

Swinburne University of Technology

COS30043 - Interface Design and Development

6.3HD - Design Document

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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: In general, this app strictly follows a mobile-first design. 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, with responsiveness in the navigation.
 - 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

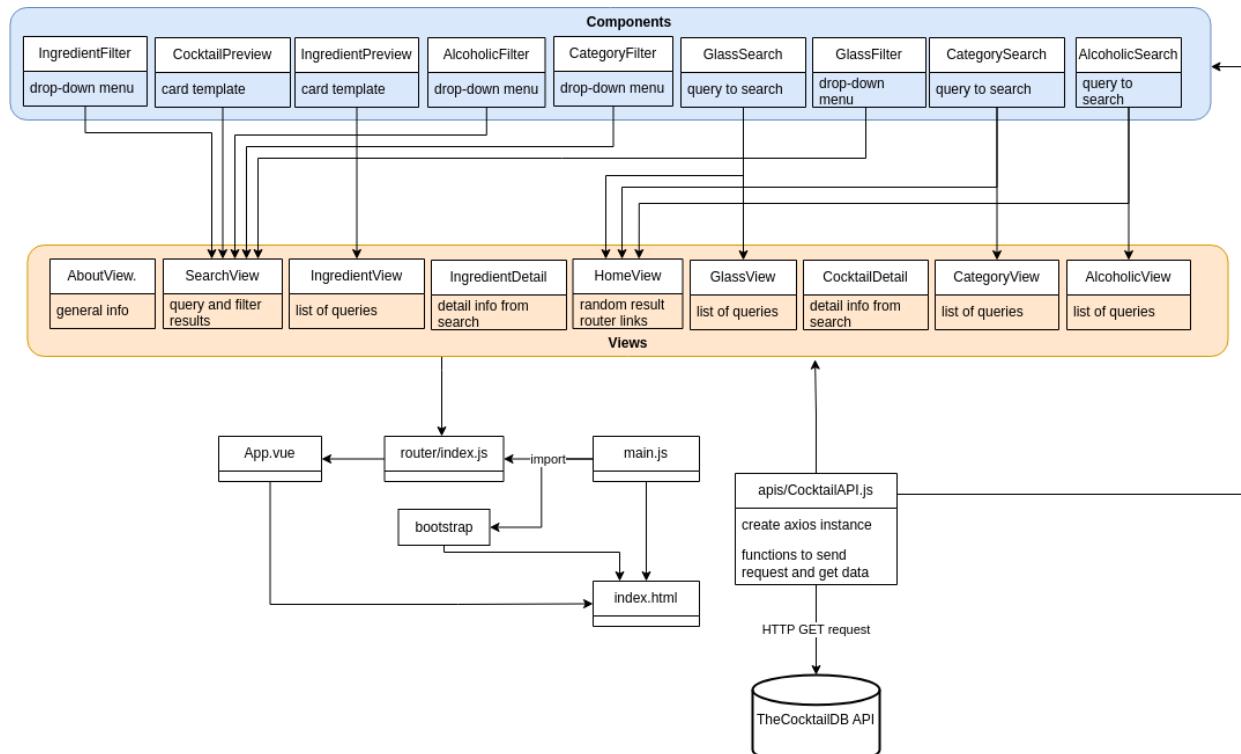


Figure 1: Architecture of the app

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: Template for IngredientView to pass in data and display
      └── IngredientPreview.vue: Template for IngredientView to pass in data and display
  └── main.js
  └── router
      └── index.js: Import necessary modules
  └── 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

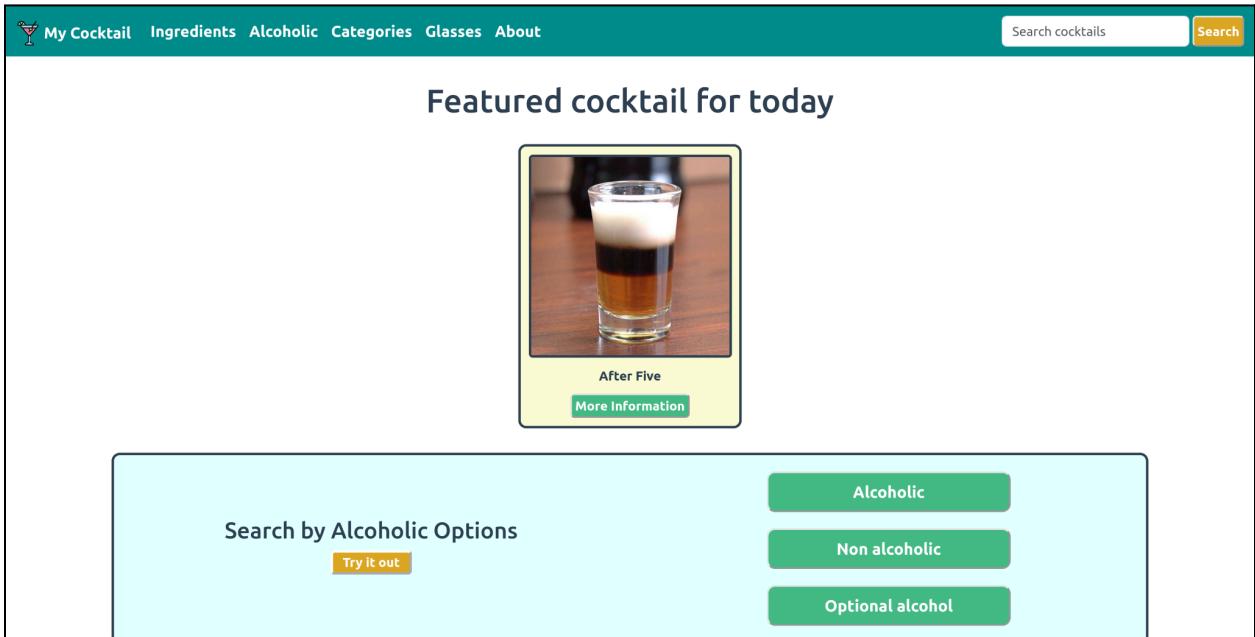


Figure 2: Home Page

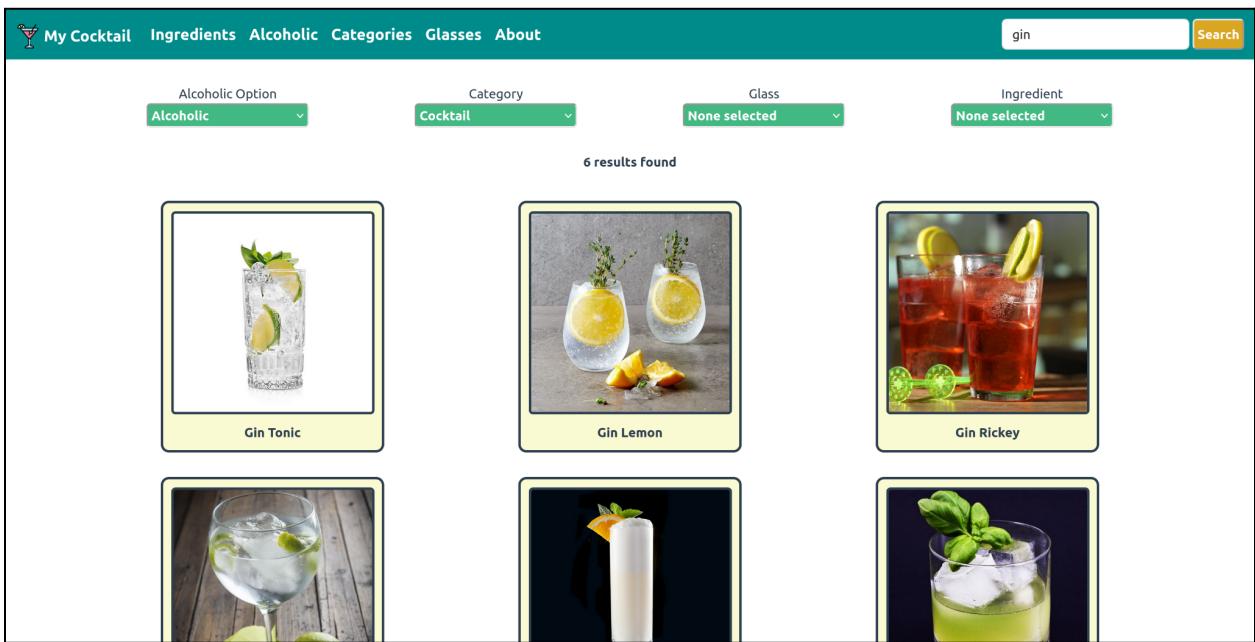


Figure 3: Search Page

 My Cocktail [Ingredients](#) [Alcoholic](#) [Categories](#) [Glasses](#) [About](#)

Cocktail Information

	Name After Five
	Category Shot
	Alcoholic Yes
	Glass Shot glass
	Instructions
	1. Pour Kahlua into shot glass to about 1/2 full. 2. Using a spoon(inverted), slowly pour in the Peppermint Schnapps until glass is about 3/4 full. Done correctly, the Schnapps will flow under the Kahlua for a clear layer. 3. Again using a spoon, but this time right side up, slowly top off the glass with a layer of Baileys. Be careful to place the spoon right at the top of the Kahlua layer and to raise it as the glass fills up. Done correctly, this will provide a layer of Baileys floating over the Kahlua. 4. Toss it down all at once for something like a Peppermint Pattie, WITH A BANG!! NOTE: Best if all ingredients are chilled
	Ingredients
	Peppermint schnapps Kahlua Baileys irish cream

Figure 4: Cocktail Information Page

 My Cocktail [Ingredients](#) [Alcoholic](#) [Categories](#) [Glasses](#) [About](#)

Ingredients

		
7-Up	Absolut Citron	Ale
		

Figure 5: Ingredient Page

 My Cocktail [Ingredients](#) [Alcoholic](#) [Categories](#) [Glasses](#) [About](#)

Cocktail Information

	Name After Five
	Category Shot
	Alcoholic Yes
	Glass Shot glass
	Instructions
	1. Pour Kahlua into shot glass to about 1/2 full. 2. Using a spoon(inverted), slowly pour in the Peppermint Schnapps until glass is about 3/4 full. Done correctly, the Schnapps will flow under the Kahlua for a clear layer. 3. Again using a spoon, but this time right side up, slowly top off the glass with a layer of Baileys. Be careful to place the spoon right at the top of the Kahlua layer and to raise it as the glass fills up. Done correctly, this will provide a layer of Bailey's floating over the Kahlua. 4. Toss it down all at once for something like a Peppermint Pattie, WITH A BANG!! NOTE: Best if all ingredients are chilled
	Ingredients
	Peppermint schnapps Kahlua Baileys irish cream

Figure 6: Ingredient Information Page

 My Cocktail [Ingredients](#) [Alcoholic](#) [Categories](#) [Glasses](#) [About](#)

Alcoholic Options

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

Figure 7: Alcoholic Options Page

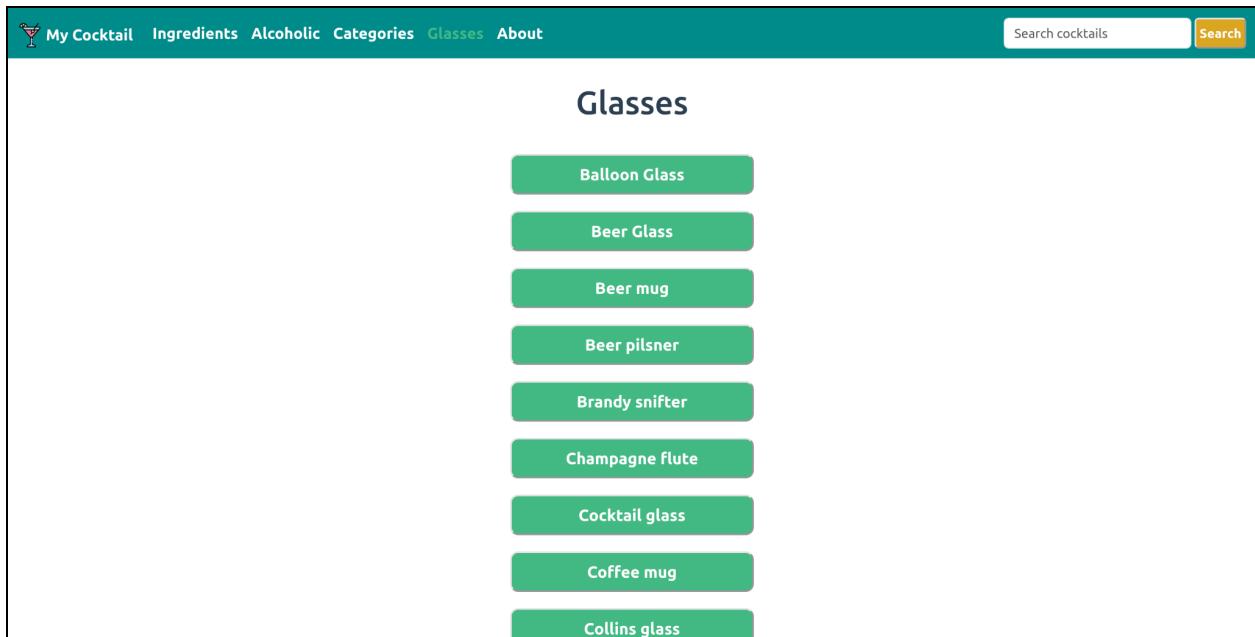


Figure 8: Glasses Page

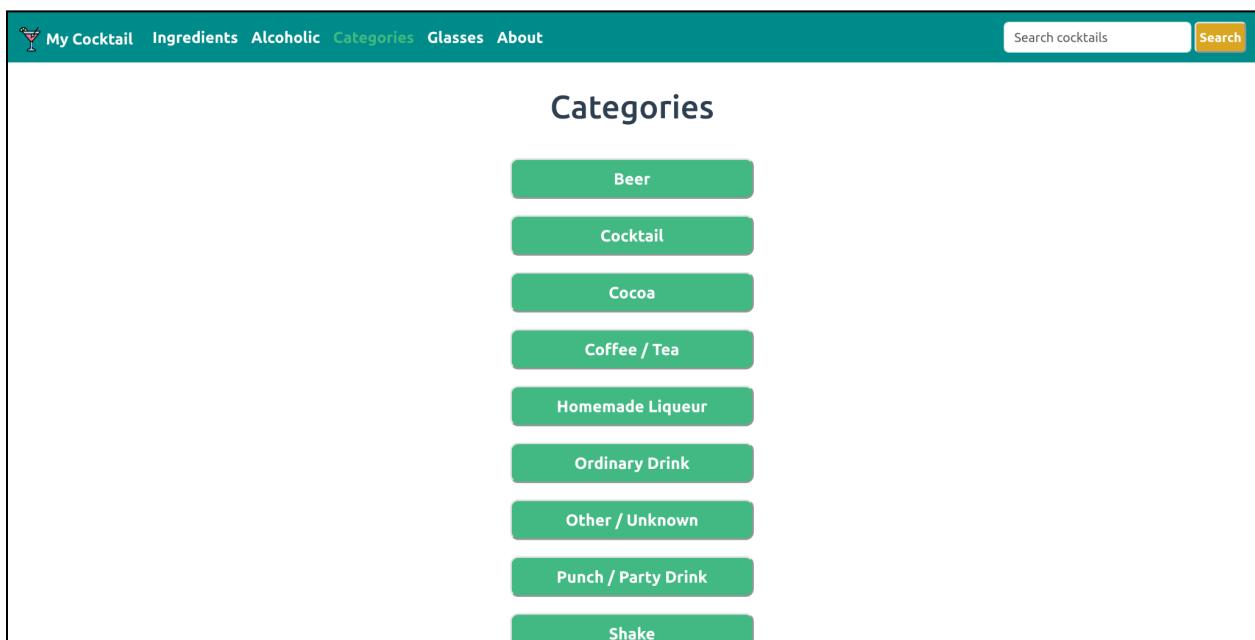


Figure 9: Categories Page

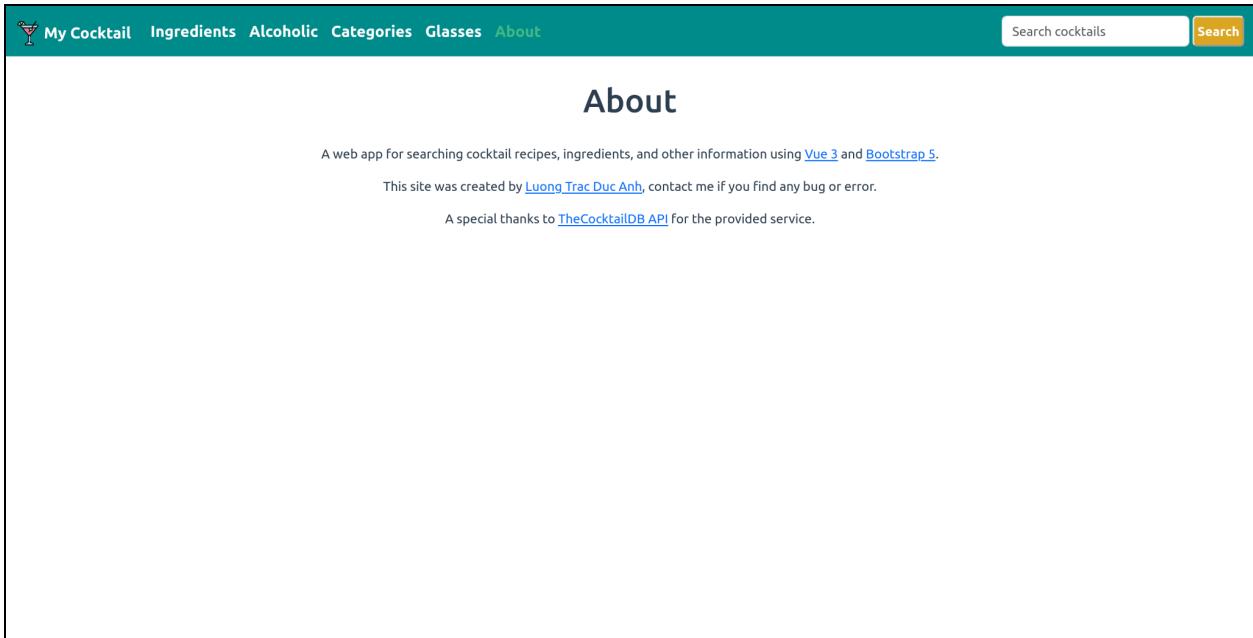


Figure 10: About page

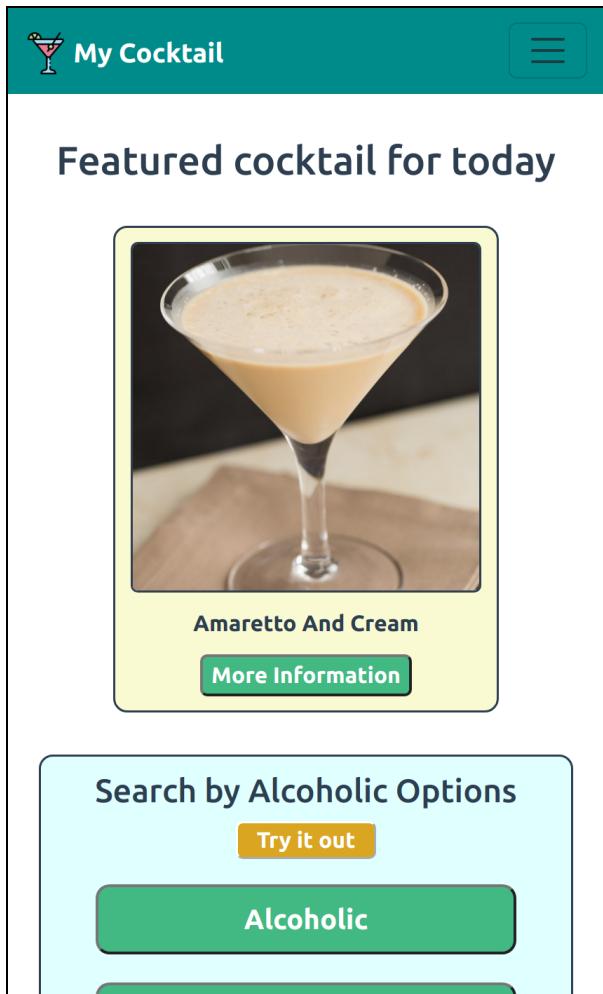


Figure 11: Home Page on Mobile

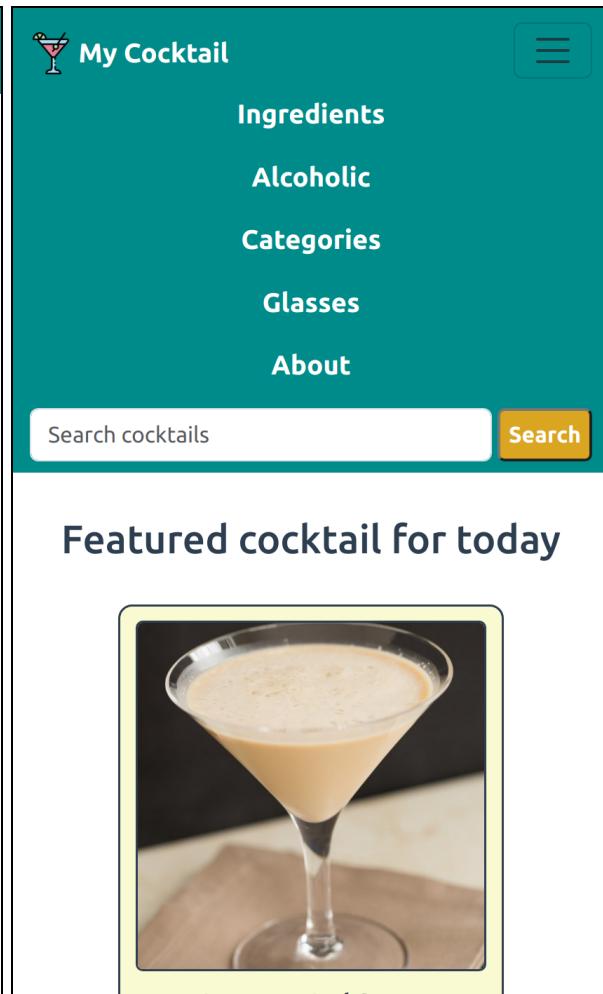


Figure 12: Toggle Navigation Bar

 My Cocktail

Category

Beer

14 results found



110 in the shade



Figure 13: Search Page on Mobile

 My Cocktail

Cocktail Information



Name
Amaretto Sunrise

Category
Ordinary Drink

Alcoholic
Yes

Glass
Collins Glass

Instructions

Mix together the amaretto and orange juice. Pour into glass and then add the grenadine until you see the sunrise.

Ingredients

1 cl Amaretto
4 oz Orange juice
1/4 cl Grenadine

Figure 14: Information Page on Mobile