Recipe Buddy — Project Writeup

Part 1

Recipe Buddy is a Chrome extension that helps people easily navigate and interact with recipes on damndelicious.net. The extension extracts the ingredients and displays them as an interactive checklist. The instructions are also extracted, and can be viewed as a slidedeck. These features help users interact with the ingredients and instructions as they cook. If they enjoy this recipe or want to cook it at a later time, they can store the recipe in Recipe Buddy's weekly planner.

Instead of traditional, static recipe websites, Recipe Buddy brings recipes to life. Recipes are now easier to follow during cooking, and can be saved to a planner for later use. Planning meals and the act of cooking is often a chaotic process, and this extension helps to make this process simpler.

I expect that many cooks would enjoy using this extension. College students, as a specific example, might particularly enjoy the planner feature. With our hectic class schedules, it's hard to plan out meals during the week and stick to that schedule. This extension allows students to plan out their weeks in advance, and have a go-to place for all their meals. They can also utilize the ingredient checklist to inform their grocery shopping, so they never miss any ingredients.

Part 2

- Clicking on the extension icon reveals a popup that is centered over the current webpage. If the current webpage is a recipe on damndelicious.net, then the popup reveals a "Recipe View" with ingredients, instructions, and an option to add the recipe to the planner. On any other webpage, the popup reveals a "planner view", where the user has access to any of the recipes they've previously added to their planner.

- [Recipe View] Users can click on each ingredient displayed in the recipe view popup to check them off.
- [Recipe View] Users can go to the previous instruction (if one exists) in the recipe view popup by clicking on the back arrow, to the left of the current instruction.
- [Recipe View] Users can go to the next instruction (if one exists) in the recipe view popup by clicking on the next arrow, to the right of the current instruction.
- [Recipe View] Users can click on the "Add to Planner" button to reveal dropdowns that allow them to add the current recipe to their planner.
- [Recipe View] Users can select the week that they want the recipe to be added to via the "Select Week" dropdown.
- [Recipe View] Users can select the weekday (of their chosen week) that they want the recipe to be added to via the "Select Weekday" dropdown.

- [Recipe View] Users will officially add the recipe to their planner by clicking "Add!" below the dropdowns.
- [Recipe View] Users can view their planner by clicking on the "switch to planner view" button.
- [Recipe View] Users can close out of the popup by clicking the "X" in the upper right corner of the popup box. They can open the popup again by clicking the chrome extension icon.

As implied from the previous interactions, the "planner view" can be triggered through two interactions: clicking the extension icon on a **non-recipe page** or clicking "switch to planner view" within the popup on a **recipe page.** If the user arrived at the planner view through the second interaction, the popup will contain a "switch to recipe view" option; this is not available if the user arrived from the first interaction.

- [Planner View] Clicking on the "switch to recipe view" button (if one exists) will bring the user to the original "recipe view" that they were first seeing.
- [Planner View] Similar to the recipe view, users can close out of the popup by clicking the "X" in the upper right corner. They can open the popup again by clicking the chrome extension icon.
- [Planner View] Users can go to the previous week (if one exists - they cannot go back in time) by clicking on the back arrow, to the left of the current week.
- [Planner View] Users can go to the next week by clicking on the next arrow, to the right of the current week. I only show 10 total weeks, assuming that users do not need to plan more than 10 weeks ahead.
- [Planner View] Clicking on any of the recipes on the planner will redirect them to the webpage of that recipe.

Part 3

1. Google Chrome Extension
2. I chose to implement an extension since I've never worked with the chrome extension API and wanted to learn it. I think this knowledge could be beneficial in the future, since it's possible that I might want to create more complex extensions in the future.
3. The extension is the foundation of my project, since all of the features build on the ability to access ingredients/instructions of the current page. In particular, manifest.json was the most crucial chrome extension component, and I also utilized Chrome storage.
4. The extension allows users to integrate recipes into their daily lives through the weekly planner. It also elevates static recipes to interactive recipes, which might help users follow along as they cook.

Part 4

The most drastic change is that in HW7, the planner existed as a separate webpage. However, in my actual implementation, it simply exists as a separate view to extension popup. This change was made to allow users to interact with the extension icon *anywhere* to pull up either the recipe or planner view. If the recipe view is shown, they can easily switch to the planner view within the same popup.

Part 5

I struggled to properly store and retrieve the data that was added to chrome storage. After much debugging, I realized that interacting with chrome storage required async functions, so I had to wait before executing code that depended on the operation completing. Adding the correct code to manifest.json was also often confusing, as some online sources are still written in Manifest v2 instead of Manifest v3.