Team UH OH STINKY Milestone 1 Report

We reached our minimal goals very well. Our minimal goals were:

- The goal of the app is to provide an interface for the user to click a button and the app generates a random sandwich order.
- Users would be able to choose: The type of meat they would like (if any)
    - Whether it is a hot or cold sandwich
    - The type of bread they would like

Overall, we achieved a lot for this milestone. We divided our group into two sub-teams, Frontend and Backend. Frontend, consisting of Matt and Nate, design the UI that the users will interact with. Backend, consisting of Hanna and MJ, develops the backend that adds the generator and constraints functionality to the app.

For the Frontend portion of completing Milestone 1, the team added the main screen, which consists of the Generate button for designing a random sub, and a Preferences button for users to set constraints. The Generate button, upon tapped, shows a screen that lists random ingredients from several different Subway categories (like bread, proteins, vegetables, etc.). The Preferences button shows a screen that lets users select hot or cold subs, select a bread, and select multiple toppings from categories like Proteins, Cheese, Sauces, Vegetables, etc. The Generate function is then constrained to these selections. Overall, the team had few problems in designing this part, but setting on a good UI was really the only problem. Additionally, we ran into issues with Git, as several push/pulls added random text to the source files and also had inconsistent changes. In the coming milestone for the front end, we plan to implement all the views and add functionality. We also plan to make the UI more user friendly and visually appealing.

For the Backend portion of milestone 1, the team developed and implemented a robust API for the front end to pull from, allowing Diets and Ingredients to be represented by Swift classes, and then implementing a variety of adjustable parameters, such as the number of diets engaged in, the maximum calories desired, etc. A significant portion of this challenge actually involved finding the source of ingredient nutrition information on Subway's website, which they do not have in one centralized location; for instance, many protein and meat options, such as bologna and steak, do not have nutrition information on one of the primary nutrition charts the company provides, leading to confusion. Nonetheless, we persisted, and have hardcoded virtually all of the Subway ingredients into our app. This will give users of our app a great variety of subs to choose from, while the app itself will have simple, robust code on the backend ensuring successful delivery of recommendations and information to the customer. In the future, we would like to add more parameters and dietary options to adjust, such as providing options for limiting sodium intake, fat intake, sugar intake, and cholesterol intake.