**Problem Solving and Software Design Project Proposal**

**Names**: Kenzi Fukuda, Rumeer Keshwani, Lucas Lee-Tyson

**Project Name**: Recipe Community

**Concept**: A web app that enables people to share their favorite recipes, learn from others, and curate a collection for them to reference in the future. A minimum viable product for this idea would be an interface that a user can interact with to input, store, edit and share recipes that as they wish. Also we would have a preloaded database of recipes for new users who are just getting started. Incorporating a user account and social element is also ideal for the community that we are building. It is essential to maximize the opportunity for anyone to input, store, change and share their recipes online.

**Learning Goals**

**Functions Needed**:

* Ability to share recipes into a reddit-style directory
  + Text-formatting, share pictures,
* User login/registration system to that people can keep track of their recipes
* Ability to upvote/downvote others recipes
* Able to “save” their favorite recipes into collections (ie. one collection for Asian food, one for American cuisine, etc.)

**Research We Will Do**:

* Look into existing reddit-clones that are already built on Python/Flask/Django (guarantee there are plenty to learn from)
* Figuring out an optimal UI for users to interact with the community through
* Understanding how to store the data in a way that allows ease of access by the user if the user wanted to manipulate the recipe data

**Project Schedule & Implementation Plan:**

Proposal Date: February 27th

Due date: April 28th

Remaining Days: 61

Phase One: A journey of 1,000 miles begins with a single step

Days 1-11: Acquire libraries, concepts, and conduct research to understand the scope of the tool we are building

Days 12-25: Building out the initial tool that allows a user to input store and edit information. Explore the uploading of images in reference to specific recipes.

Phase Two: Bun in the oven

Days 25-30: Researching Jungle and python web interface to structure the web facing portion of the project

Days 30-44: Building out web facing portion of recipe community in order to allow any user to interact with the community so they can input, store, and edit their recipes

Phase Three: Too Many Cooks

Days 45-50: Implement User Accounts so that their data can be tracked and stored more effectively

Days 50-61: Implement social and sharing features so that people can spread their recipes and Recipe Community all over the world!

**Collaboration Plan**:

* Lucas: Will handle library and framework conceptualization, laying groundwork for core features of the product
* Kenzi: Will handle community research, web frameworks, and social/sharing features
* Rumeer: Will focus on product market fit/implementation as well as focus on troubleshooting and building out fundamental aspects. Will look to other group members for guidance on product construction.
* In general, we plan to collaborate heavily on the project as a whole despite dividing up the work. We see it as an opportunity for all of us to learn from each other and better grasp the material by having to articulate/explain our thought process for problem solving to each other.

**Risks**:

* Underestimating effort of creating “web” components of a Python application (social sharing, user registration system, etc.)
* Accountability, and making sure that we are staying on-schedule to ensure that hit all of the core functionalities for the final product
* Failing to achieve virality within the casual cooking community

**Additional Course Content:**

* Web frameworks for Python
* User systems (registration/logins) with security concerns
* API usage