The Boys of 103 - Team 19

mixbook: Mixology Application

Product Backlog

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Problem Statement

No drink beats a well mixed cocktail at your favorite bar. However, what if you don't want to leave your house or pay \$10 for a drink that you can make yourself for the fraction of the cost? You could mix your own drinks at home, but you're not a bartender: you don't know what drinks you can make with what you have in your kitchen. Our mixology app aims to solve that problem: give it a list of ingredients and Mixbook will give you detailed recipes using only those ingredients. Currently there are a multitude of outdated mixology apps that just solely list recipes. Our application serves to create a social media where users can share recipes and review drinks through a simple user interface.

Background information

For the longest time, drink recipes were in paper-bound books and usually only bartenders would have these books. With the advent of the internet, websites started cropping up, although shoddy, with some drink recipes here and there, though nowhere near complete or user friendly. As mobile applications came about, this technology shifted to become mobile app based, though none were anything more than static drink recipe books. Currently there is no existing mobile application that allows a user to find recipes based on the ingredients that they have as well as allow the sharing and reviewing of drink recipes in a user friendly manner. It is frustrating searching for hours to find drink recipes that are craftable with only the ingredients that you currently have, and this mobile application aims to change that.

Environment

- An Android application front end
- A MySQL database
- A Java based backend utilizing a three-tier Spring MVC based architecture
- AWS hosting of database and other web server

Functional Requirements

| Backlog ID | Functional Requirement | Hours | Status |
|---------------|---|-------|----------------------|
| 1 | As a user, I would like to be able to edit a list of ingredients I own. | 5 | Planned for sprint 1 |

| 2 | As a user, I would like the app to tell me what drinks I can make with those ingredients. | 10 | Planned for sprint 2 |
|----|---|----|----------------------|
| 3 | As a user, I would like to view different drink recipes. | 5 | Planned for sprint 1 |
| 4 | As a user, I would like to rate and write reviews of drink recipes. | 5 | Planned for sprint 2 |
| 5 | As a user, I would like to see ratings and reviews of drink recipes. | 5 | Planned for sprint 2 |
| 6 | As a user, I would like to share custom recipes. | 5 | Planned for sprint 1 |
| 7 | As a user, I would like the option of not needing to create an account to utilize the core services of the application. | 5 | Planned for sprint 1 |
| 8 | As a user, I would like to be able to view recipes that include but are not limited to ingredients that I have. | 5 | Planned for sprint 2 |
| 9 | As a user, I would like the option of being able to have my own account. | 5 | Planned for sprint 1 |
| 10 | As a developer, I would like there to be minimal load times for all functionalities in the application. | 10 | Planned for sprint 2 |
| 11 | As a user, I would like to be able to stay logged in. | 10 | Planned for sprint 2 |
| 12 | As a user, I would like to be able to change my password. | 5 | Planned for sprint 1 |
| 13 | As a user, I would like to be able to edit my own recipes. | 3 | Planned for sprint 2 |
| 14 | As a user, I would like to be able to edit my own reviews. | 2 | Planned for sprint 2 |
| | Total | 80 | |

Non-Functional Requirements

- 1. Should be able to use this application on an Android device
- 2. Should use some sort of near-real-time or real-time solution for updates
- 3. Should be scalable to be user demand
- 4. Should meet standard security practices
- 5. Should have an interface that is simple enough so that the average user would be able to use the application without struggling
- 6. Should be able to have negligible downtime while allowing for continuous development.
- 7. Should be able to be high performing while maintaining proper security practices
- 8. Should have the ability to receive feedback in some from
- 9. Should design database schema independent of application so that it follows proper database schema design and can be ported for other uses
- 10. Should incorporate a three-tier architecture

Use Cases

Case: View/search for drink recipe

| Action | System Response |
|-----------------------------|--------------------------------------|
| User enters Recipes section | App shows recipe section |
| User taps Search | Search box appears |
| User types in query | Searches for drinks containing query |
| Tap show recipes | Recipe list appears |

Case: See drink recipes possible with ingredients

| Action | System Response |
|-----------------------------|---------------------------|
| User enters Recipes section | App shows recipe section |
| User adds ingredients | Ingredients added to list |
| Tap show recipes | Recipe list appears |

Case: Create custom recipe

| Action | System Response |
|-----------------------------|--------------------------|
| User enters Recipes section | App shows recipe section |

| User taps create | Create recipe from appears |
|---|--|
| User enters in ingredients, uploads picture | |
| User taps save | Recipe is submitted to recipe database |

Case: Rate/review a recipe

| Action | System Response |
|----------------------|--|
| User taps on reciepe | App shows recipe details |
| User taps add review | Dialog prompts for star rating and text review |
| User taps submit | Review is submitted to database |

Case: View recipe rating/reviews

| Action | System Response |
|-----------------------------|---|
| User enters Recipes section | App shows recipe list view, prompts for ingredients |
| User selects recipe | Recipe details displayed |
| Tap show reviews | Reviews are shown |

Case: Logging in without an account

| Action | System Response |
|---------------------------------------|--|
| Users is at login screen | |
| User taps continue without logging in | App goes to main screen, user is not logged in |

Case: Logging in with account

| Action | System Response |
|--------------------------------|---------------------------|
| User is at login screen | |
| User taps login/create account | Login/create dialog shown |

| User logs in/creates an account | User is logged in, main screen is shown |
|---------------------------------|---|
|---------------------------------|---|

Case: View recipes with ingredients I don't have

| Action | System Response |
|-----------------------------|--|
| User enters Recipes section | App shows recipe view |
| User adds ingredients | Ingredients added to list |
| Tap show recipes | Recipe list appears, includes suggestions for drinks that require ingredients the user does not have |

Case: Persistent logins

| Action | System Response |
|--|---|
| User open the app after logging in a previous time | App starts at main screen with user already logged in |

Case: Edit recipe rating/reviews

| Action | System Response |
|------------------------------|---|
| User enters Recipes section | App shows recipe list view, prompts for ingredients |
| User selects recipe | Recipe details displayed |
| Tap show reviews | Reviews are shown |
| User taps edit on his review | Edit dialog is shown |
| User taps save | Review is updated. |

Case: Change password

| Action | System Response |
|------------------------------|-------------------------------------|
| User enters Settings section | Settings are shown |
| User taps change password | Change password dialog is displayed |

| User taps save | Password is updated in database |
|----------------|---------------------------------|
|----------------|---------------------------------|

Case: Edit custom recipes

| Action | System Response |
|-----------------------------------|-------------------------------------|
| User enters recipe section | Main recipe screen is shown |
| User enter the My Recipes section | User's own custom recipes are shown |
| User taps edit on a recipe | Recipe ingredient from displayed |
| User taps save | Recipe is updated in database |

Case: Minimal load time for loading all possible recipes

| Action | System Response |
|----------------------------|---|
| User enters recipe section | Main recipe screen is shown |
| User adds ingredients | Ingredients added to list |
| Tap show recipes | Recipe list appears in less than a second |

Case: Entering in ingredients

| Action | System Response |
|-----------------------------|-------------------------------|
| Users enters recipe section | Main recipe screen is shown |
| User adds ingredients | Ingredients added to the list |

Case: Removing ingredients

| Action | System Response |
|-----------------------------|-------------------------------------|
| Users enters recipe section | Main recipe screen is shown |
| User removes an ingredient | Ingredient is removed from the list |