Project Plan

Team 4

CMSC 495 – 7383

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Outline:

Our project will be a recipe repository, primarily written in Java. We’ll be dividing completion of the project into distinct stages based on implemented features. The expectation is that this app will only require the local system to be using an implementation of the JDK (a brief review of features shows this project should be usable in JDK 7.0+, though this is subject to change) for most stages, though the final stages would see us building a webapp for this project. The expectation is for all phases to be able to run on basic PC (i.e. 4GB of ram, i3 tier processor, no graphics card, etc), but expect to extend this functionality to mobile via webapp in later stages. Due to resource constraints, this will primarily be tested and implemented via Virtual Machines on local networks, and so may need additional tweaking before moving to a production environment.

Stage One will be a rudimentary implementation meant to be run entirely on a local system. It will have a locally hosted database with the ability to create and store recipes and to retrieve and recipes from the database based on recipe names, ingredients, and tags (each of these three searchable items will be implemented as a separate Java class). This tier will not be focused on User Interface (UI) and so the expectation is that a simple Java Swing UI will be used to interact with the underlying code. For this stage, we expect the recipes database to be approximately 10 recipes in size so the team can focus on making it work before optimization is needed.

Stage Two will focus on polishing UI, adding the ability to edit existing entries in the recipe database, optimizing the database, and implementing the ability to import recipes from external files. UI and databasing are areas our team has not worked with extensively and we foresee these as being significant hurdles, but are important before we move to advanced features. At this stage, we expect to limit the import of recipes from external files to be limited to specifically formatted text files.

Stage Three will focus on network connectivity, specifically on moving the actual database to a remote system. Again, out team has minimal experience with programming networking programs, but this step will be crucial for making the application more robust in future stages. It is also at this stage that we intend to fully build out the recipes database with at least 1,000 distinct recipes. While we are hesitant to commit to delivering a working network scrapper to grab recipes from online resources, it is expected that this will be a capability that begins to be worked on at this stage, though as a separate app focused on translating online recipes to the import format referenced in Stage Two.

Stage Four is intended to focus on building a rudimentary webpage to use as the web application as well as implementing the web scrapper to import recipes from online. We expect there to be several major changes in this stage with this being the biggest single feature to be added to the application. While it will be possible to write the web portions of the application in Java, we expect the need to use other non-Java non-HTML languages within out project at this stage.

Stage Five’s primary focus will be on improving the web interface. While traditionally, bug testing would be held as a separate Stage unto itself, we see this major step in web interface to be a critical part of bug resolution, and so are including that in what would otherwise be a final Alpha Stage.