**Lab5 Activity**

**User stories & Main developers:**

* User Account: Sheida(add/remove users, registration, login), Natalie(user profile, editing functionalities, registration UI)
* View List of Recipes: Sheida
* Manipulate recipe collection ( adding/removing/editing recipes): Sheida,  Shaun
* Search Recipes: Sheida
* Manipulate food ingredient inventory: Natalie
* Favourite Lists: Felix
* Allergy information : Felix, Natalie
* Meal Planner: Ashna, Sheida
* User Survey: Ashna
* Manage pantry (expiration tracking): Natalie
* Shopping List: Ashna, Felix

**Lab 5 assigned user stories:**

* Ingredient inventory : Sheida
* User Account/profile(registration, login, logout, user profile editing, survey): Shaun
* Recipe Collection (adding/editing/removing, view recipes):Natalie
* Search Recipes: Felix
* Favourite Recipe List: Ashna
* Meal Planning: Felix

**Manual Test Cases for ingredient inventory (Sheida)**

***Scenarios***

1. Access ingredient inventory from home page:
2. Add ingredient:
   1. Save an ingredient with all sections filled in proper format
   2. Don’t enter any information and click save
   3. Enter an ingredient name that already exists in DB
   4. Enter strings in cost, carbs, protein sections
   5. Don’t fill in cost, carbs, protein sections
3. Return to home page from inventory page
4. Edit Ingredient:
   1. Click save without changing anything
   2. Change all the information
   3. Change only one section
5. Remove Ingredient.

***Test*s:** Assuming database sql file has been run, and the user has logged in.

Test1: Saving and removing ingredients.

1. Click on “My Ingredients” button in home page.
2. Click on “Add Ingredient”.
3. Enter “Salt”, 2,0,0 in the sections “Ingredient Name”, “Cost”, “Carbs(g)”, and “Protein(g)”.
4. Modify the expiration date to today’s date.
5. Click save.
6. Click “Back” button.
7. The name of the ingredient just saved should be on the page. Double click on this name. A window should pop up with all the information of the ingredient “Salt”. Check to see if this information is correct.
8. Click “Back” button.
9. Close the window, run the application again and following login go to “My Ingredients”.
10. Click on the ingredient “Salt” to make sure the information displayed is correct. This indicates that information had been properly saved in database.
11. Close the pop up window.
12. Click on the ingredient and then click “Remove” button. The ingredient should be removed from the list.
13. Repeat step 9 or go back to home page and return to the ingredient page to make sure that the ingredient is no longer in the list.

Test2: No entry.

1. Click on “My Ingredients” button in home page.
2. Click on “Add Ingredient”.
3. Click “Save”
4. A warning message should appear notifying the user that the “Ingredient Name” section cannot be blank.
5. Fill in the name and click “Save”.
6. A warning message should appear notifying the user that the “Cost” section cannot be blank.
7. Click “Save”.
8. A warning message should appear notifying the user that the “Carbs(g)” section cannot be blank.
9. Fill in carbs section and click “Save”
10. A warning message should appear notifying the user that the “Protein(g)” section cannot be blank.
11. Fill in the protein section but click “Cancel”. Check to make sure that the ingredient has not been added to the list.

Test 3: Invalid entry and editing ingredients.

1. Click on “My Ingredients” button in home page.
2. Click on “Add Ingredient”.
3. Enter “Salt”, “c”, “c”,”c” in the sections “Ingredient Name”, “Cost”, “Carbs(g)”, and “Protein(g)”.
4. Click “Save”.
5. A warning should appear notifying the user that “Cost entry is invalid!”.
6. Fill in the cost with a number and click “Save”.
7. A warning should appear notifying the user that “Carbs entry is invalid!”.
8. Fill in the carbs section with a number and click “Save”.
9. A warning should appear notifying the user that “Protein entry is invalid!”.
10. Fill in the protein section with a number and click “Save”.
11. Click on the ingredient name “Salt” in the list once.
12. Click “Edit” button.
13. The ingredient information should appear in the appropriate text panes.
14. Change the ingredient information and click save.
15. Double click on “Salt” in the ingredient list and check to make that the information has been modified correctly.

Test 4: Adding an ingredient that already exists.

1. Click on “My Ingredients” button in home page.
2. Click on “Add Ingredient”.
3. Enter “Pasta”, “2”, “2”,”2” in the sections “Ingredient Name”, “Cost”, “Carbs(g)”, and “Protein(g)”.
4. Click “Save”.
5. Repeat steps 2-3. A warning message should appear, “Ingredient name already exists”.
6. Click “Cancel”
7. Click on “Pasta” and then click “Edit”
8. Only change information in “Cost” and save.
9. Double click on “Pasta” in ingredient list to make sure the information has been correctly modified.
10. Repeat step 7 but click save without modifying anything and repeat step 9.

***Issues****:*

* No logout button on the “My Ingredient” window.

***Bugs:***

1. No automatic resizing. The content on the pages needs to be enlarged as well when we enlarge the window. Reproducible and it is a design issue. Severity: medium.
2. Carbs is placed before protein, but the warning message that “Protein can’t be blank!” appears when both carbs and protein are blank even though, first the carb field needs to be checked. The same is true for invalid entry (when strings are entered for carbs and protein fields).This is reproducible and the severity is low.
3. Ingredients Inventory related functionalities (add/remove/edit) can not be used with the stub database. They only work with the real database. This is reproducible and the severity is high.
   1. Change databaseType in src/persistence/DBSetUp.java to 1.
   2. Run Main.java
   3. Login and go to “My ingredients” and click “Add Ingredient”.
   4. Enter “Pasta”, “2”, “2”,”2” in the sections “Ingredient Name”, “Cost”, “Carbs(g)”, and “Protein(g)”. Clicking save will lead to an error.

**Code Review for ingredient inventory user story(Sheida)**

Bugs & code smells in related classes:

* IngredientActions:
  + Unused import statement.
  + Not able to be used by stubDB
    - Because of this line->UsersDB userDB = (UsersDB) access.usersDB();
  + Comments should not explain “what” the code does but instead should explain “why”
  + Methods addIngredient and removeIngredient are not used anywhere in the project (dead code)
* Ingredient: Unnecessary comments.
* UsersDB:
  + Unused import statements.
  + Unnecessary comments (Comments should not explain “what” the code does but instead should explain “why”)
  + Methods addIngredient() and getIngredient() are too long.
* EditIngredientView:
  + Unused import statement
  + Switch statement should be replaced (use JCalendar)
  + If JCalendar is used, the comboBoxSetUp() method can be removed.
  + EditIngredientView() method is too long and its parameter list is too long.
* IngredientListView:
  + Wrong comment for ingredientsListSetUp().
  + Method IngredientsListView() is too long.
  + Variable “selectedIndex” is not used.
  + Unused import statements.
* IngredientView
  + Unused import statements.
  + Unused variables :“editProfileContentPane” is not used.
  + Lines 66-70,103-107 are too long.
  + Method ingredientView() is too long.

Code smells found: bloaters(long methods, large classes, long parameter lists), object-oriented abusers(switch statements, temporary fields), dispensables (unnecessary comments, dead code). Code was also checked for couplers such as message chains and feature envy code smells, but none was detected.