System Environment

- o Software: Any web browser client should be able to access the front end. We'll be using Apache Tomcat for the server that hosts the servlets and MySQL for the database management system.

- o RDBMS used: We will be using MySQL for our RDBMS, as stated by the project assignment requirements.

- o Programming/Application languages used: For our front end/presentation level, we will use React.js which combines JavaScript, HTML, and CSS to create a nice presentable user interface, and will be hosted by Apache Tomcat. For our backend/logic level, we will use Java and Java servlets. Finally, for the data level, we will use MySQL to create our database.

Nonfunctional Issues

- GUI done in React using HTML and CSS.

  - o Our GUI will be implemented by using a combination of React.js and Java servlets. The servlets, in cooperation with our Java backend, will produce the data that React.js will organize and display to the client.

  - o The homepage of Recipedia will display highly-rated recipes. The homepage will also have a login prompt, and after a user logs in, the homepage will also display their favorite recipes and their own recipes.

  - o By entering a query into the search bar, users will see recipes that have been added into the database, ordered by whichever filter restraints they add to the search.

- Upon choosing a recipe, the recipe name, serving size, cooking and preparation time, ingredient list, and instructions will be displayed to the user. The recipe can also be rated and favorited on this page.

- When writing new recipes, users will have fields to enter the recipe name, serving size, cooking and preparation time, ingredient list, and instructions.

- Access Control

  - Users may create and edit their own recipes, and editing rights are given only to the accounts that created them.

  - Users may rate and favorite recipes, and changing these attributes is restricted to each individual user account.