

User Interface design  
Programming 3: Recipe Assistant  
Group 22

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## Programming 3

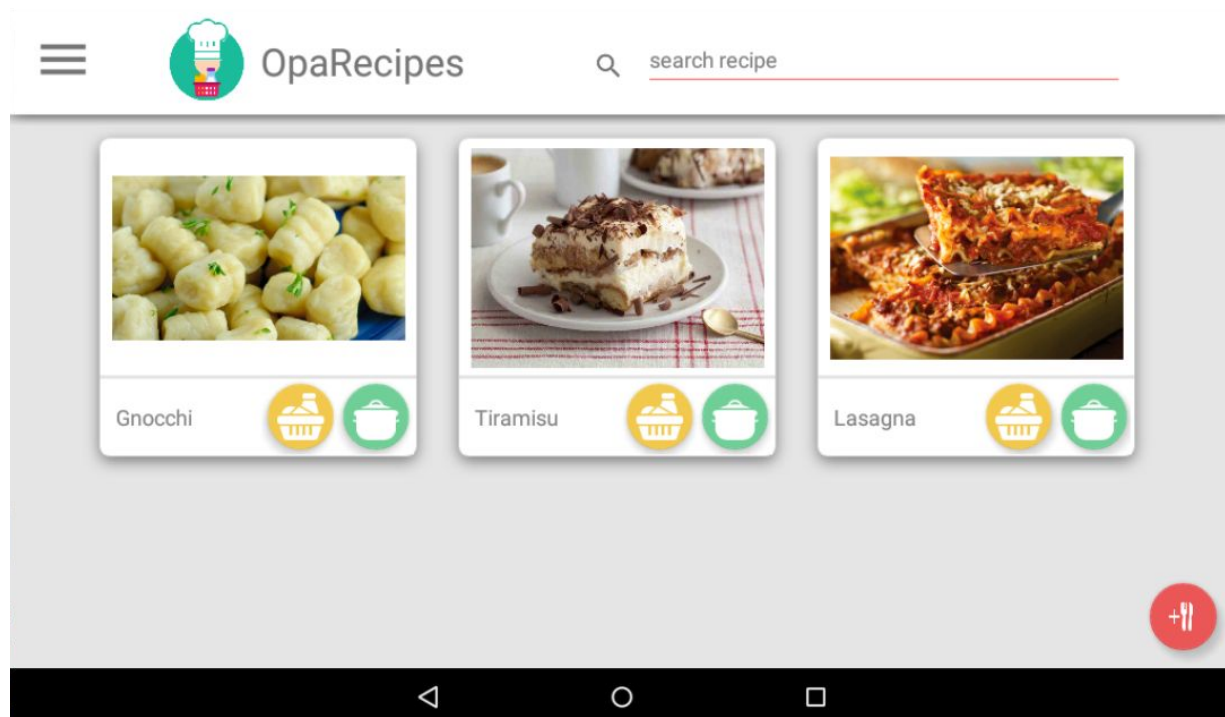
### Application overview

This application provides a voice-enabled cooking assistant, using Alexa, that lists ingredients and gives the user preparation directions. The user can view or modify existing recipes and add new recipes through our Android application that shares a common database with the Alexa app so that their recipes are always up to date.

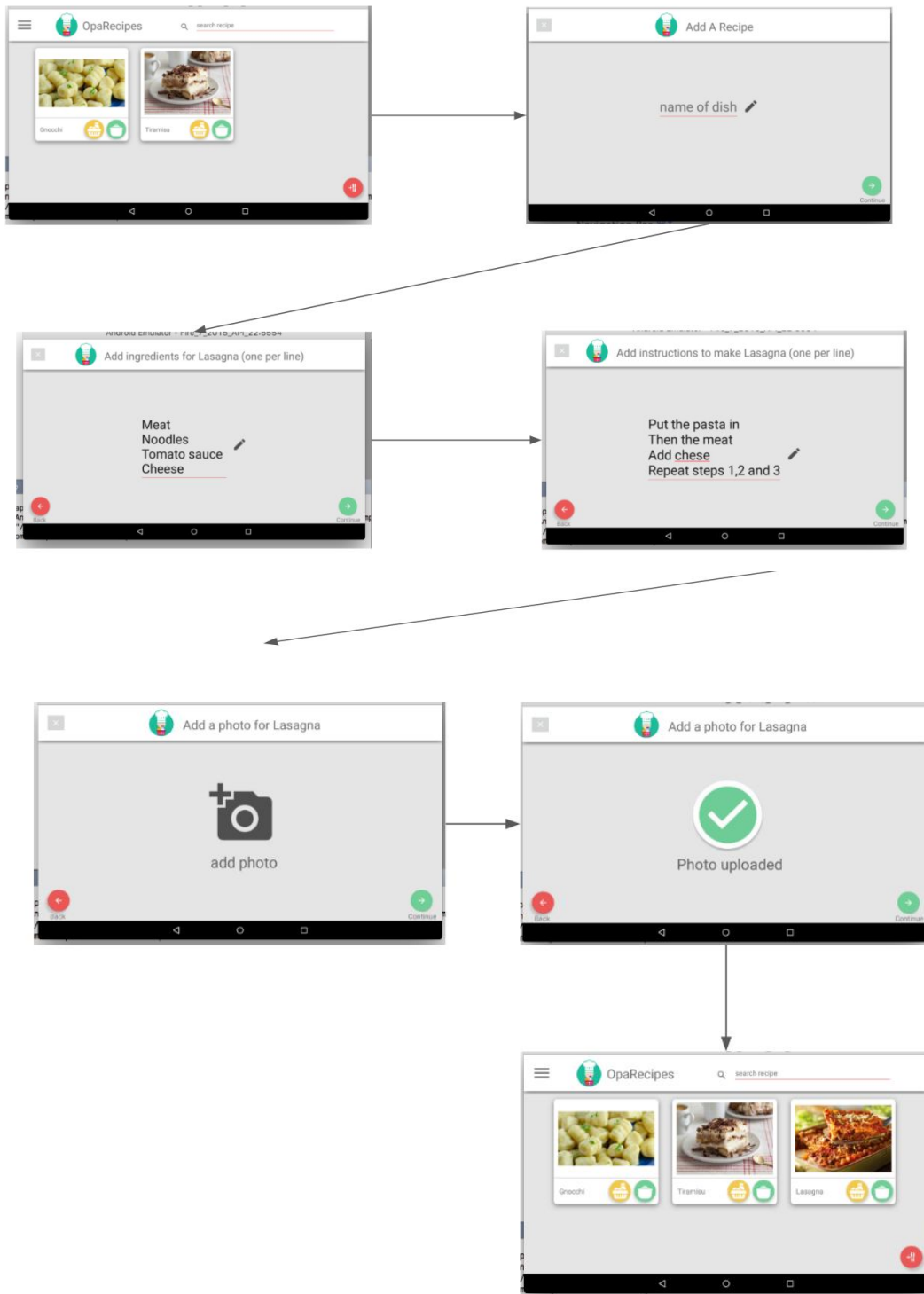
The user inputs recipes through the android application by inserting the dish name, ingredients, cooking instructions and a picture from the phone gallery. Once the food has been added, the user can view all dishes in the main menu. If the user desires they can click on the yellow ingredients button and view the list of item ingredients. If the user clicks on the green steps button, they'll be able to read the steps to prepare the item.

In the user's home, they can interact with Alexa to ask for cooking instructions. They simply need to say the dish they want information for and Alexa can walk them through ingredients or steps. The full outline of all possible interactions is diagrammed on the third page of this document.

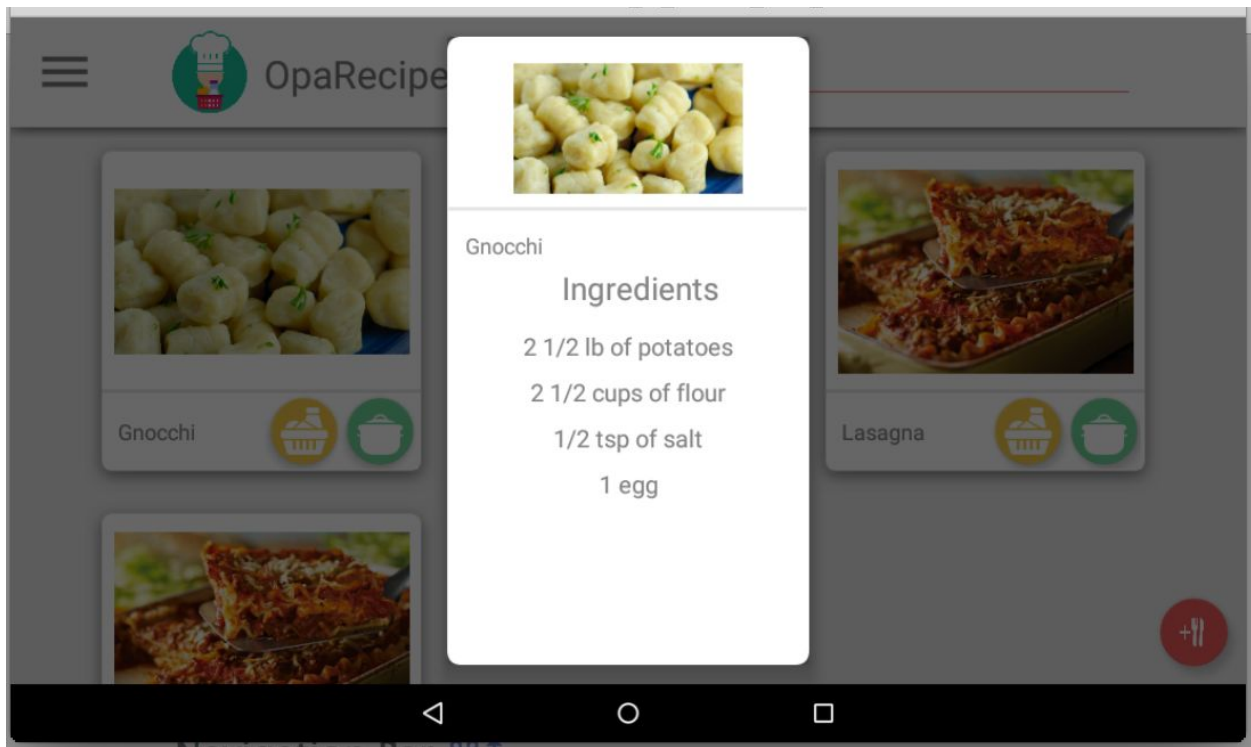
### Main page



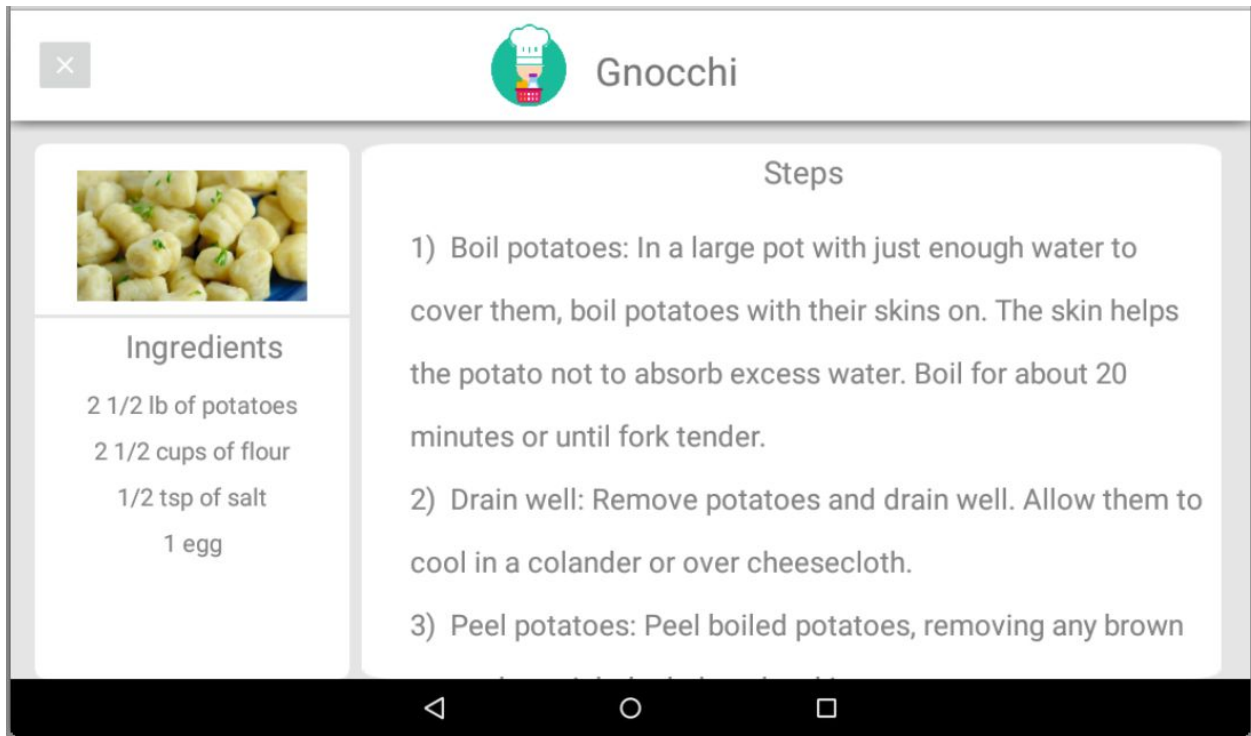
## Adding a Recipe



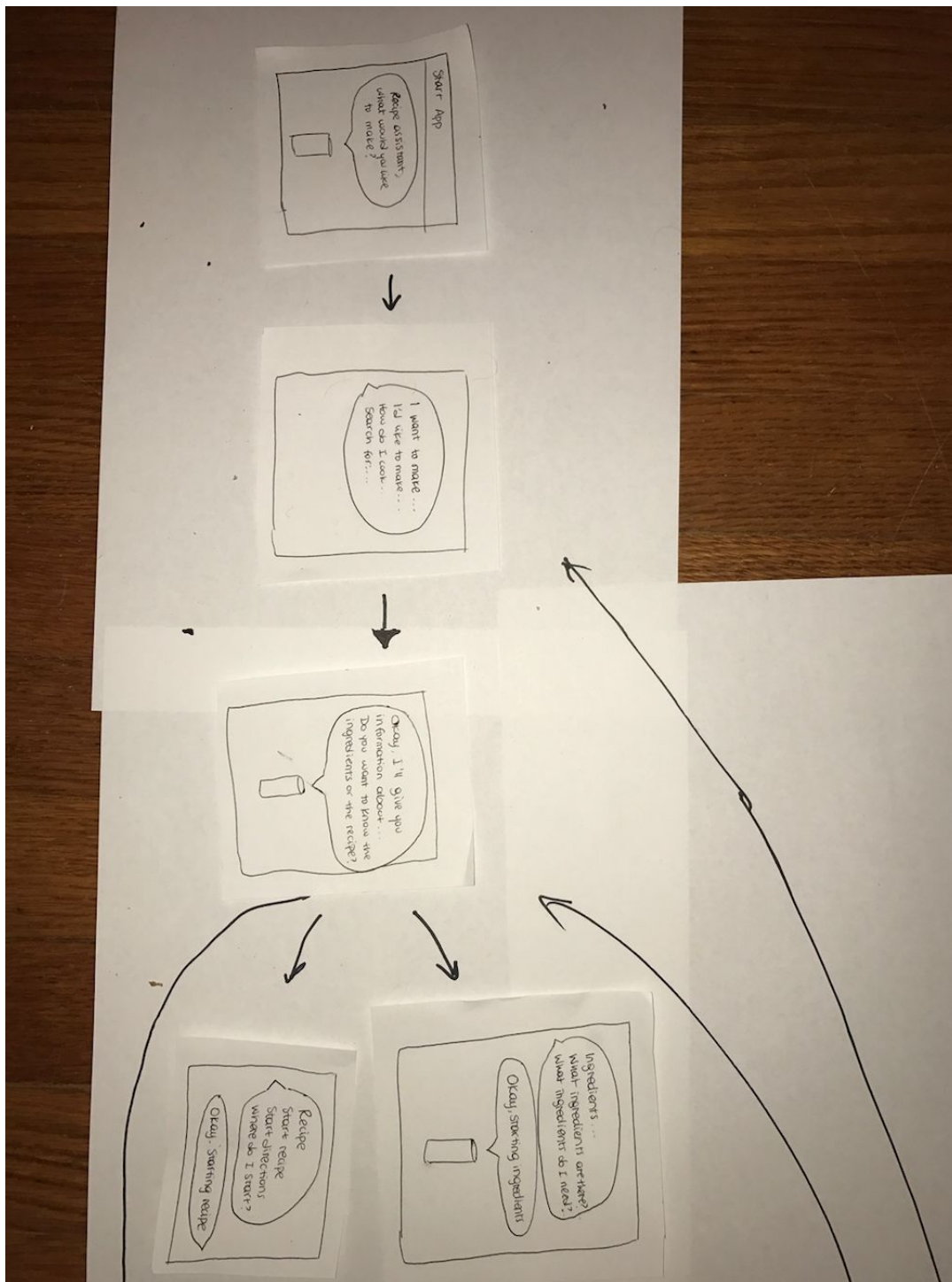
## Shopping list page

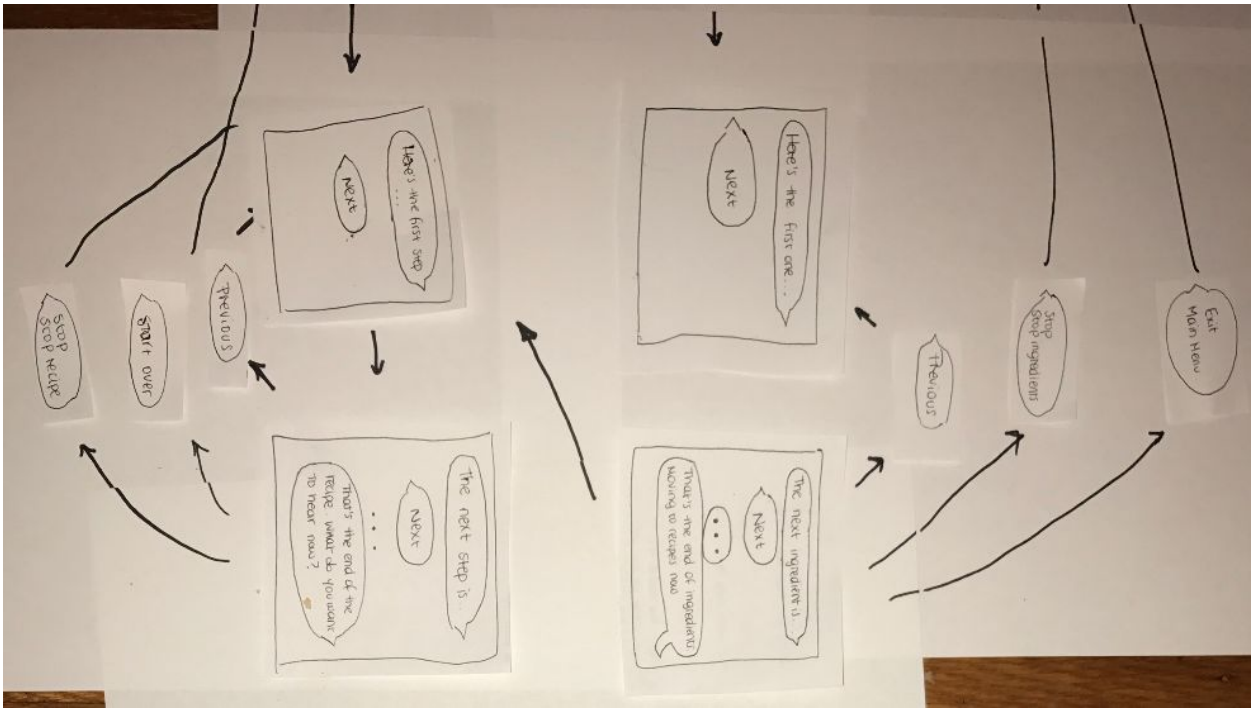


## Steps page



Flow chart for Voice UI: The following two pictures fit together to outline the complete voice interaction.





## Sample utterances

### Sample 1

Alexa: Recipe assistant what would you like to make?

User: How do I cook Gnocci?

Alexa: Okay. I'll give you information about Gnocci. Do you want to know ingredients or the recipe?

User: What ingredients are there?

Alexa: Here's the first one potatoes

User: Next

...

User: stop ingredients.

Alexa: Okay I'm back at the main menu

### Sample 2

Alexa: Recipe assistant what would you like to make?

User: How do I cook Gnocci?

Alexa: Okay. I'll give you information about Gnocci. Do you want to know ingredients or the recipe?

User: What ingredients are there?

Alexa: Here's the first one potatoes

User: Next

Alexa: Fluor

User: Previous

Alexa: Potatoes

User: Next

...

Alexa: That's the end of ingredients. Moving to recipes now. Here's the first step: boil the potatoes

User: Next

...

Alexa: That's the end of the recipe. What do you want to hear now?