

# **Software Implementation and Testing Document**

**For**

**Group <8>**

Version 1.0

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## **1. Programming Languages (5 points)**

- Python: We currently have python implemented with flask/SQLite3 for the databases and communication to the web page. We are considering switching over to C++ to use with SQLite and one of API's in the proposal for more substantial software once we get the base implementation going since the group overall is more familiar with C++.
- HTML: We are using HTML for the markup and web design of the pages. HTML is not difficult to understand and is commonly used for web design.

## **2. Platforms, APIs, Databases, and other technologies used (5 points)**

- Flask: To get a first implementation in fast we did fast work with python to use with flask to get the database to be able to communicate with the web page.
- SQLite: It's a database engine that we decided to use that has our recipe database and ingredient database

## **3. Execution-based Functional Testing (10 points)**

We tested for the implementation of the database and connection to the web pages. The database was made sure to be connected to the web site. We were testing for the basic groundwork getting the site up and the main search to bring up the name of the recipe, the steps, and ingredients needed.

## **4. Execution-based Non-Functional Testing (10 points)**

The current iteration does not involve much in the way of non-functional testing due to the smaller scale of the first iteration. Being that the primary functional requirement is for our base framework to be versatile, testing this will mainly involve measuring how straightforward it is to implement more advanced systems to our base framework.

## **5. Non-Execution-based Testing (10 points)**

We used GitHub to go over code and see if it was ready for implementation and approved. Other than that, nothing much more.