PROG 03: Recipe Assistant - Overview

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Team Roles:

- Web page (Web UI 3 people): Sharon, Zixuan, Jennifer
- Voice (Amazon DB 4 people): Lucy, Victor, Sharon, Zixuan

Web UI Requirements

- A home page with title, a background image, and a table of recipes. Include icons for:
 - Adding a recipe
 - Searching for recipes
 - Settings
- Each item in the table of recipes should include:
 - Small image of the dish
 - Dish name
 - o Icon to access ingredient list
 - Icon to access recipe directions
- Recipe pages, each of which should include:
 - An image of the dish
 - o Ingredient list
 - Preparation directions
 - o Navigation icons: home, back, search
- Ingredient list page, optimized for a small screen (mobile device):
 - List of ingredients
- Add recipe page. Should include:
 - Text box for title
 - Text box for ingredients (one per line)
 - Text box for preparation steps (one per line)
 - Image upload dialog

This assignment again uses T-shaped design. You do not need to implement the search or settings features. You should implement recipe selection, recipe pages, add recipe and ingredient list pages.

Recipes should include Recipe name, image, ingredient list and preparation directions.

Voice UI

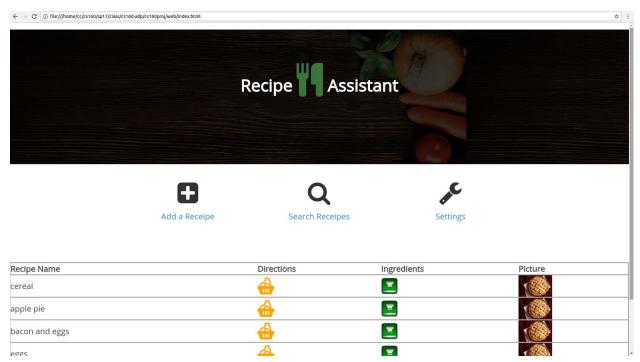
The voice UI should implement recipe retrieval, ingredient listing, and preparation directions. Recipes can be accessed by exact name. Once in a recipe, you can ask for a list of ingredients, or the recipe directions.

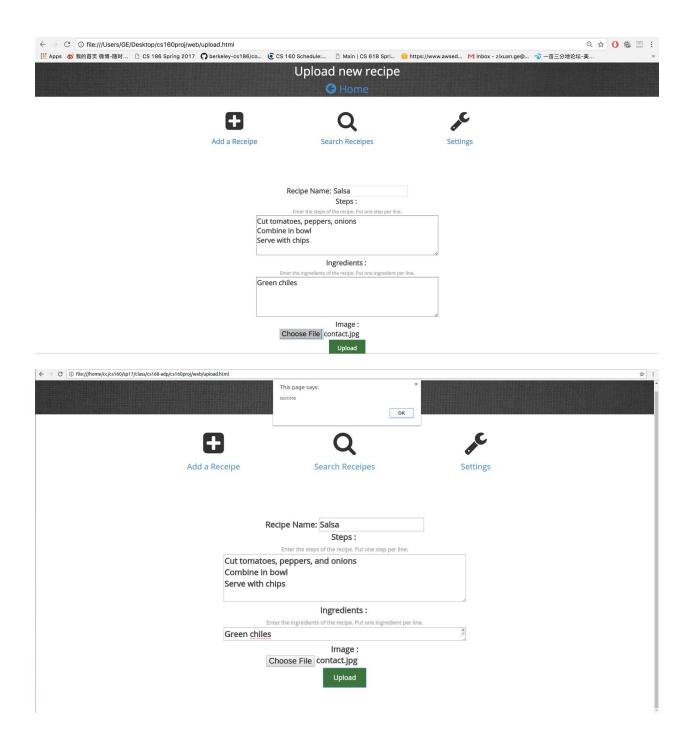
Overview of app:

Our app, "Recipe Assistant" for aspiring home cooks, comprises of two components: a web UI optimized for computers/mobile devices, and a voice UI guided through Alexa. Using the web UI, people are able to easily enter and browse recipes they would like to cook. Our optimized interface makes it fun to look at sample dish images, ingredients, and cooking instructions. The user is also able to enter their own recipes into the app as a personalization feature. The voice UI intuitively handles recipe retrieval, ingredient listing, and preparation directions. With simple commands, the user is able to begin searching/cooking a particular dish and navigate across ingredients or steps freely. At any time, the home cook can end the process, or start again (repeat) to iron out potential mistakes.

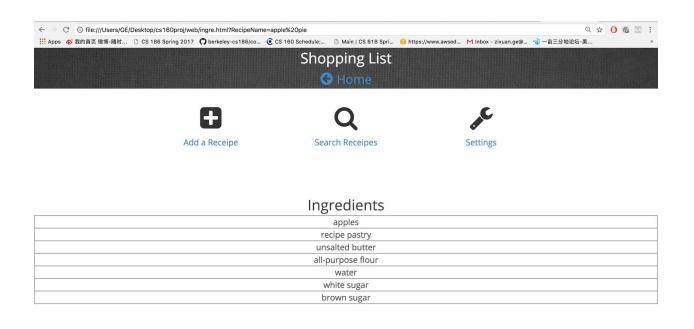
Screenshots:

Web app main page, and the steps to add a recipe:

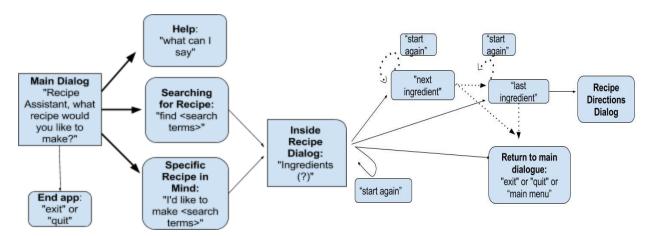


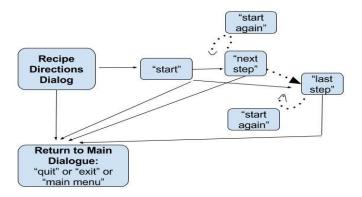


• Shopping list page:



Flowchart of Voice UI:





Sample Scenarios:

• Two sample scenarios (text only) of how the app can be used. Try to go beyond the sample utterances listed above to include other responses that users might give.

Scenario 1

User: "I want to make cereal"

Alexa: "I have successfully found the recipe of cereal. You can say ingredient to read the next ingredient in the list. Or say step to read the next step in the list."

User: "Next ingredient"

Alexa:"Cereal"

User: "Next ingredient"

Alexa: "Milk. You have got all the ingredients of this recipe. Move on to recipe steps by

saying step." User: "Step"

Alexa: "Pour cereal into bowl"

User: "Step"

Alexa: "Pour milk into bowl"

User: "Step"

Alexa: "Eat. You have finished this recipe. Please restart or quit."

User: "Restart"

Alexa: "Pour cereal into bowl"

Scenario 2

User: "what can i say"

Alexa: "You can say I want to make apple pie. Then ask for next ingredient. After ingredients, ask for next step. You can always restart the process or quit. What do you want to make today?"

User: "i'd like to make bacon and eggs"

Alexa: "I have successfully found the recipe of bacon and eggs"

User: "Next ingredient"

Alexa: "Bacon"

User: "Ingredient"

Alexa: "Eggs. you have got all the ingredients of this recipe. Move on to recipe"

User: "Read recipe"

Alexa: "Crack Eggs"

User: "last step"

Alexa:"Cook 3 mins. you are done with this recipe. please start over or quit"

User: "main menu"

Alexa: ". you are done with this recipe."

(new cycle begins...)

User: "i'd like to make a banana."

Alexa: "I have successfully found the recipe of banana."

Submit Zip file:

- The pdf report above.
- Two voice recordings (.wav or .mp3 or .mp4) of a user's interaction with the system.
 Create at least two scenarios to demonstrate the features of the system for these voice recordings. They can be the same as the text given in the pdf report.
- Your Alexa source code file (node.js or Jython or Java file)
- Your intent schema (json)
- Your sample utterances file (.txt)
- Any custom slot types
- Source code for your web app