

pickyboiler

Team 23 Sprint 1 Planning Document

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Sprint Overview

In this initial sprint we plan to cover the basic functional requirements so that it would be easier for us to implement more advanced features in the next sprint. The basic functionalities we plan to implement during this sprint include creating the framework for our Android application filled with necessary activity pages, such as the on-campus dining courts page, food preferences page, allergens tab, favorite food tab, and diets tab. Users would be able to view a ranked list of dining courts and the menu of each dining court. Users would also be able to add their food preferences in the allergens tab, favorite food tab, and diets tab. User's food preferences would be saved locally on their devices. Additionally, we plan to first implement basic module with similar functionality, which will be replaced later by final module to serve as a proof of concept.

Scrum Master: Wonwin Viwathpongpan

Scrum Meeting: Wednesdays 10:30 - 11:00 am

Risks and Challenges: We are still not familiar with Android development and backend side of the application, so it will be easy to fall behind and put ourselves at a disadvantage for delivering a workable demo. However, once we get started on the frameworks and the basic structure of the application, we may find it easier to implement additional functionalities in the future. Additionally, we may have trouble optimizing the application for various devices with different screen resolutions to satisfy one of our non-functional requirement.

User Stories

User story #1

As a user, I would like to see ranking of dining courts that have the most matches to my food preferences, so that I could easily choose which dining court to go.

| # | Description | Time (hrs) | Owner |
|---|---|------------|---------|
| 1 | Create a parser class to parse JSON sent from Purdue API | 5 | Wonwin |
| 2 | Create a sorter class to rank dining courts | 5 | Wonwin |
| 3 | Create a utility class to compute ranking score for each dining court based on user preferences | 5 | Wonwin |
| 4 | Create activity page to display various dining courts | 5 | Jackson |
| 5 | Create a fragment class for the activity page | 4 | Jackson |
| 6 | Populate the fragment class with Purdue dining courts in a banner style list | 3 | Siravit |
| 7 | Design banners for dining courts | 3 | Siravit |

Acceptance Criteria / Testing Criteria:

1. Given sorter module is implemented, when a user try to view sorted list, the list should accurately presents user's preference.
2. Given network error when retrieving dining court data, then the app should notifies the user of network error.
3. Given no dining court is serving when user want to view the list, then the app should tell user that no dining court is serving.
4. Given user has allergens when sorting dining courts, then the app should ignore dishes that contain allergens when computing.
5. Given a different time of the day when viewing the list, then the app should correctly show the meal serving at the time.
6. Given a long list of dining courts when scrolling up or down, then the dining court banners should not dislocate or overlap the activity page header, that is "On-Campus Dining."
7. Given corrupted JSON from Purdue API when parsing the JSON, the app should not crash and should notify user to attempt again.

User story #2

As a user, I would like to view current food menus for all dining courts, so that I could choose what to eat in the court.

| # | Description | Time (hrs) | Owner |
|---|--|------------|---------|
| 1 | Create an onClick method to redirect user to the menu page when a dining court is selected | 3 | Jackson |
| 2 | Allow the dining court banners to be clickable or interactable. | 3 | Corey |
| 3 | Create an activity page for each dining court to show its respective food menus | 3 | Siravit |
| 4 | Create a parser function to display each menu serving at each station of the dining courts | 4 | Jackson |

Acceptance Criteria / Testing Criteria:

1. Given viewing module has been implemented when user tries to view menu with internet access, then the app should display serving menu for the chosen dining court.
2. Given no internet connection and no dining courts details cached locally, then the app should notifies the user of network error.
3. Given no internet connection but has previous up to date cache, then the app should function normally.
4. Given no internet connection and out of date cache, then the app should not use the cache and instead, notifies the user of network error.

User story #3 and #6

As a user, I would like to add favorite food into my preferences by entering in keywords, so that I can easily matched all menu that matched my keyword.

As a user, I would like to sort food preference item alphabetically so that I can easily edit my preferences.

| # | Description | Time (hrs) | Owner |
|---|--|------------|---------|
| 1 | Create a fragment class for the favorites tab for the preferences page | 2 | Siravit |
| 2 | Create an input box so that users can enter keywords | 3 | Siravit |

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|---|---|---|---------|
| | that satisfy valid conditions given in the acceptance criteria below | | |
| 3 | Parse users' favorite food input into a list and display the list on the activity page | 3 | Siravit |
| 4 | Create a sorter for the favorite food list so that the added favorite food are in alphabetical order (also for user story #6) | 2 | Siravit |
| 5 | Create a SharedPreferences storage to save users food preferences locally | 5 | Wonwin |
| 6 | Create a toast function to display toast messages when the user adds a favorite food | 3 | Corey |
| 7 | Create a sidebar menu to allow users to switch to Food Preferences page | 6 | Siravit |

Acceptance Criteria / Testing Criteria:

1. Given favorite food module has been implemented when user tries to input favorite menu, the item should be saved.
2. Given input with symbols when user submit favorite menu item, then the app should notifies user to correct the mistakes.
3. Given repeated favorite menu is entered when user submit the list, then the app should notifies user that the menu is already in the list.
4. Give a blank favorite menu is entered when user submit the list, then the app should not do anything.

User story #4

As a user, I would like to add favorite food into my preferences by selecting specific serving menu, so that I can be matched to specific dishes I like.

| # | Description | Time (hrs) | Owner |
|---|--|------------|-------|
| 1 | Create a method to read parsed data from Purdue API | 3 | Corey |
| 2 | Make a retrieved menu interactable in order to allow it to be added to preferences | 3 | Corey |

| | | | |
|---|--|---|---------|
| 3 | Create utility class in order to hold selected dishes so the user may confirm selections | 4 | Jackson |
| 4 | Create function to update user's preferences with selections | 3 | Corey |

Acceptance Criteria / Testing Criteria:

1. Given a loaded menu, when a user taps a food item then the option will be given to add the item to the favorite food input
2. Given a list of dishes to add to the user's favorites menu, when a user exits the menu, then the app will successfully update both the local and archived user food preferences.
3. Given the pop up that a user receives when clicking a food item, when a user does not want to add the item to preferences, then the user should be able to exit the pop up window without affecting selected favorites.
4. Given a long queue of toast to display when user repeatedly make changes to the list, then the app should flushes the old toast for the new ones.

User story #7

As a user, I would like to add allergens into my preferences, so that I could avoid food I have allergies to.

| # | Description | Time (hrs) | Owner |
|---|---|------------|---------|
| 1 | Create a fragment class for the allergens tab for the preferences page | 2 | Corey |
| 2 | Design graphics for all allergen buttons | 5 | Siravit |
| 3 | Design the allergens page | 4 | Siravit |
| 4 | Create a SharedPreferences storage to save users' allergens preferences locally | 5 | Jackson |
| 5 | Create a toast function to display toast messages when the user interacts with an allergen button | 3 | Corey |

Acceptance Criteria / Testing Criteria:

1. Given allergens module has been implemented when user tries to add allergens, then the app should saved the preferences.

2. Given allergens preferences has been saved when user views dietary practice activity, then the app should display correctly which allergens has already been active.
3. Given a long queue of toast to display when user repeatedly make changes to the list, then the app should flushes the old toast for the new ones.

User story #9

As a user, I would like to choose my dietary practices from premade templates, so that I don't have to spend long time building my preferences.

| # | Description | Time (hrs) | Owner |
|---|--|------------|---------|
| 1 | Create a fragment class for the diets tab for the preferences page | 2 | Corey |
| 2 | Create various dietary templates | 6 | Wonwin |
| 3 | Design graphics for each dietary template | 6 | Siravit |
| 4 | Create a SharedPreferences storage to save users' diet preferences locally | 5 | Wonwin |
| 5 | Create a toast function to display toast messages when the user interacts with a diet button | 3 | Corey |

Acceptance Criteria / Testing Criteria:

1. Given dietary practice module has been implemented when user tries to add dietary practice, then the preferences should be saved.
2. Given dietary practice preferences has been saved when user views dietary practice activity, then the app should display correctly which practice has already been active.
3. Given a long queue of toast to display when user repeatedly make changes to the list, then the app should flushes the old toast for the new ones.
4. Ensure that users cannot alter provided templates.
5. If no template is selected from the menu no change should be made to preferences.

User story #8, #10, and #11

As a user, I would like to remove my dietary practices, so that I can change my practices preference if I change my dietary lifestyle.

As a user, I would like to remove my food preferences (both favorite food and allergens), so that I can change my preference if I change my mind.

As a user, I would like to remove my allergen preferences, so that I can change my allergen preference if my allergen changes.

| # | Description | Time (hrs) | Owner |
|---|---|------------|---------|
| 1 | Create function to remove saved user's dietary practices | 3 | Jackson |
| 2 | Create function to remove saved user's food preferences | 3 | Corey |
| 3 | Create function to remove saved user's allergen preferences | 3 | Corey |
| 4 | Create SharedPreferences function to make sure that the preferences are removed accordingly, even if the app gets restarted | 3 | Siravit |
| 5 | Create android swipe action to call delete function for all three tabs | 6 | Jackson |

Acceptance Criteria / Testing Criteria:

1. Given user removes dietary practices, then the app should grey out removed practices button.
2. Given user removes allergens, then the app should grey out removed practices button.
3. Given user removes food preferences, then the app should removed that items from the list.
4. Given user swipes right, delete button should appear for user to select.
5. Given user swipes right, and exit the app, the delete button should not appear on next startup.

Remaining backlog

Functional Requirements

1. As a user, I would like to see ranking of dining courts that have the most matches to my food preferences, so that I could easily choose which dining court to go.
2. As a user, I would like to view current food menus for all dining courts., so that I could choose what to eat in the court.
3. As a user, I would like to add favorite food into my preferences by entering in keywords, so that I can easily matched all menu that matched my keyword.
4. As a user, I would like to add favorite food into my preferences by selecting specific serving menu, so that I can matched specific dish I like.
5. As a user, I would like an auto complete function when entering favorites, so that I have easier time typing and not having to worry about typo.
6. As a user, I would like to sort preference item alphabetically so that I can easily edit my preferences.
7. As a user, I would like to add allergens into my preferences, so that I could avoid food I have allergies to.
8. As a user, I would like to remove my food preferences (both favorite food and allergens), so that I can change my preference if I change my mind.
9. As a user, I would like to choose my dietary practices from premade templates, so that I don't have to spend long time building my preferences.
10. As a user, I would like to remove my dietary practices, so that I can change my practices preference if I change my dietary lifestyle.
11. As a user, I would like to remove my allergen preferences, so that I can change my allergen preference if my allergen changes.
12. As a user, I would like to view nutritional values for each food dish, so that I can decide which dish is healthy.
13. As a user, I would like to receive notification when my favorite dishes are being served, so that I don't have to open application to manually check.
14. As a user, I would like to receive timely notification for which dining court I should choose, so that I know which dining court to go without opening the application.
15. As a user, I would like to view locations of places where I can use my dining dollars, so that I can easily spend my dining dollar before it expires.
16. As a user, I would like to view off campus restaurants if all Purdue dining courts are closed, so that I can easily find place to eat when dining courts are closed.
17. As a user, I would like to get suggestions for off campus restaurant based off of my food preferences, so that I can explore more dishes I might like.
18. As a user, I would like to get recommendations on menu I might like based on other users with similar preferences, so that I can explore dish I might like.
19. As a user, I would like to get recommendations on menu based on my ethnicity, so that I can easily build my preferences from users' with similar taste.
20. As a user, I would like to be able to refresh the app, so that I can get the latest

dining court information.

21. As a developer, I would like to collect anonymous user's preferences data, so that I can improve suggestion system.
22. If time allows, as a developer, I would like to explore more advanced data mining techniques to create better suggestion system, so that users can get better recommendation.
23. If time allows, as a developer, I would like to a web application version of the app, so that users can easily user our application on PC.
24. If time allows, as a user, I would like a ranking of off campus restaurants based on my preferences, so that I can easily chooses where to eat off campus.
25. If time allows, as a user, I would like the application to work nationwide so that I can choose where to eat when I am travelling.
26. If time allows, are a user, I would like to specify by budget for off campus restaurants, so that I can easily choose restaurants within my budget.
27. If time allows, as a user, I would like the application to learn by itself overtime my dietary preferences, so that I don't have to manually create my preferences.
28. If time allows, as a user, I would like to create my own dietary template and share it with other users, so that I create share specialized eating practice, such as special diet program.
29. If time allows, as a user, I would like to be able to rate memu, so that users can know the quality of the dishes.
30. If time allows, as a user, I would like to leave a review of a dish, so that users can understand the rating.
31. If time allows, as a user, I would like to leave a review of a dining court, so that users can know how good is the service.
32. If time allows, as a developer, I would like to cooperate with Purdue to count number of people inside the courts, and number of seats left so that users can decide if they want to wait.
33. If time allows, as a user, I would like to see a ranking of dining courts based off of popularity at the current time, so that users can see which dining courts are busy.