### **Classification of Components**

## *Module descriptions*

#### 1. Database Module

The Database module is the module responsible for storing user and recipe data such as username, ingredients, instructions etc.

Dependent On: Backend Module

Input: MongoDB Query (via mongoose)

Output: Response in JSON format

#### 2. Backend Module

The Backend module is the module responsible for directing the user throughout the web application as well as modifying data and communication between the frontend and the database.

Dependent On: All Modules

Input: API call to one of the routes

Output: Response in JSON format with relevant information

#### 3. Authentication Module

The Authentication module is the module responsible for allowing users to create accounts and login to Bazaar. The authentication module was tested partly through the mocha framework and partly through manual testing.

Dependent On: Backend Module, Database Module, Sign in/Sign out Module

Input: JSON containing user information from Google OAuth

Output: A success or error message, followed by a redirect to the account page

loaded with user data or the sign in/sign up page respectively

#### 4. Account Module

The account module is the module responsible for the account page of the application where users can view there settings and change their username. This module was tested via manuel testing.

Dependent On: Backend Module, Database Module, Sign in/Sign Up Module,

**Authentication Module** 

Input: API calls from the backend

Output: UI shows a profile page with given from the backend

#### 5. Navigation Module

The navigation module contains the navigation bar, which contains the search bar, and the signin/sign out buttons.

Dependent On: Sign in/Sign Up Module

Input: Log in state

Output: UI shows a navigation bar consistent throughout the front-end

### 6. Sign in/Sign Up Module

The Sign In/ Sign Up Module contains the pages for signing into the app, as well as a page to create an account for Bazaar.

Dependent On: Backend Module, Database Module, Authentication Module

Input: API authentication call

Output: Successful Sign in/Unsuccessful Sign in and Successful Account

Creation/Unsuccessful Account Creation

### 7. Recipe Viewer Module

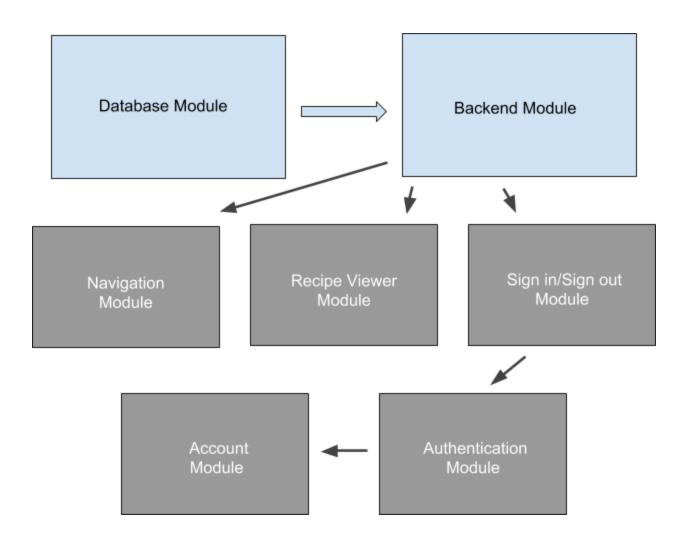
The Recipe Viewer module aggregates other UI components in order to display data. These modules were created by manual testing.

Dependent On: Backend Module, Database Module, Account Module

Input: Backend API call

Output: List of recipe components pulled from backend

## Outline of Components



### Incremental Testing Technique

We used the bottom-up testing technique as all the front-end modules were tested before connecting those modules to the backend modules. We then proceeded to test the program with the frontend modules connected to the backend modules.

We successfully integrated automatic testing using Travis CI as can be seen on our repository.

### **Incremental and Regression Testing**

## Testing Methods

#### 1. Database Module

The database module was tested manually. The tests included the regression tests used to verify that previously fixed bugs stay out of the system and confirm that bug fixes did not create new bugs that affect functionality.

#### 2. Backend Module

The backend module was tested by the supertest and mocha frameworks. We created tests to cover edge cases and cases related to any material that we added or any material related to the code we added.

#### 3. Authentication Module

The authentication module was tested partly through the mocha framework and partly through manual testing, we did not add any new code to this module so any regression testing for this module was purely out of relation to other modules.

#### 4. Account Module

The front-end account module was tested partly through the enzyme/jest framework and partly through manual testing, and found no problems with rendering any part of it.

#### 5. Navigation Module

The front-end account module was tested partly through the enzyme/jest framework and partly through manual testing, and found some rendering problems with the layout.

### 6. Sign in/Sign Up Module

The front-end sign in/sign up module was tested partly through the enzyme/jest framework and partly through manual testing, and found some rendering problems with the layout.

### 7. Recipe Viewer Module

The front-end recipe viewer module was tested alongside the recipePage and recipeViewer components partly through the enzyme/jest framework and partly through manual testing, and found some rendering problems with the layout.

# Defect Log

Module: Database

Defect No.	Description	Severity	How to Correct
1	Search by specific ingredients or attributes would not return any results because database schema for recipes not extensive enough to account for all aspects of a recipe	2	We expanded the schema to accommodate for more attributes to better represent a given recipe

## Module: Backend

Defect No.	Description	Severity	How to Correct
1	Not all routes in backend check for valid logged in user before sending back data	1	Added checks for valid logged in user to every route
2	Search method returned invalid results when no query was entered	1	Added a check for a valid query before using the search query to perform a search on the database
3	Update username would work irrespective of whether a user was a valid user of Bazaar	2	Adding checks to search the database for a valid user and updating the username only if the previous username was found and matched the current user.

## Module: Authentication

Defect No.	Description	Severity	How to Correct
1	After authentication, a user state can not be saved when visiting various pages of the application.	2	We implemented a consistent state management system.
2	On signup, an account can be created multiple times for the same username/email combination.	3	Create a simple check to see if the email or username already exists in the database.
3	Google authentication failed to work because the google app engine could not authenticate due to mismatched call back url.	1	Configuring google app engine and our backend for a valid callback root.

## Module: Sign in/Sign out

Defect No.	Description	Severity	How to Correct
1	Cancel button on Sign in page does not perform any action	3	In progress - need to remove all current input in fields or redirect to a different home page with some form of response
2	Email and password have different	3	Changed css so that the input boxes used

formatting for the same type of box	the same type of css
item	

## Module: Navigation

Defect No.	Description	Severity	How to Correct
1	Empty button without any text shows up next to "Sign in / Sign out" button	3	In progress - kept as a placeholder for it to turn into Profile button on the Navigation bar, but needs to be removed

## Module: Recipe Viewer

Defect No.	Description	Severity	How to Correct
1	Empty button without any text shows up next to "Sign in / Sign out" button	3	In progress - kept as a placeholder for it to turn into Profile button on the Navigation bar, but needs to be removed
2	Through testing with Enzyme we checked to make sure the page rendered properly, which it did, but once we viewed the rendered page, it did not look as expected.	3	In progress - updated the CSS to fix this formatting error.

# **Updated Product Backlog**

# Functional Requirements

Backlog Id	Functional Requirements	Hours	Status
1	As a user, I would like to be able to sign in to Bazaar using my Google Account.	4	In Progress: Moved to Sprint 2
2	As a user, I would like to change my username.	2	Completed in Sprint 1
3	As a user, I would like to search for recipes on the application.	10	Completed in Sprint 1
4	As a user, I would like to save my favorite recipes.	2	In-Progress: Moved to Sprint 2
5	As a user, I would like to add or remove ingredients to a shopping list.	3	Planned for Sprint 2
6	As a user, I would like to share recipes on social media.	2	Planned for Sprint 2
7	As a developer, I would like to inspect my code, unit inspect my code, and inspect the design of my code.	100	Planned for Sprint 1 and 2
8	As a user, I would like to see a prediction of my liking towards the recipe	15	Planned for Sprint 2
9	As a user, I would like to add my dish preferences.	5	In Progress: Moved to Sprint 2
10	As a user, I would like to sign out	1	Planned for

	out of my Google account		Sprint 2
11	As a user, I would like to see youtube videos of the dish I am making.	3	Planned for Sprint 2
12	As a user, I would like to create recipes for others to view	5	Planned for Sprint 2
13	As a user, I would like to upvote or downvote recipes.	2	In Progress: Moved to Sprint 2
14	As a user, I would like to comment on recipes	2	Planned for Sprint 2
15	As a user, I would like to have a calendar where I can view all the meals for a week.	8	Planned for Sprint 2
16	As a user, I would like to plan my meals for the week	10	Planned for Sprint 2
17	As a user, I would like to get an email everyday about my meals for that day	3	Planned for Sprint 2
18	As a user, I would like to edit how often I get emails.	1	Planned for Sprint 2
19	As a user, I would like the option to receive text messages instead of emails.	3	Planned for Sprint 2
20	As a user, I would like the app to keep track of the calories I intake from the meals I have.	4	Planned for Sprint 2

# Non-Functional Requirements

Backlog Id	Non-Functional Requirements	Hours	Status
21	As a user, I would like personal information to remain secure and private	4	Planned for Sprint 2
22	As a developer, I would like to learn how to use ReactJS	10	Completed in Sprint 1
23	As a developer, I would like to learn how to use Firebase	3	Completed in Sprint 1
24	As a developer, I would like to learn how to setup a local test environment	2	Completed in Sprint 1
25	As a developer, I would like to learn how to use NodeJS.	10	Completed in Sprint 1
26	As a developer, I would like to learn how to unit test in ReactJS.	8	Planned for Sprint 2
27	As a developer, I would like to learn how to unit test in NodeJS.	8	Planned for Sprint 2