**Overview:**

For this project, we created a web UI and VUI that are both linked to a DynamoDB. User is able to input the recipe they want with the information of recipe name, ingredients, Directions and recipe image through the web UI. After inputting the information, User will be able to access the information through web UI and Voice UI. The webUI will display all the previous information in a formatted way and the Voice UI will read out the ingredient lists and direction lists one by one to give instructions to users.

Flow Chart for VUI:
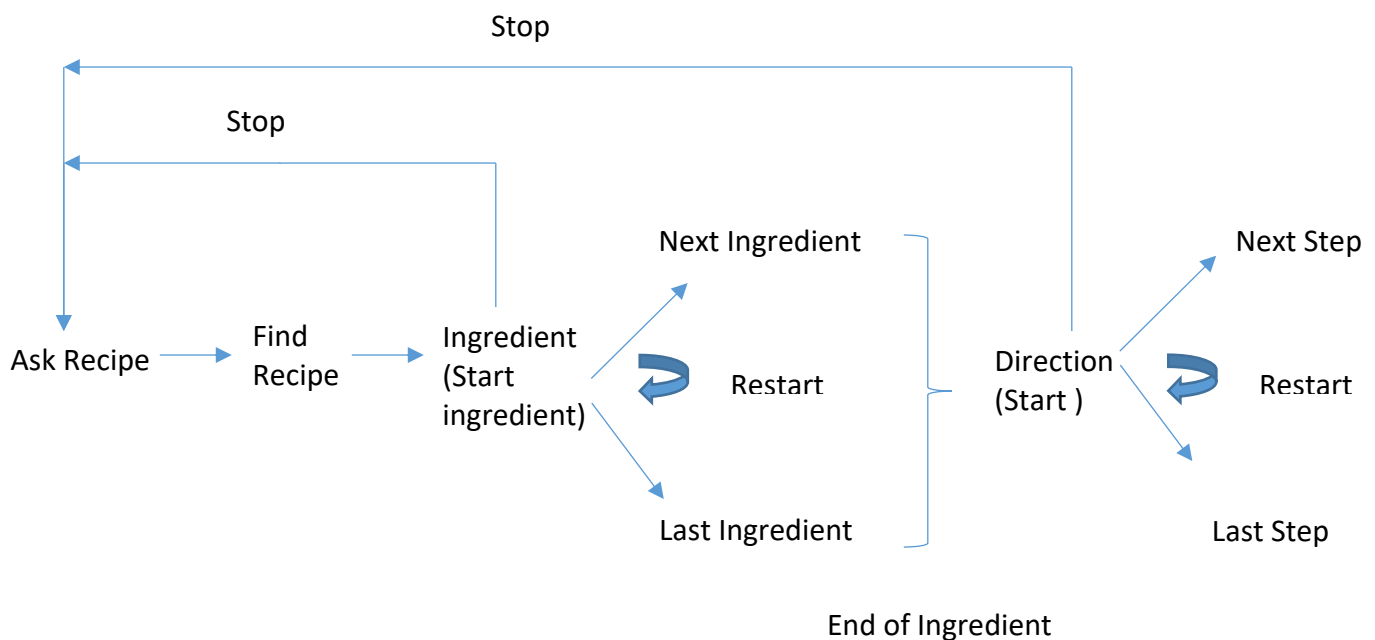
Sample Scenario:

Scenario 1:

User is cooking egg and bacon; his hands are both occupied. He ask alexa for instruction of the recipe he wanted to make.

Q: Alexa, recipe;

R: Recipe here what can I do for you

Q: find egg and bacon

R: Recipe found, you can check Ingredients by asking ingredient

Q: ingredient

R: your first ingredient is: egg

Q: next ingredient?

R your next ingredient is : bacon

Q: next ingredient?

R: you have reached the end of the ingredient list, say start to read the recipe.

Q:Start
R: the first step is: scramble the egg
Q: what do I do next
R: fry the bacon
Q:what is the last step again?
R: the previous step is scramble the egg.
…

Scenario 2:
User is very new to the alexa VUI, he is exploring ways to use this application.
Q: Alexa, recipe;
R: Recipe here what can I do for you
Q: What can I say?
R: To access your recipe, say find plus your recipe name or say "exit" to quit the recipe
Q: great! Find egg and bacon
R: Recipe found, you can check Ingredients by asking ingredient
Q: ingredient
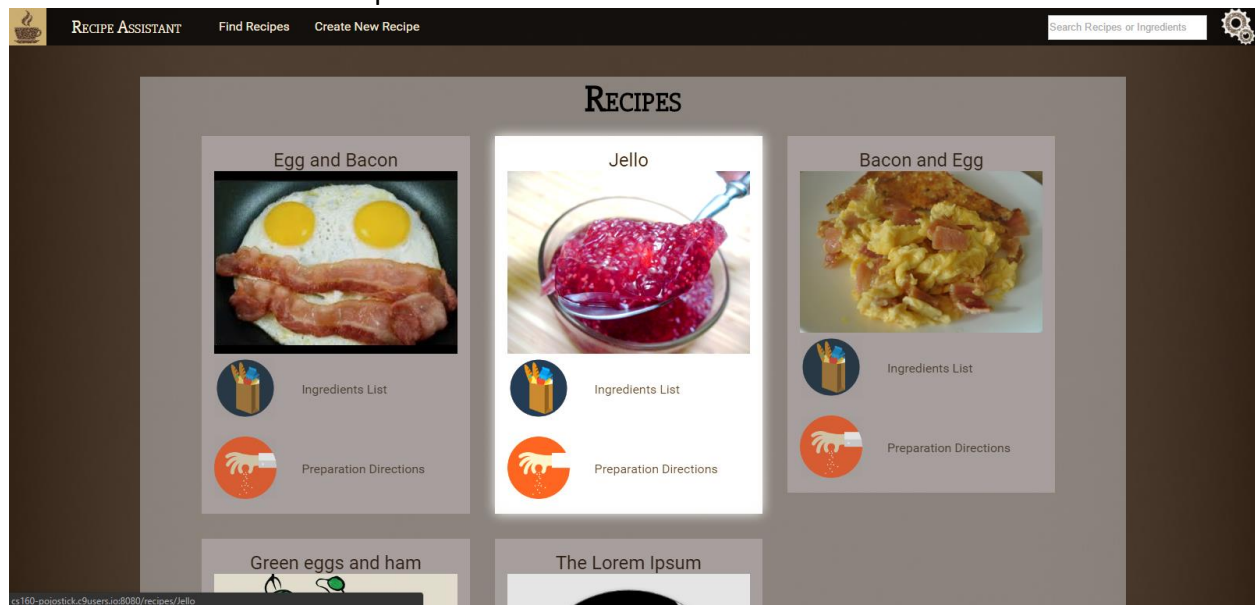R:your first ingredient is "egg"
Q: what can I say?
R: to restart the ingredient list, say restart, To advance in ingredient list, say next ingredient, to go back in ingredient list, say last ingredinet, to exit to main menu, say stop','List of help command

Web App:
Here is the web app's home page when visiting it from the base url.
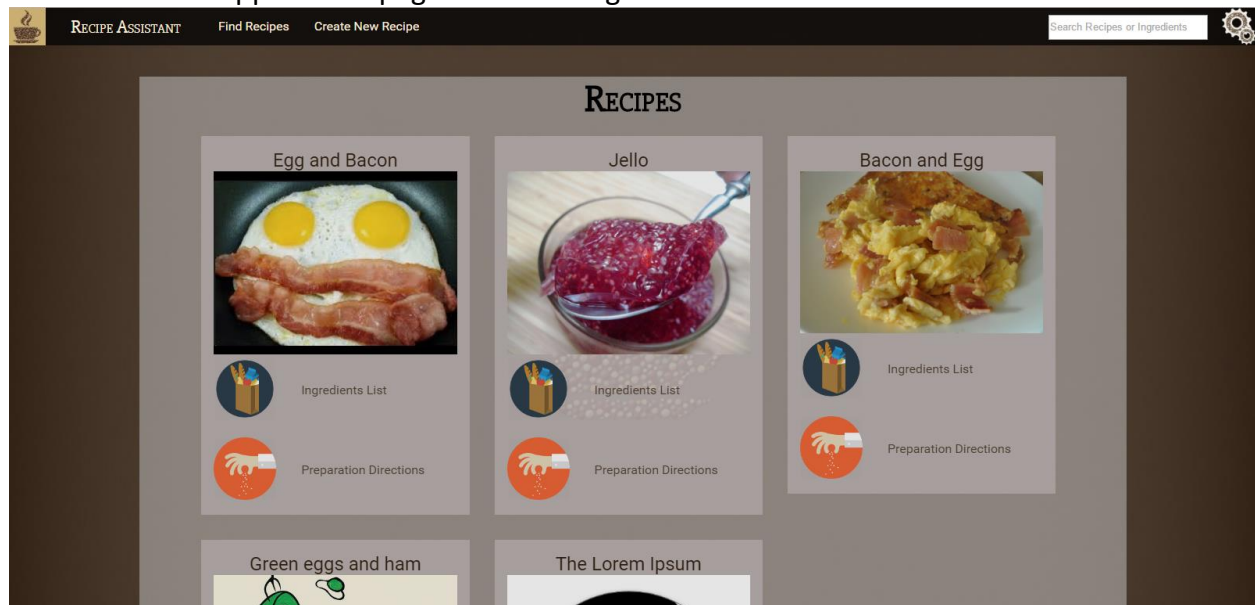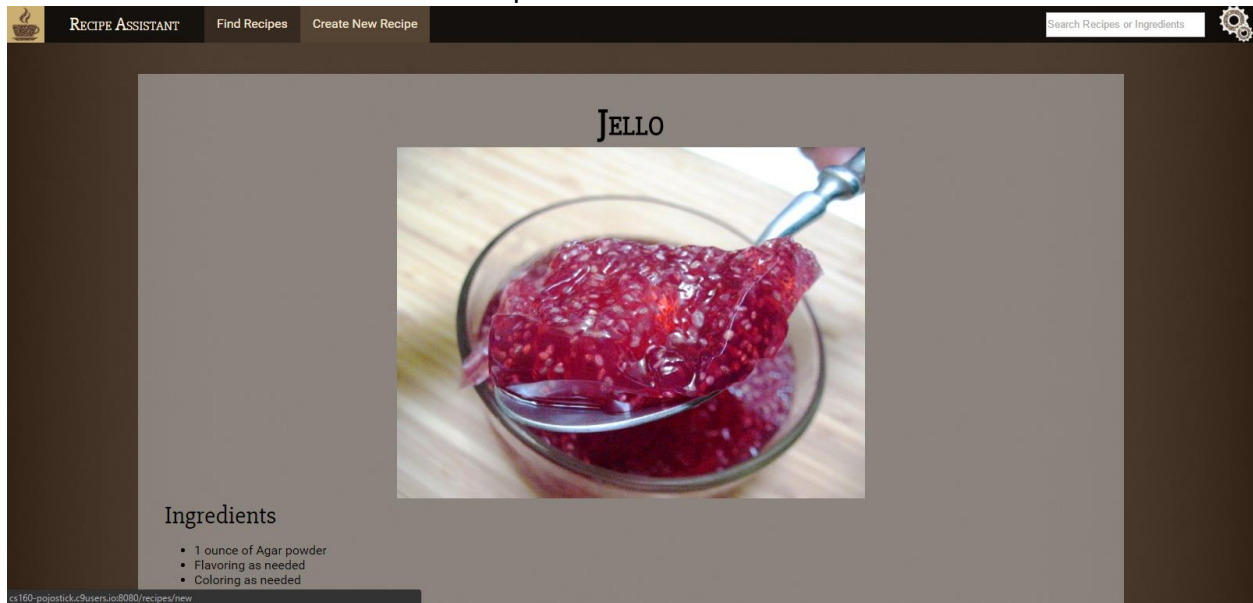
If we click on one of the recipes "Jello"

We are redirected to its main page

We can click the "Recipe Assistant" link above to go back to the home page, or we can click "Find Recipes" to go straight to the recipes search table.

We can also click the "Create New Recipe" button above

We are redirected to a page that allows us to fill in information

We can click the "Settings" button to edit individual recipes or change display. If we enter terms in the search bar, we can query both recipe names and recipe ingredients. Finally, we can click on the coffee icon on the top left to return to the home page.
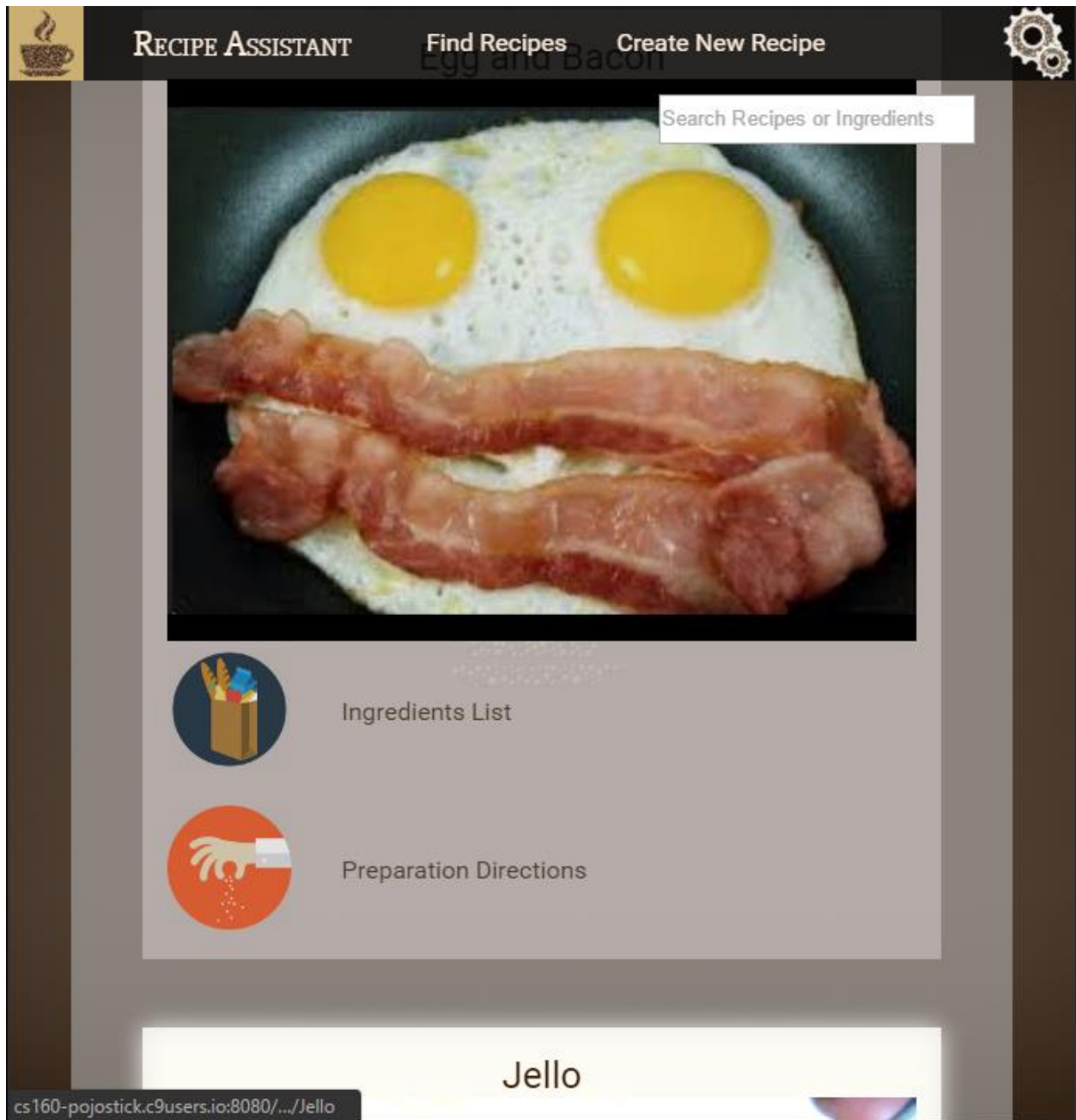
When we scroll down, the menu stays at the top of the page, allowing us easy access to other quick links.
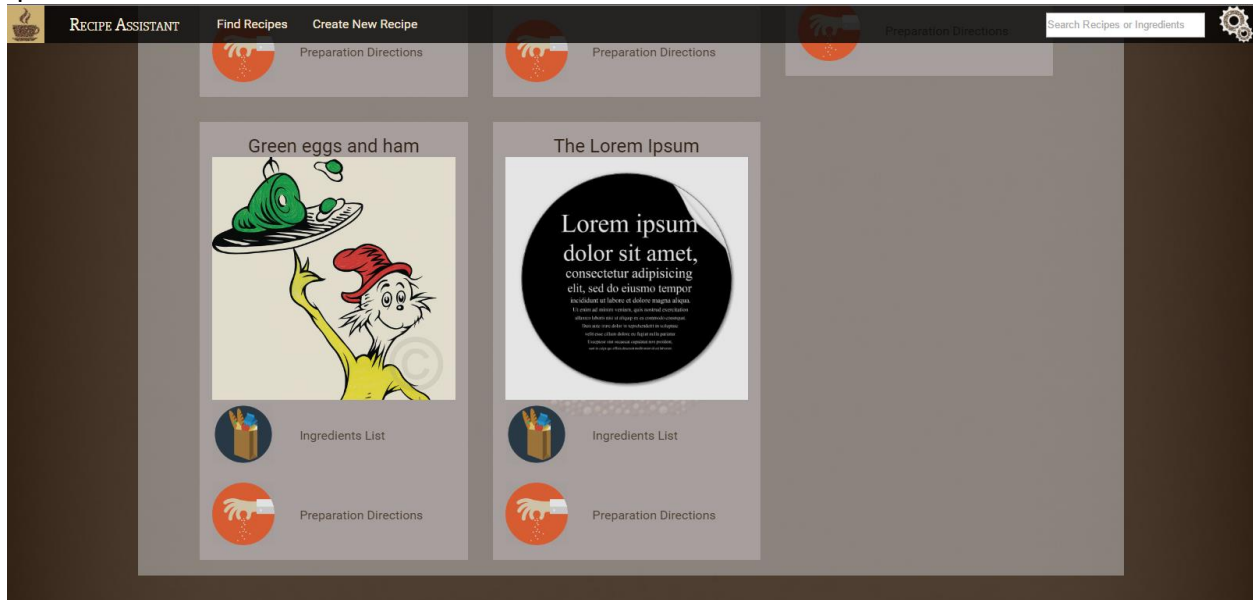

Our website also supports responsive design. For example, on smaller devices, the table will automatically rearrange itself into two columns instead.
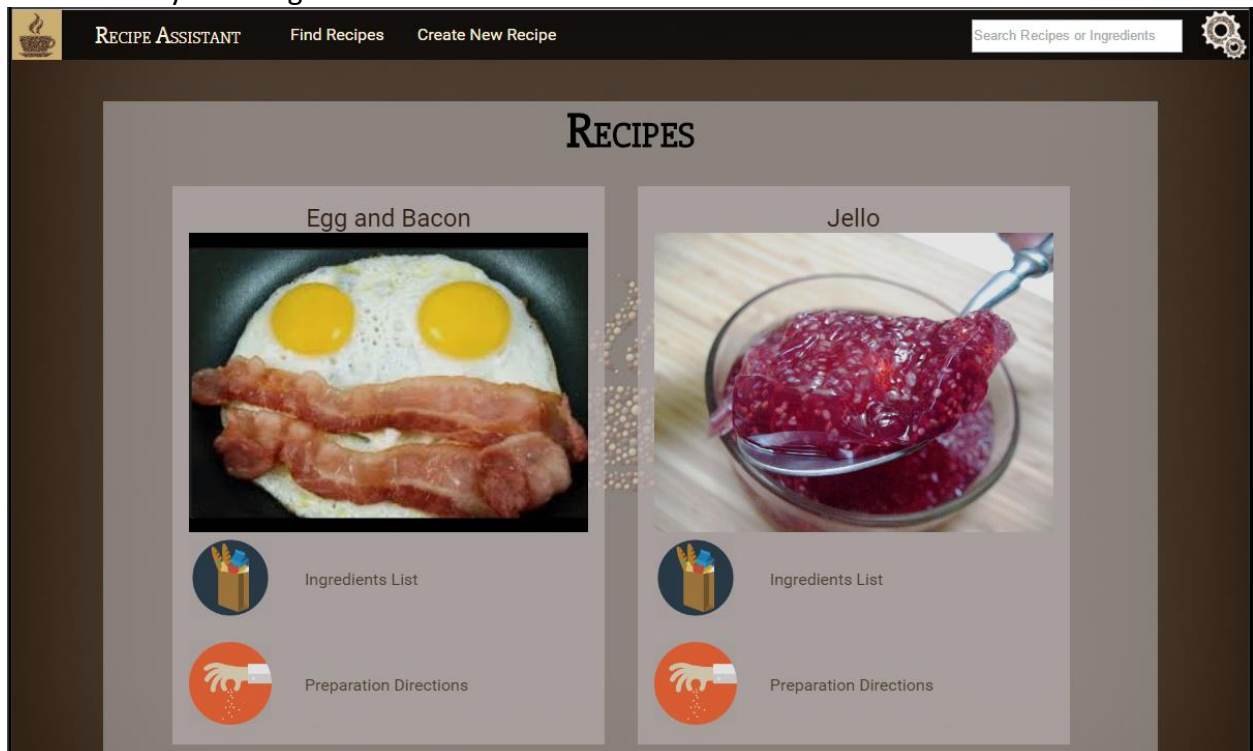
And for screens smaller than tablets like phones, only one column is displayed in a stream-feed like fashion

Finally, under each recipe is a hot link to the ingredients or directions of that recipe. We use the "Lorem Ipsum" recipe as an example, since the contents of that page is long enough to push everything down.
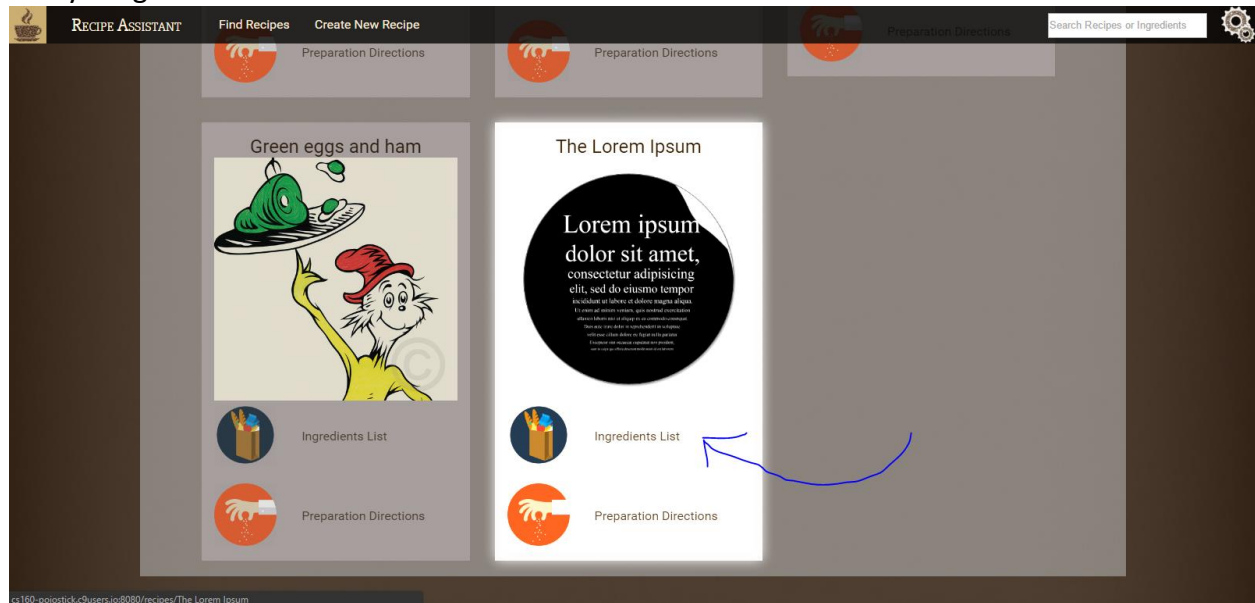
Here is what happens when we click the "ingredients" button under Lorem Ipsum. It acts as a "shopping list" of items the user can get.
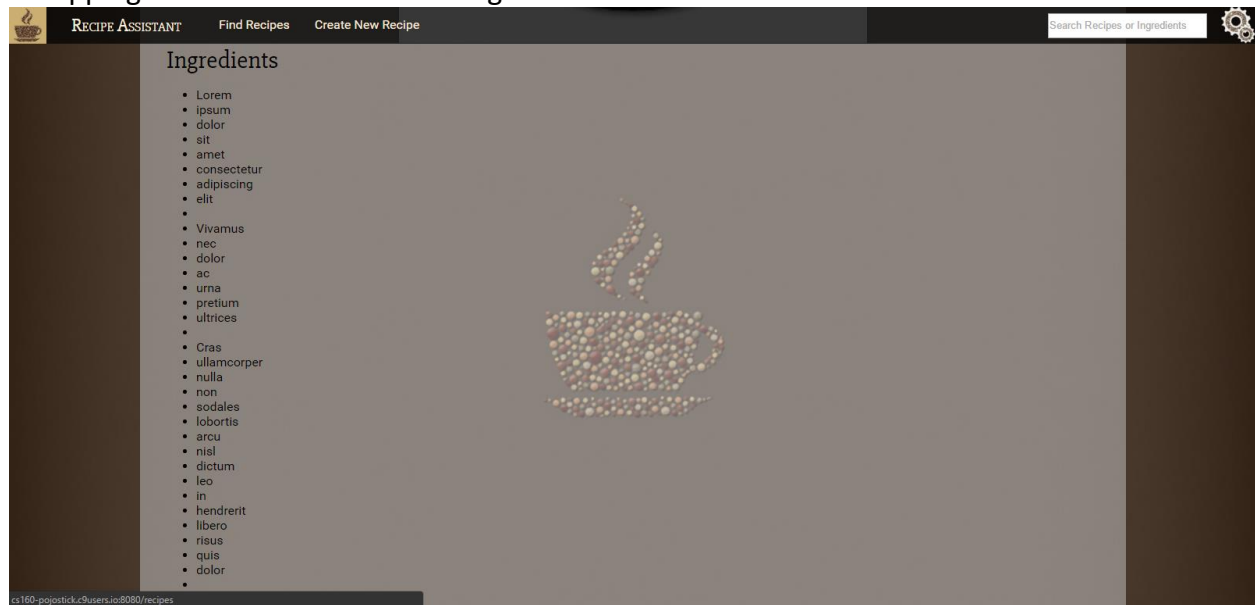
Furthermore, we can click the "Directions" link to also go straight to the directions segment

Directions

1. Lorem ipsum dolor sit amet, consectetur adipiscing elit.
2. Vivamus nec dolor ac urna pretium ultrices.
3. Cras ullamcorper, nulla non sodales lobortis, arcu nisl dictum leo, in hendrerit libero risus quis dolor.
4. Quisque non sodales sem.
5. Vestibulum porta nec mauris vel vestibulum.
6. Suspendisse non ornare nibh.
7. Mauris efficitur libero ut nibh pretium iaculis.
8. Curabitur at lacus tempor risus rhoncus vulputate eget placerat metus.
9.
10. Cras nunc leo, fringilla in elit molestie, tristique iaculis arcu.
11. Proin dignissim, ligula at suscipit porta, metus arcu vehicula nulla, in feugiat orci ante quis libero.
12. Nulla auctor velit malesuada fringilla porta.
13. Donec ac tellus ut ipsum pellentesque egestas.
14. Ut interdum nunc lacus, nec tincidunt est ultricies ut.
15. In ac justo condimentum, facilisis nisl at, viverra eros.
16. Morbi eleifend quam sit amet ligula lacinia eleifend.
17. Etiam non sollicitudin mi.
18. Donec dictum magna consectetur arcu condimentum, et bibendum erat volutpat.
19.
20. Morbi quis posuere metus.
21. Sed commodo pretium fermentum.
22. Curabitur sit amet purus ut nunc maximus hendrerit tristique in velit.
23. Nullam cursus cursus aliquet.
24. Morbi vitae augue eget nibh blandit dictum sed in mauris.
25. Vivamus efficitur ultricies consectetur.
26. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos himenaeos.
27. Pellentesque sagittis porttitor convallis.
28. Nulla a placerat sapien, ut tempus purus.
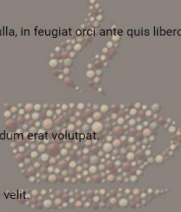29. Quisque elit augue, ultricies vel tempor tempus, dapibus quis lectus.
30.
31. Nulla elementum quam massa, eu porta eros suscipit vel.
32. Nulla facilisi.
33. Cras nec ex nulla.
34. Donec laoreet tincidunt nisi a condimentum.