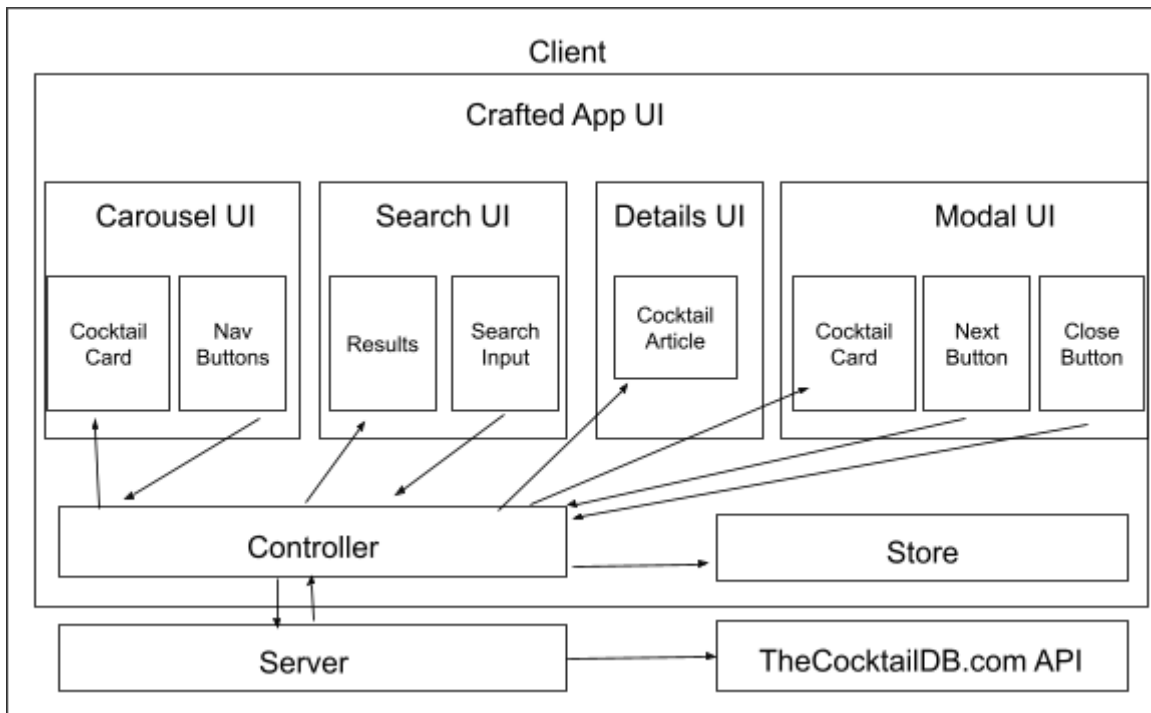


# Crafted System Design

## Requirements Exploration:

- Server: Provides HTTP API to return cocktail data
- Controller: Passes cocktail Data to components
- Client store: stores search query results and cocktail details results
- UI:
  - Search: Users should be able to search cocktails by name or ingredients
  - Details: Display info about each cocktail including name, image, ingredients, and directions
  - Carousel: Shows featured cocktails in a carousel on homepage
  - Random Cocktail Generator: modal that generates a random cocktail and allows users to generate another

## Architectural / High-Level Design:



## Data Model:

Entity	Source	Belongs To	Fields
Cocktail Card	Server	Carousel UI, Modal UI, Search UI result list	'Name', 'id', 'link'
Nav Buttons	Client	Carousel UI	'Id', 'icon'
Results	Sever	Search UI	'list', 'return to top button', 'no result p'
Search Input	Client	Search UI	'form', 'text input', 'submit button'
Cocktail Article	Server	Details UI	'id', 'name', 'image', 'ingredients list', 'directions list'
Next Button	Client	Modal UI	'Button', 'icon'
Close Button	Client	Modal UI	'Button', 'icon'

## Interface Definition (API)

Source	Destination	Call Type	Purpose
Server	Controller	HTTP	Fetch cocktail data from the TheCocktailDB.com API
Controller	Carousel	JS	Pass cocktails data list to carousel
Controller	Search	JS	Pass cocktail data list to search
Controller	Details	JS	Pass cocktail data object to details UI
Controller	Modal	JS	Pass cocktail data object to modal UI

### Optimizations:

- Lazy loading: wait to load images for cocktails not yet in carousel view or search results view
- Truncate long cocktail names. Full name is visible when user navigates to details page
- Debounce search: only connect to search endpoint after 1 second of typing to ensure fast results but minimize connections to server
- Show return to top button when user scrolls more than device height
- Show error message when no results are found.
- Show 404 page when user tries to navigate to invalid details page