# STAC - Cocktail Nutrition

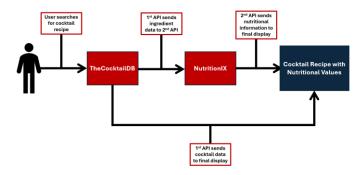
#### Introduction

The team at "STAC" have created a web application which gives users nutritional information regarding a wide range of cocktails. These range from classic favourites to more obscure lesser-known drinks. The idea was chosen because a gap was identified in similar applications that solely focus on food and soft drinks rather than alcoholic beverages.

The application functions by making use of two web APIs. The first is "TheCocktailDB", and the second one is "NutritionIX". "TheCocktailDB" provides a database of cocktails and their ingredients. "NutritionIX" provides a nutritional database for a large number of foods, many of which are used in the cocktail recipes.

## **Functionality**

The application takes a user input and pulls cocktail information from the first API, using the ingredients in the recipes to feed data into the second API, which uses this data to find nutritional information on the specific ingredients. The result is a cocktail recipe displaying the nutritional information for its ingredients as well as an estimate for the whole cocktail. As part of the implementation for this idea, STAC have a feature to search for a specific cocktail by its name as well as searching for cocktails that contain a specific ingredient.



### **Challenges**

A number of challenges were encountered by the team when trying to incorporate the two APIs. First, "TheCocktailDB" has many recipes using different units of measurement instead of one standard. To tackle this problem the team decided on the most common unit, which was an ounce, and converted all nutritional information for the ingredients to reflect what they would be at one ounce. Information is also provided to the user on common units of measurement used by "TheCocktailDB" and their equivalent values at one ounce. Because of this, the total nutritional values for cocktails only display an amount equivalent to one ounce per ingredient.

Another challenge encountered was the limit on API keys in place in the "NutritionIX" API. This API is limited to 200 calls per day which meant that multiple accounts had to be created to maximise the work the team could do in a day. The API produces a call for every ingredient that is loaded in the application further reducing the time it takes to use up the 200 calls. However, "NutritionIX" was the most complete API that the team encountered in terms of the amount of food and beverages in its database so it was decided that this API would be the one used.

### **Future Improvements**

Following the first release of the "Cocktail Nutrition" web application, the STAC team have outlined potential future improvements. First, the functionality to search for cocktails based on multiple ingredients would allow users to use the application to see cocktails they can make depending on ingredients they want to use. Another improvement would be to handle all different types of unit measurements in calculations, to allow the application to calculate more accurate nutritional information for each ingredient and consequently each cocktail. Finally, the possibility to incorporate a third API was discussed, whereby the specific nutritional information for beer could be displayed rather than just cocktails.