Team UH OH STINKY Milestone 2 Report

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

Minimal Goals

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

Stretch Goals

In addition to the minimal goals, we will allow the user to specify:

- A minimum and maximum number of calories
- Diets like Vegan, Vegetarian, Pescatarian, Lactose Intolerance, Gluten-Free, Paleo, Keto, Mediterranean, Kosher, Halal
- Allergies to common substances
- Fine tune random orders so that they cater towards a users likings

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 started to add more functionality and views that correspond to our backend code. We implemented the home screen users are greeted with when they open the app. At this screen, users are able to press a button that says "Generate," in which it brings them to another view that generates a completely random sub. There is another button on the home screen that says "Preferences." This button brings the user to a view that allows the user to make the sub less random. For example, if the user knows for sure they want a sub with cheddar cheese and italian bread, they have the option to guarantee those 2 ingredients on their sub, and still have the rest of the ingredients be randomly generated. In this view, they have many other options and at the bottom of the view, there is the same generate button as on the home screen, now with just less randomization. For the final milestone, we plan to make the UI appealing as well as implement an allergy/diet function in preferences or on the homepage to cater to people's needs. We also plan to implement a max calories section for the user to input if they so choose.

For the Backend portion of milestone 2, our team updated our API to accommodate developments on the front end, including inclusion of mandatory ingredients the user could specify. This required updating our code for the randomize function significantly, including changing the user contract so that these mandatory ingredients could be passed explicitly. We

also novelly added an ingredients list for "Sub temperature," allowing us to use the same mechanisms we had previously used for ingredient randomization or specification to also declare whether the sub was hot or cold; this massively saved on the development time otherwise required to implement this feature, and demonstrates the flexibility and utility of our backend API. In future, the backend developers plan to implement a new functionality which will enable the user to specify how many of a type of ingredient to add to the sub, randomly or otherwise. For instance, they can specify whether they want max 2 proteins, max 1 protein, no proteins, etc. This will involve making modifications to the API which will again increase the flexibility of our application.