

1. KitchenSync: A Pantry and Recipe Companion
2. Team Members
 - a. David Tran
 - i. dtran2021@my.fit.edu
 - b. Chris Nederhoed
 - i. cnederhoed2020@my.fit.edu
 - c. Tyler Son
 - i. tson2022@my.fit.edu
3. Advisor - Fitzroy Nembhard
 - a. fnembhard@fit.edu
4. Client - Fitzroy Nembhard
 - a. Affiliation - College professor in the Department of computer science
5. Progress of current milestone

Task	% Done	Tyler Son	Chris Nederhoed	David Tran	Items Left
Meal Planner	95%		100%		Nutrition Calculator, Daily Meal Summary
Recipe Ingredient Suggestions and Substitutions	85%		100%		add-on suggestions, user Prefs
Notification System	10%			100%	Create a notification system so that users will be pinged if their content is removed., someone rates their recipe, items expire soon, or if a item is low in their inventory

Admin Backend + Admin Portal	25%			100%	check if it violates TOS, Admin Portal, names, feedback, recipes. Admin filters, Admin sorting, Admin ticketing system, Admin controls, Activity Logs, Reporting System
Shopping Companion	50%			100%	List Sharing,, Price data from retailers, Price data from club stores, Price per unit comparison,
New User Guide // Tutorial Onboarding	50%		100%		System walkthrough
Conduct Evaluation of the System	100%	100%			Fix the bugs found
Senior Design Showcase Poster	100%	50%	50%		

Review/Feedback system	50%	50%	50%		Allow users to report a recipe Connect the Backend to the frontend
Test/demo of the entire system	100%	100%			
Create user/developer manual	100%		100%		
Create demo video	0%			100%	Record and edit a demo video showing the user how to use the application.
Clean Up and General Organizing	100%		100%		

6. Discussion (at least a few sentences, ie a paragraph) of each accomplished task (and obstacles) for the current Milestone:

a. Meal Planner:

The meal planner is in a functioning state. The macro calculator data is now just an estimate as it was found that users might not have the weights of common items that are used in whole such as vegetables or fruit which are often regarded as “1 Avocado or 1 Lime” but still contribute to the macros of a recipe. Future work on this area would likely be to get accurate macros for all ingredients.

b. Recipe Ingredient Suggestions and Substitutions:

The suggestions and substitutions function as well. A list of known//common substitutions were added into a .json file and can easily be added to in order to extend more suggestions. As for the suggestions each recipe gets three generated based on known flavors and such, It should be noted that the suggestions are not shown as an item, unit, quantity, but just the item as the user might prefer a little or alot to be added.

c. Notification System:

Time constraints unfortunately left this module less than complete. It has some parts setup and worked on but the vast majority is still a work in progress. This would be another area for improvement in the future.

d. Admin Backend + Admin Portal:

The admin backend and portal is in a very barebones state but allows the admin to access the database and delete items as long as the admin logs into the portal with the right access key ID and secret access key. Future work here would be expanding functionality and creating an actual GUI so that it is more user friendly.

e. Shopping Companion:

The shopping companion is currently able to grab some price data from Walmart but due to anti web scraping measures in place on other sites and limits on Walmart the price estimates are not always accurate or reliable. This is one area for future work to really shine and explore.

f. New User Guide // Tutorial Onboarding:

Each Screen has a similar short walkthrough that shows the user what each button does. There is also a FAQ that was added to the User manual portion of our developer / user manual.

g. Conduct Evaluation of the System:

Based on how the system has been tested. The system should work well and appear functional for the senior design showcase

h. Senior Design Showcase Poster:

The poster has been completed and includes information on how the project was done and shows the various things that the program can do.

i. Review/Feedback system:

The user can provide feedback by assigning up to five stars on any recipe based on how they felt and recipe notes can be written. The frontend is ready to go but the backend still needs some polish to be fully functional.

j. Test/demo of the entire system

The system has been tested thoroughly and it appears to work as intended. Many of the bugs observed in the previous milestone have been resolved.

k. Create user/developer manual

The user and developer manual includes a portion for each that goes into detail about things necessary for the user and things necessary for the developer. Users are given a step by step guide to install, sign up, and use the system. Developers are provided with the tools used to construct the system and how/why things were set up.

l. Create demo video

At the time of writing this the video is not recorded but should be prior to the showcase.

m. Clean Up and General Organizing:

Most of the methods have already been organised inside the different classes but a good amount of them still need proper comments and explanations. The goal of this is to make future work on the project easy to extend and understand.

7. Discussion (at least a few sentences, ie a paragraph) of the contribution of each team member to the current Milestone:

- a. Tyler Son: I added many new recipes on the database so that the user has many options to choose from when they want to make a new recipe. I finished the senior design showcase poster and wrote a brief background to the project along with what the user can do and the purpose of the program. In addition, I provided snapshots of what each interface looks like on the poster.
- b. David Tran: I finalized the price finder api to get an estimate of prices for the user's shopping list, and also created an admin backend so that the admins can delete recipes from the database. In addition, I also created the demo video.
- c. Chris Nederhoed: I finished the GUI updates to the theme on all the screens. I also finished the meal planner module and added the changes to the recipe type to include the new functionality for the suggestion and substitutions. I implemented the walkthrough/onboarding process for new users to help get them to be able understand the system. I wrote the user/developer manual and lastly commented and organised the entire code base. I also went through and updated the poster to accurately reflect the current state of the system and meet the requirements outlined by the showcase. I also finished making and filling out the milestone document.

8. "Lessons Learned"

9. Tyler Son:

The lessons learned from this project is that the goals for each milestone of the project need to be thoroughly understood early on and clearly communicated with the rest of the team. In addition, we learned that we should have had smaller goals for each milestone rather than starting off with trying to complete two major components in a single milestone. Rather, we should have paced ourselves more with each milestone. I learned a lot about the practical implementation of databases and how information in certain database tables is transferred to the front end components and displayed. I also learned how much security is involved in the process of trying to get the information stored in databases to the front end.

10. David Tran:

The lesson I learned from the project is to make sure that there is better communication between partners and to ensure realistic goals. While communication between all the members of the project was fairly solid - there were some issues and setbacks with communication that made things more difficult than expected when it came to developing the application. In particular some components that were being developed hit roadblocks because some features that were assumed to be in it were not there - which meant development was a bit tougher than expected.

11. Chris Nederhoed:

The lessons learned from this project are to make sure the expectations and communication is worked out very early on in a project. I also learned that making a plan is only a quarter of the project. The other seventy five percent is taking the plan and throwing it out the window when something doesn't work for one reason or another. As for the technologies used I learned alot about front end development from a high level view of design to implementation and then the low level implementation in java. I also learned a ton working with python on multiple threads/processes to update with the frontend rather than running then letting the frontend update. I also found that making deliverables and responsibilities clear with a proper plan and task tracking is key to making sure everyone is on the same page and contributing to the project equally. Another area I think I learned a lot in was making sure you have access to a reliable data set for external items such as nutritional information or price data as it has proven difficult to secure free access to a good data set for these two things.

12. Date(s) of meeting(s) with Client during the current milestone: 4/16/2025


13. Client feedback on the current milestone

a. ... (if Client and Faculty Advisor are the same, write "see Faculty Advisor Feedback below")

b. ...

14. Date(s) of meeting(s) with Faculty Advisor during the current milestone: 4/16/25

15. Faculty Advisor feedback on each task for the current Milestone

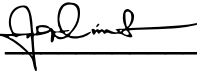
16. Faculty Advisor Signature:  Date: 4/21/2025

----- on a separate page -----

17. Evaluation by Faculty Advisor

- a. Faculty Advisor: detach and return this page to Dr. Chan (HC 209) or email the scores to pkc@cs.fit.edu
- b. Score (0-10) for each member: circle a score (or circle two adjacent scores for .25 or write down a real number between 0 and 10)

Tyler Son	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
David Tran	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Chris Nederhoed	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10

- Faculty Advisor Signature:  Date: 4/21/2025