

Design Documentation: Bite Body

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Date:	October 21, 2019
Version:	1.0





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Executive Abstract

This Design Documentation serves as a preliminary document that allows us to refer to internally as a guide for the creation of our Bite Body web application. It also serves as a blueprint for our trusted stakeholders to view and understand as we approach the initial software development phase. The first component of this document consists of three activity diagrams which lay out the content flow that our three most important features have. The three features being *Creating a workout*, *Creating a meal plan*, and *Fitness Tracker*. The Architectural Site Map serves as a higher level view of the entire web application from the landing page to the different pages that house our different features. Architectural class diagrams of the backend and frontend are also contained within the document. These describe the structure of the system by showing the system's classes, attributes, and functions. Finally, a working prototype of our application will be shown off via screenshots for this document.

Behavior: Activity Diagrams

Diagram 1: Creating a workout plan

The *Create a workout plan* feature is locked behind the login page. Upon successful login, users are prompted to input user information to have a daily or weekly workout created. After the workout regimen is displayed you can either keep it for use/reference or opt to reroll and have a new one be created.

Figure 1: Creating a workout Plan

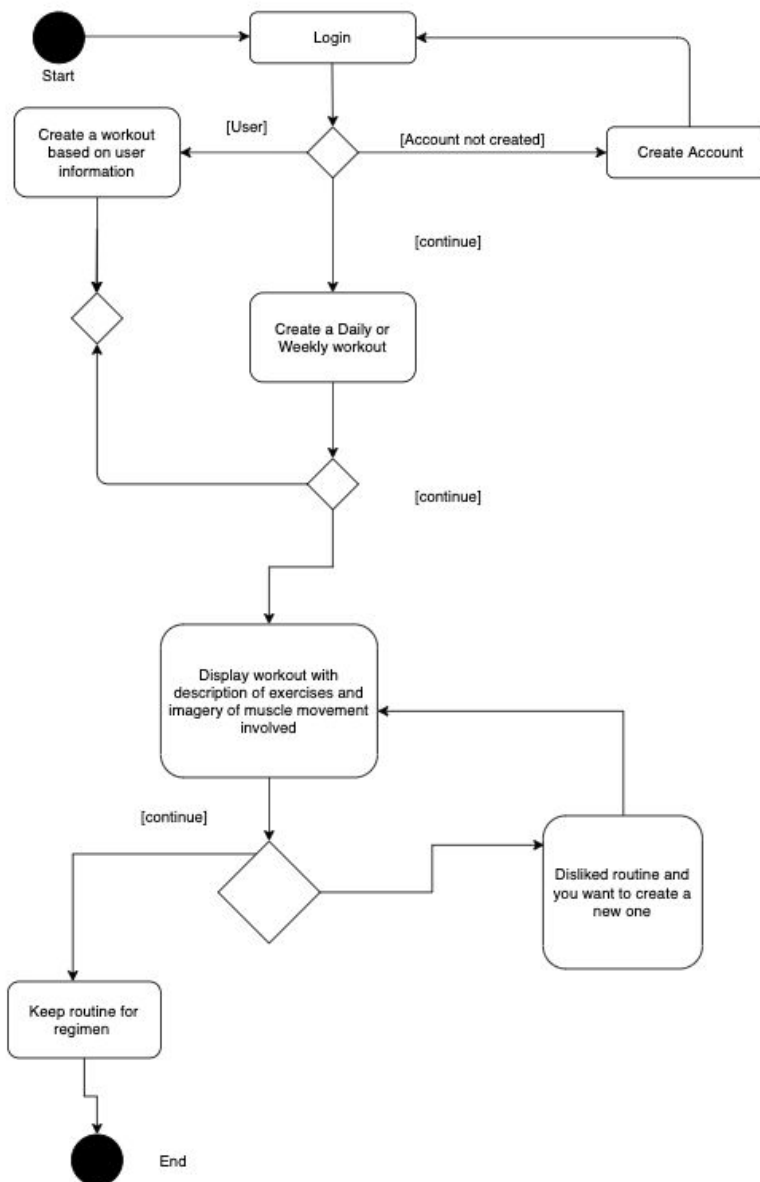


Diagram 2: Creating a meal plan

The *Create a meal plan* feature is locked behind the login page. Upon successful login, users can either create a meal manually or search the site for pre-made meals. Should the user opt to create one manually, they are then required to fill out plan parameters. An invalid input deters progression and valid input allows the user to confirm that the meal follows fitness goals. From there the user selects meal and adds the meal to meal plan calendar. Otherwise, should the user prefer a pre-made meal, the website will prompt for physical characteristic input. Invalid inputs are not accepted and valid inputs then leads to calendar addition and confirmation.

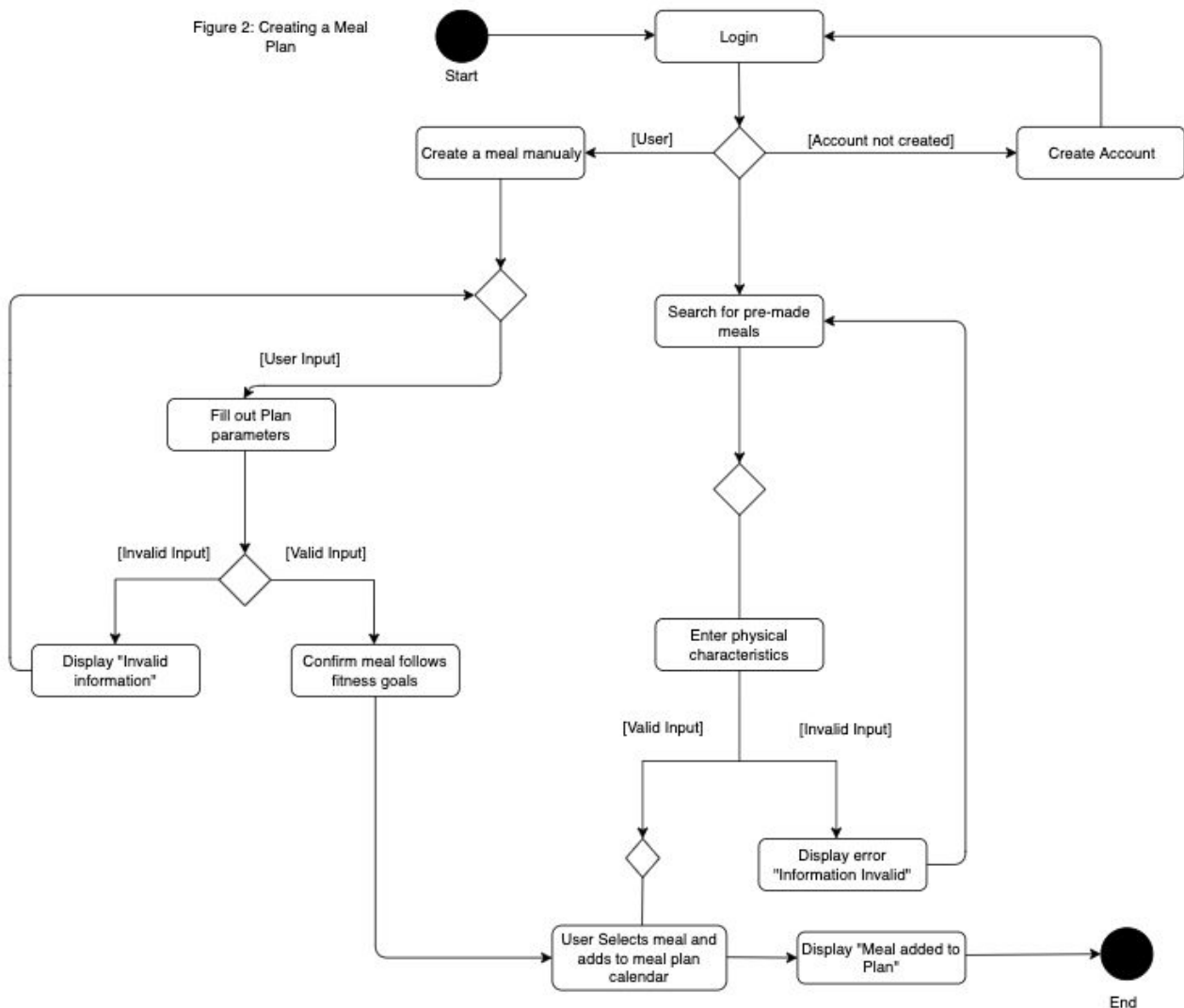
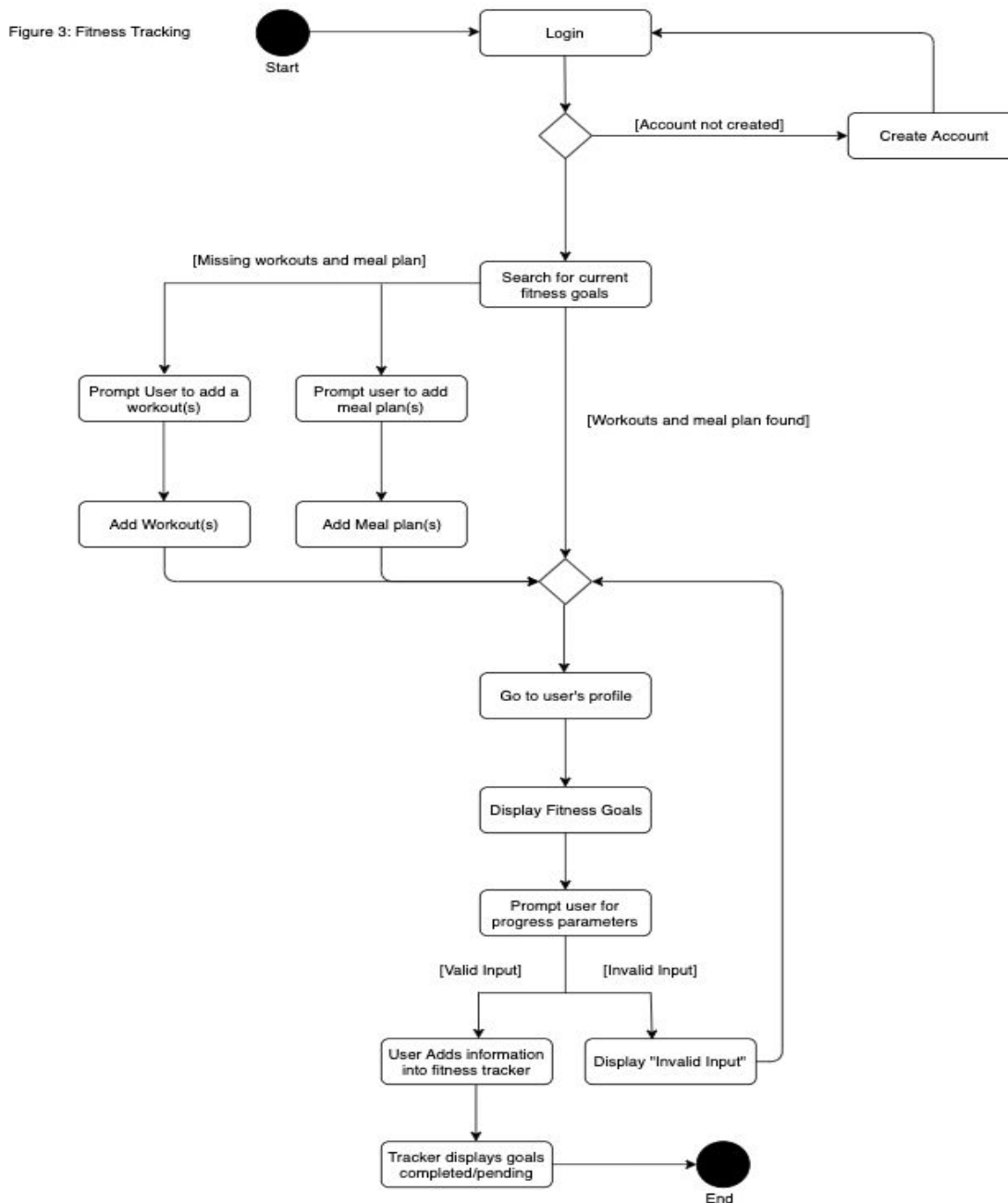


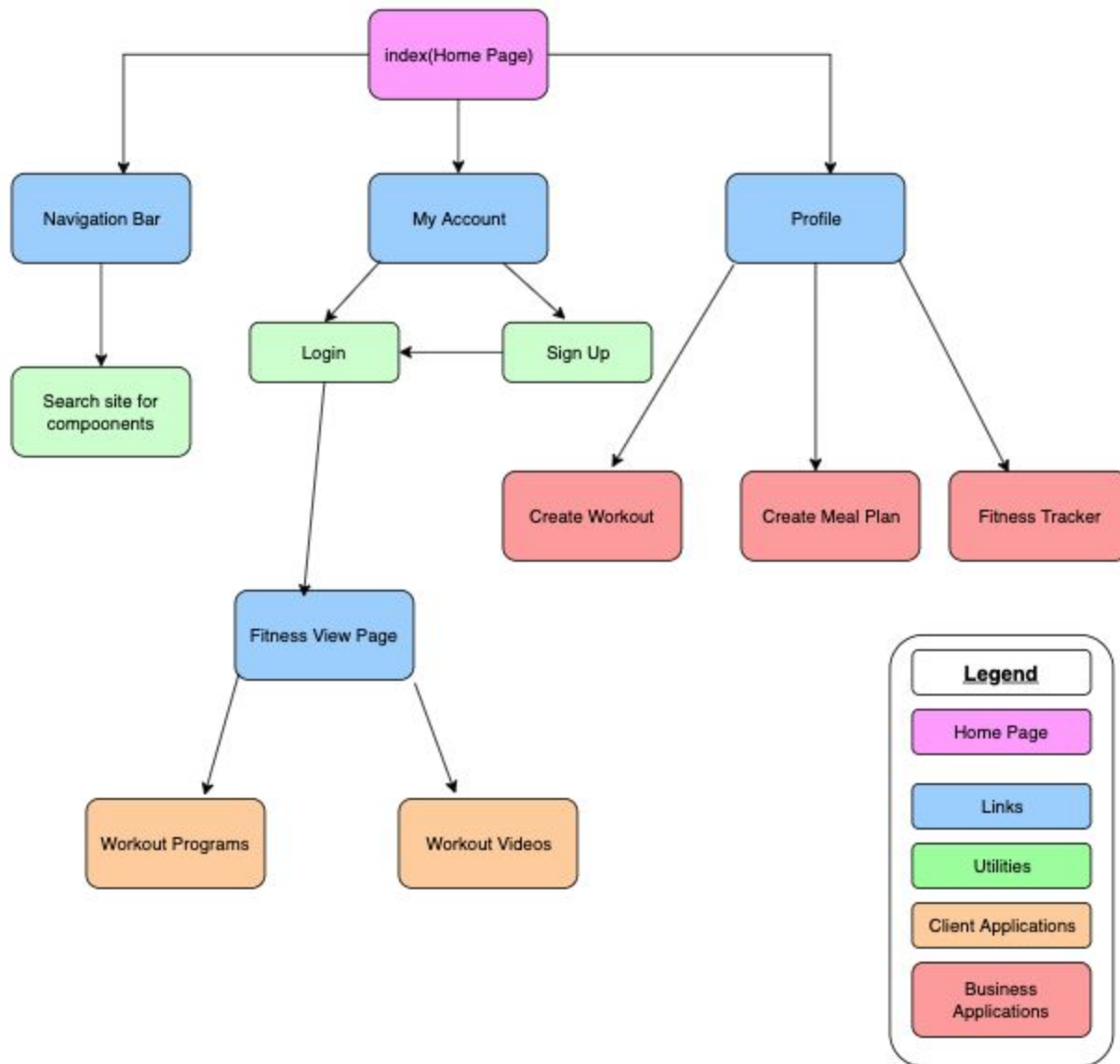
Diagram 3: Fitness Tracking

The *Fitness Tracking* feature is locked behind the login page. Upon successful login, any user can search for current fitness goals. Upon doing so they should either add workouts or meal plan should they be missing. If they are not missing then they go to user's profile, have their fitness goals displayed, and prompted for certain progress parameters that when entered correctly adds info into the tracker and has the goals that are completed/pending displayed.



Architectural Site Map

Our Architectural Site Map details a high level mapping of the web application and all the features that are accessed at certain junction points. The legend provides an easy way to determine which aspects of our application are links, utilities, client applications, and business applications. It is important to note that the site map, in its current iteration, only maps the three most important features outlined in our activity diagrams and does not outline the entirety of our application's features and functions.

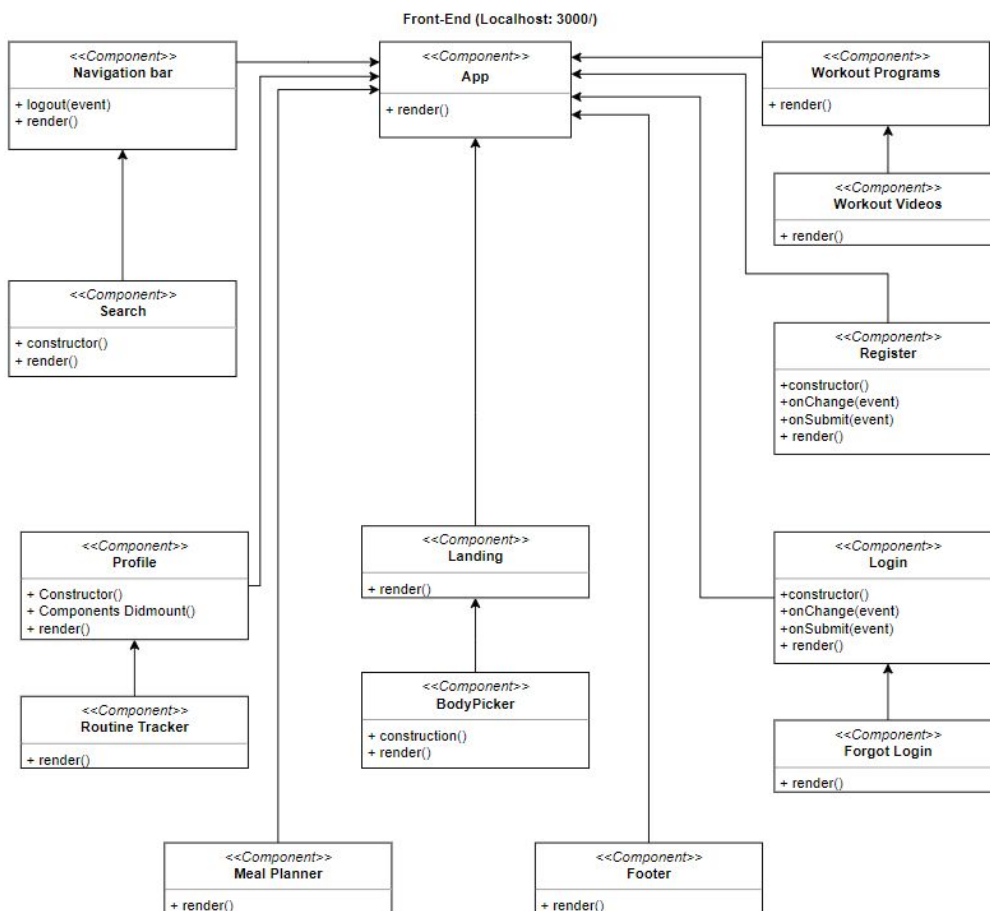


Architectural Class Diagrams

Frontend Diagram

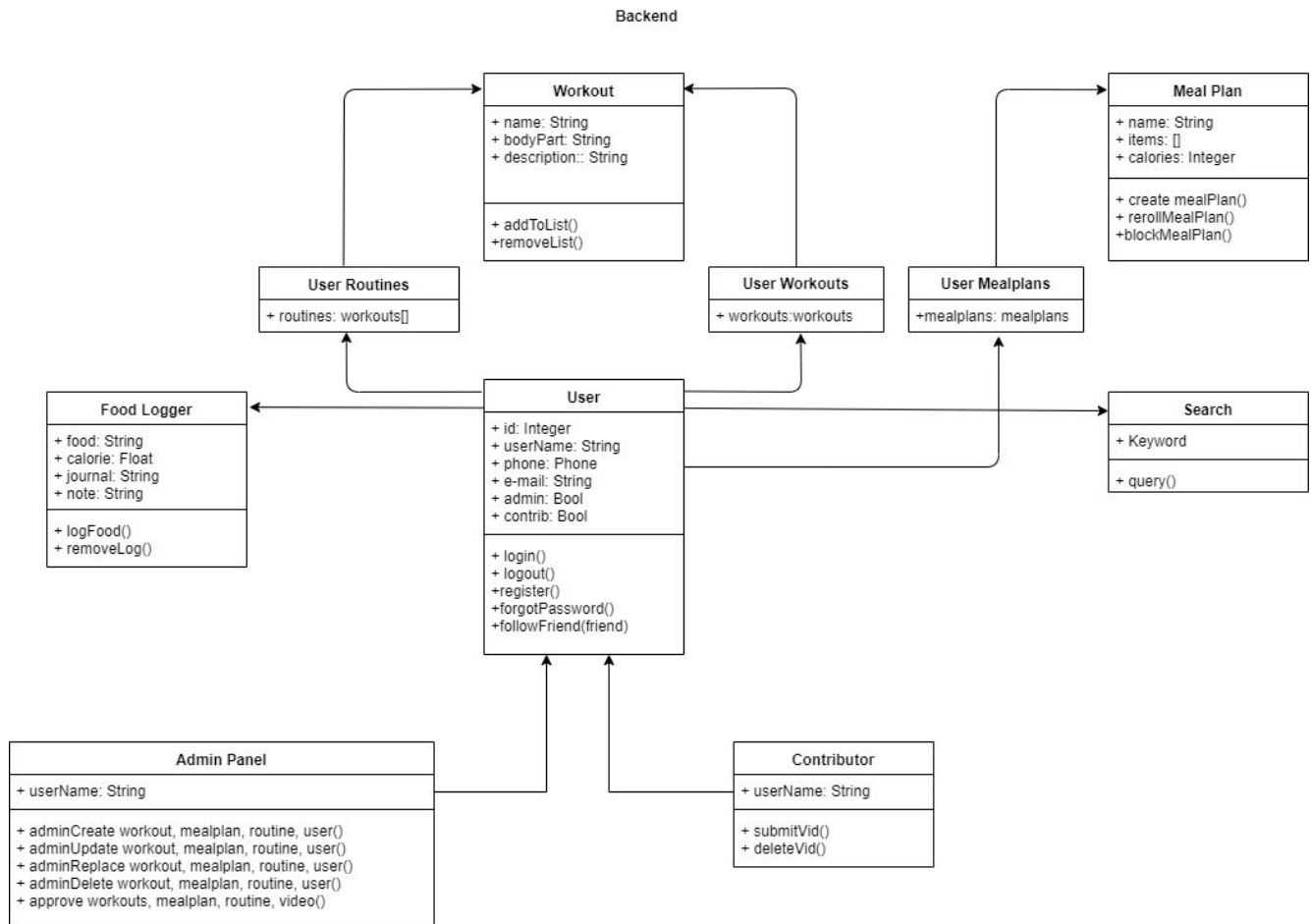
The frontend class diagram is using the React JavaScript framework to detail the classes that will be used and how they are interconnected with one another. React will be utilized solely as a view/client for our application. There will be no computing logic done in the frontend other than rendering components and keeping track of state for each of these components. In other words, the logic present at the frontend level is almost exclusively a visual effort.

The app class will handle rendering all of the components we have created. Given that we are using single page application technology, most classes are connected to the application component. Every component connects to the app because they are housed as subsets within the application itself.



Backend Diagram

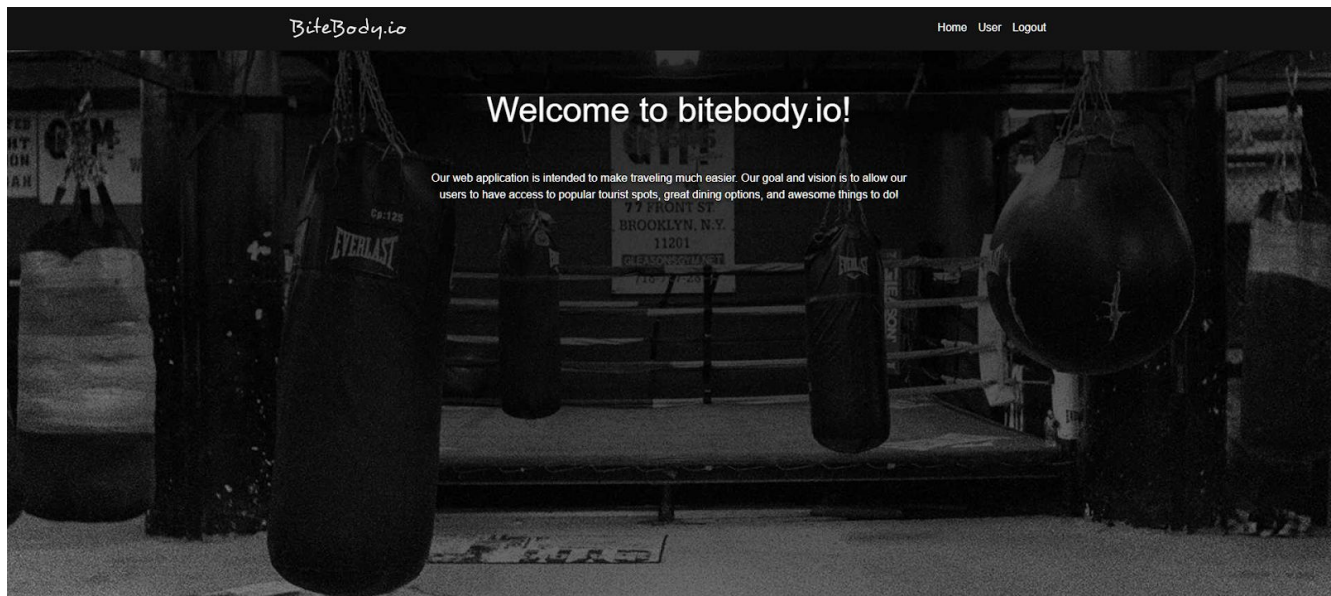
The backend class diagram is using the Flask Python framework to detail the classes that will be used and how they are interconnected with one another. It handles all the CRUD applications, connects to database, creates sequel queries for database, serializes/deserialized data, handles security such as password encryption, creates our objects our objects for frontend to render, handles meal prep logic, and searching for workouts.



Prototype

Screenshots

Landing Page



Profile Page

A screenshot of the BiteBody.io profile page. The page has a dark header with the logo "BiteBody.io" on the left and links "Home", "User", and "Logout" on the right. The main content area is white and titled "PROFILE" in large, bold, black letters. Below the title, there is a form with three rows, each with a label on the left and a value on the right:

Fist Name	David
Last Name	Ibarra
Email	ibarradavid97@aol.com

Sign-in Page

BiteBody.io

[Home](#) [Login](#) [Register](#)

Please sign in

Email address

Password

Sign in

Sign-up Page

BiteBody.io

[Home](#) [Login](#) [Register](#)

Register

First name

Last name

Email address

Password

Register!

Mobile View

