### **Our Understanding of the App:**

\*\*\*Starbucks problem statement: Orders coming in for very complex drinks is making the ordering process complicated for employees and customers. People would like to save very special orders. We want to make this process go by easier.

Prototype a proof of concept for people to improve upon the software, When the project is done it is possible that it would be sent to other developers to continue pursuing.

The app is designed to allow users to submit recipes for drinks so that other users can access them and try something new. The drinks that they find on the app can then be sent to employees on the app in the form of the Starbucks ordering system, so that they can be easily accessible for the customer to order.

1. How would the UI look like? what is included? (Should we draw some prototypes and let the client describe more, make adjustment?)

Have a customer side and an employee side to the app:

Customer side: order a drink that uses a submitted name by other users, use the app to reference the ingredients, can send the recipe to a Starbucks employee for them to make

Employee side: get an order that specifies the ingredients to the employee with the drink name, also can submit drink ideas

2. What kind of software do you imagine this being? A mobile app, website extension or accessory, etc.? Which operating system?

Mobile app is the target.

<u>Need more information from the client</u> for whether it will be an IOS or Android app? We threw around the idea of creating a web app so that the application is easily portable.

Develop for Android AND IOS to meet all markets (web app should be fine since this is just a proof of concept)

- \*\*\*Brian confirmed that a webapp would work just fine for what we're trying to do
- 3. When first reading the "recipe" of the drink, what concise way do you want the recipe ordered? Ingredients then instructions, ingredients as we read the instructions, instructions then ingredients?

This may be based on the structure of Starbucks orders; language can vary based on the user's preferences. Maybe have settings to change the language used to show the recipe, <u>need more</u> information from the client.

- \*\*\* By the next meeting we will show Brian what we have, and he will give us the exact amount we will need so we have enough information for the app to be functional
- 4. If the answer for previous question is based on the Starbucks order's structure, do you have any samples for the language of your ordering system so we can replicate it?

Parker said they should be able to provide examples, need to clarify with the clients.

- \*\*\* By the next meeting we will show Brian what we have, and he will give us the exact amount we will need so we have enough information for the app to be functional
- \*\*\*JSON Pattern/Order sequence will be provided once we make more progress, i.e. order I.D's, employee/customer I.D's
- 5. Is voice recognition one of the key components of this software?

It is optional but would preferably be included. Link to an existing software if we end up implementing.

6. What kind of design do you want for this software? Modern, minimal, asymmetric, abstract, bright, neutral, seasonal, etc.?

Sleek, modern single page, clean info system, few clicks as possible, similar to the Starbucks app UI.

This needs more information from the client.

Whatever we decide to use for the design, make sure it is HAPPY and friendly

\*\*\*Brian liked the idea of keeping the same style as the Starbucks app

7. What is the SKU level for ingredients?

Plan to potentially use an example stock system of our own, (assume this until we are or are not provided a database environment)

Ask other clients if they have a database for us to use for inventory.

- \*\*\*By the next meeting we will show Brian what we have, and he will give us the exact amount we will need so we have enough information for the app to be functional
- 8. Based on the description, it sounds like you want the recipe to be read/written out in different styles. How is the style determined? (Whether it's the language of the ordering system, a more generic recipe, or the natural language at the pace of the barista)

This may need to be based on how Starbucks operates things, sounds like style will be based on the user's choice. Employee side will mostly use language of the ordering system for ease of use on their end.

Focus is the customer side: Name of the drink, ingredients

Optional focus: Nutritional info, image of drink, etc.

9. When you mention GPT, are you talking about GPT-3, the language prediction model?

Need more information from the client on how they would want GPT used, if at all.

Bob says avoid GPT-3 and use GPT-2 because Google has a good framework that is free. GPT-3 has a higher level of accuracy, to use though, you need permission from the open Al foundation.

Use it in way so that it seems Starbucks is catering to what the customer wants

\*\*\*As far as deciding how to implement AI, OUR ROLE IS TO ACT AS LEADS, we come back with a solution and see if the client would like to work more with it or take a different direction

## **KEY FEATURES**

- Customer can look up (search/tag) catalog of drinks (name, ingredients, image)
- Have a database with the secret/menu of drinks from Starbucks
- Allow customers to make orders and make accounts
- (optional) Reward system to encourage users to submit recipes
- Automatically offer a certain artist drink in the app (this way we can train a model to provide accurate recommendations to a given customer)
- \*\*\*make it EASIER for employees to be able to make special orders and for customers to order them

#### Clients:

Brian Ames: Main client/Customer (Starbucks Sponsor, nicest human ever) Senior in data science team, met Bob Rapp at a conference (Fav food: white chocolate mocha)

Bob Rapp: Communicator to Central and us (He is mostly here to say "go team, let's have a pizza") (Fav food: fetta wrap, dark brewed coffee steamed half and half grande in a venti)

Parker Jones: Tech Guy, works under Bob from Central (Fav food: Broccoli)

## **Special Notes:**

Last year's students worked on Barista.ai (a project using GPT-2), did project using Google

Tip for meeting with Ames: Provide a sequence of how the software would run (go through each part of operating the app)

GOAL: Have this project be something that we can use as a valuable reference with big names attached to it (make it something difficult to do)

- \*\*\*Brian liked the idea of connecting people through the app like a social media app (sharing drinks etc.)
- \*\*\*Brian would like weekly meetings to keep track of progress and show off what we've come up with it (Fridays at 2:30pm)
- \*\*\*Brian proposed us creating a presentation to a group in Starbucks prior to the previous meeting to really show off what we've accomplished (March 3<sup>rd</sup>)
- \*\*\*^^ This would put us needing to finish the app around February 15<sup>th</sup>-25<sup>th</sup> to be able to prepare a presentation
- \*\*\*The idea is to get a win and be fully engaged. The goal is to be creative and expressive.
- \*\*\*HYPERPERSONALIZATION, make the app seem like it knows the user personally
- \*\*\*WORK WITHIN OUR OWN SCOPE, we have the freedom to implement what we think is possible. If we need more, ask Brian

\*\*\*It is our job to scope it, we can provide a working database without it being fully loaded with contents

\*\*\*final presentation for our class is March 8th

# Side Notes (Don't pertain to the project)

Parker/Bob working for Ford with 1500 job openings for developers (side note)

(optional) Have the software be able to be some kind of attachment that can work with Ford (for a good recommendation)

Tip: put up a cheap website (on Google or something) pretending we are a company with crazy titles so we can point to it when needed as a reference for senior project

Bob likes a Grande steamed half and half drink