Casey Nord, Steven Phillips, Matthew Insley, Adrian Protzel, Brad Goodlett

March 4, 2020

CS 352

Anita Sarma

**Project Part 8: Prototype**

**Problem Summary:**

We are designing a user interface for an online cooking recipe management system that utilizes decentralized web protocols such as IPFS (<https://ipfs.io/>). From a usability standpoint this focuses on two distinct problems: creating an intuitive and well laid out recipe application, and integrating a web protocol that encourages transparency and direct access to underlying data structures.

As a recipe management system, we are looking to provide an interface that iterates on and improves the design of many websites that exist today. We are striving to eliminate the clutter and poor formatting commonly found on food recipe websites and are hoping to create a functional, user friendly UI that allows users to save, store, share, and access recipes from any device without being tied to a single application. This should provide the everyday user a well formatted and intuitive interface for managing their recipes. Everything should be laid out clearly enough to allow it function as a replacement for recipe books and boxes of notecards, instead of functioning like a blog or a spread out search engine strewn with ads.

In terms of web protocols such as IPFS, we are looking to store and manage recipe data in a databaseless, content addressed, decentralized network. Leveraging this technology provides a unique framework where data such as .json files representing a recipe are not stored in a centralized location that is only accessible through a specific website or API. Instead, recipe data is distributed across the entire network, accessible through content identifying hashes. In this way, users will have direct access and control over the data on the system. Since the recipes themselves are stored completely independently of the web app, advanced users are capable of going as far as creating their own recipe tools and applications that are able to recognize, parse, and display the data structures used to represent recipes on the network.

**Prototype:**

See the .bmpr file in this folder.

**Justification of design decisions:**

Several updates have been made to the prototype after reviewing the feedback from our heuristic and empirical evaluations, as well as from the latest design gallery.

* Links to hash identifiers have been included on all recipe thumbnails. This provides better memory-recognition as accessing these won’t be limited to a single location.
* Question mark buttons have been added in relevant places. This is meant to function alongside a FAQs page that will be implemented to provide documentation and feature specific assistance.
* A standardized footer has been implemented throughout the UI. This adheres to the design principle of consistency and quick access to important information, such as help pages and site information.
* The header has been rearranged and the app title has been made smaller. It now also functions as a link to the homepage. This helps remove unnecessary clutter introduced by using extra buttons when a link on the app title would suffice.
* Profile icons have been moved to the right of the header next to settings. This provides better grouping and helps solidify the functionality of the header.
* ‘Add recipes’ has been replaced ‘create recipes’. This should eliminate confusion by making users have to remember if ‘add’ means to create a recipe or add to the users collection.
* Prototype links have been updated so that things cannot be clicked on when on a confirmation page. This should mirror the actual intended functionality of the app better.
* ‘My favs’ has been removed. The ‘My recipes’ option is enough, and adding additional bins for organizing recipes only makes it more difficult for a user to manage.
* ‘Collapse’ button has been replaced with ‘Return’. This provides better clarification of its purpose and improves navigation and the design principle of consistency across the app.
* The double slider has been replaced with a static bar. This was never intended to be a feature but in the wireframe seems to suggest undesired functionality.
* ‘Add to Favorites’ is now ‘Add to My Recipes’. This provides better consistency with the updated ‘My Recipes’ feature.
* View recipe now links to a ‘Modify Recipe’ page instead of linking to ‘Create Recipe’. This should function the same, but will pre-populate the ‘Add Recipe’ page with data pulled from the recipe the user linked from.
* In the final design, all hash links will be togglable from user settings and will be disabled by default.

In total, these changes should better adhere to the design principle, notably visibility, affordance, and consistency.



