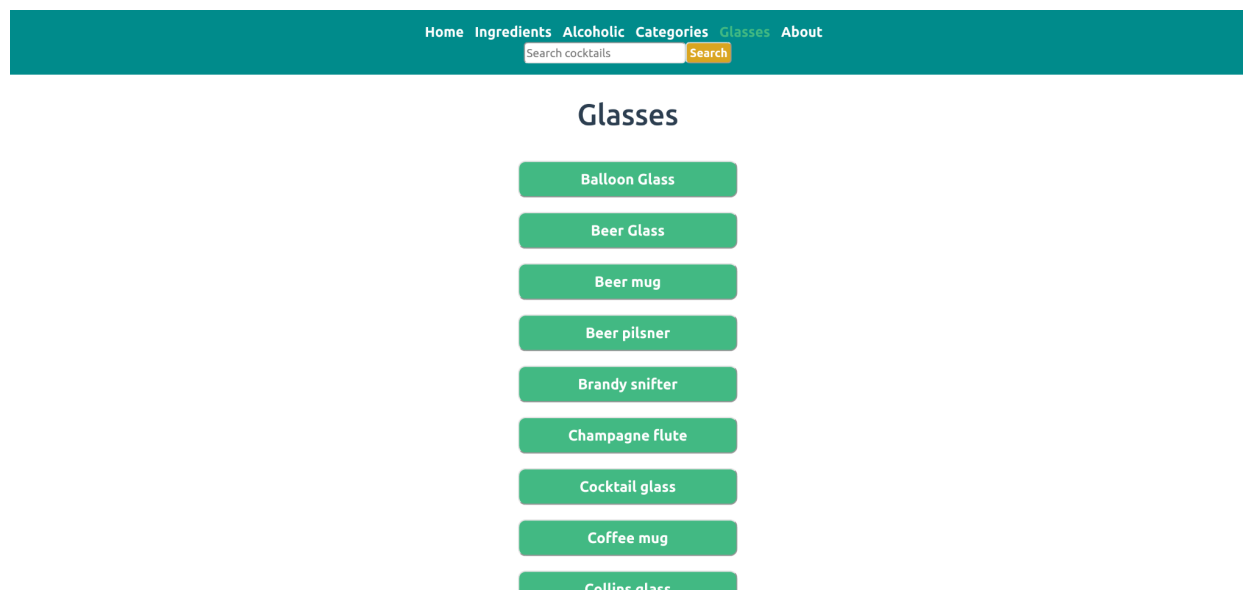


Figure 7: Glasses Page

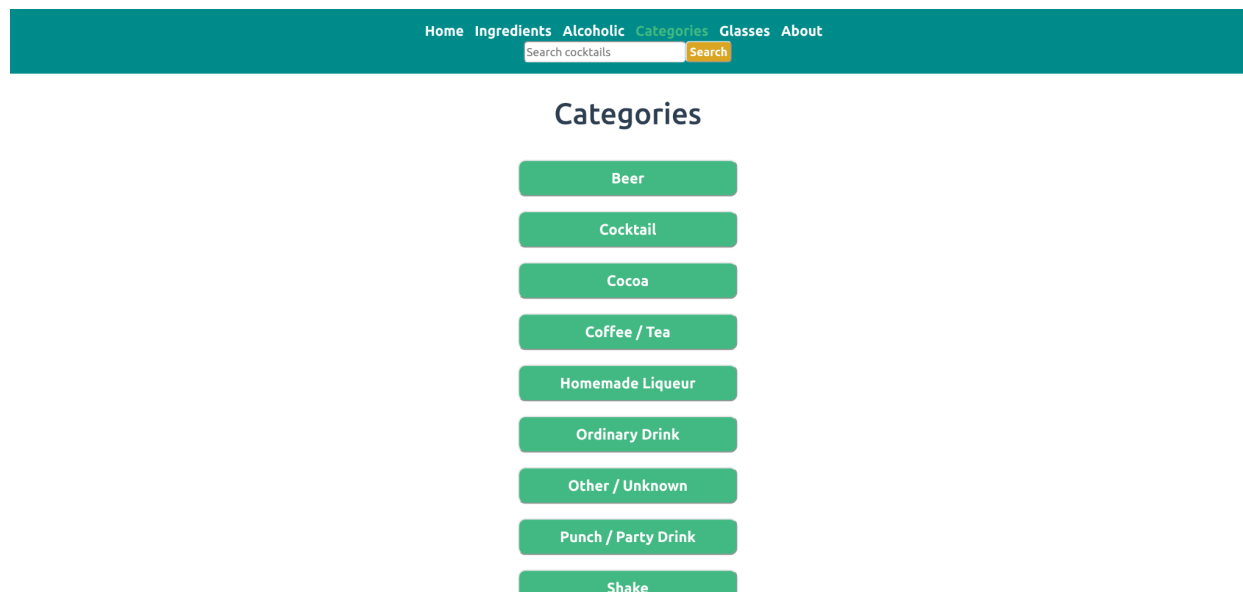


Figure 8: Categories Page

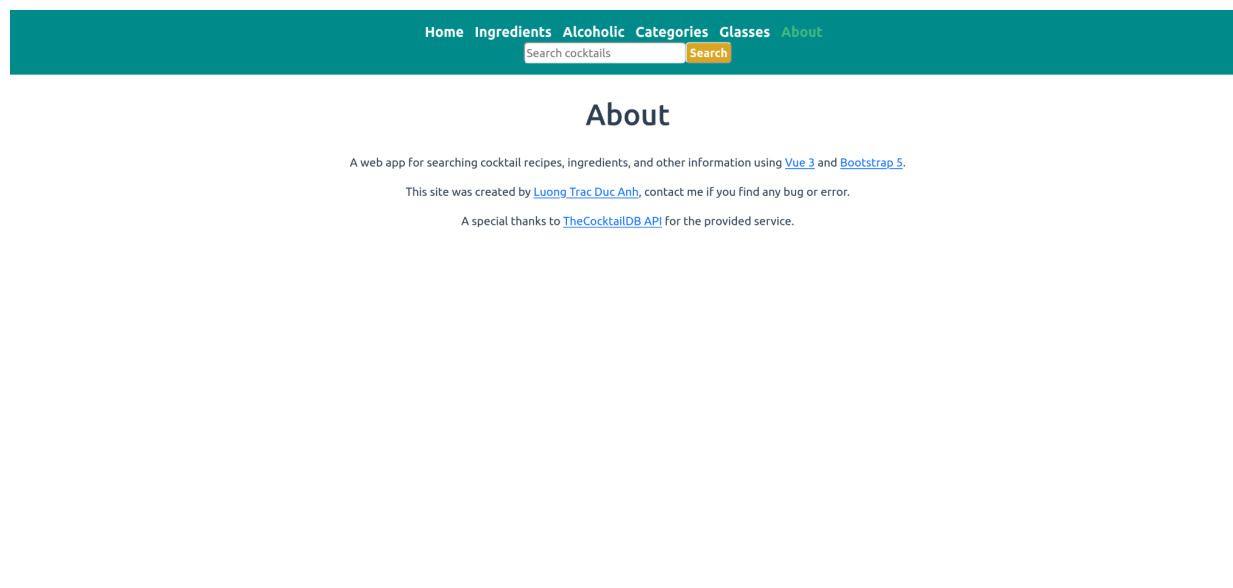


Figure 9: About page