

Team 23 Sprint 2 Planning Document

Corey Combs, Jackson Sorrells, Wonwin Viwathpongpan, Siravit Tichachol

Sprint Overview

In this sprint we plan to cover mostly quality of life functional requirements so that we can have an acceptable application by the end of the Sprint. The functionalities we plan to implement during this sprint include creating an in-app activity page to view current serving menu, assisting users to add favorites menu through selectable list and auto complete typing, displaying nutrition value of each menu, adding more templates to dietary practices, notifying users of best matched dining court, allowing users to refresh page, and adding offline mode to the application. If time allows, we will start working on the backend to allow users to save and share saved preferences online.

Scrum Master: Wonwin Viwathpongpan

Scrum Meeting: Wednesdays 10:30 - 11:20 am

Risks and Challenges:

For this sprint, we have to make sure additional modules do not conflict with existing ones. We also have to allocate time to test previous modules to ensure that we have a stable code base to build upon in sprint 2. Additionally, we have a difficult time setting up meetings due to each person's conflicting schedules. Therefore, we have to work more independently during this sprint.

User Stories

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 a new activity page for food menus for each dining court	2	Jackson
2	Design graphical interface for the menu pages	6	Jackson
3	Create parser function to display the menus at each dining court	6	Jackson
4	Allow clickable dining court banners to redirect the user to the menu pages	5	Jackson

Acceptance Criteria / Testing Criteria:

- 1. Given that a user clicks a dining court, the page will be redirected to a menu display.
- 2. Given menu data is accessed through the API, the menu will be displayed on the page.
- 3. Given that a user is currently on the page with the displayed menu, if the user presses the back button they will be redirected back to the sorted dining courts page.

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 specific dish I like.

#	Description	Time (hrs)	Owner
1	Make individual items on menu page clickable	3	Corey
2	Create function to display a notification when user clicks menu item	3	Corey

3	Create function to handle user responses; update user	6	Corey
	preferences based on user response		

Acceptance Criteria / Testing Criteria:

- 1. Given a user desires to add an item to his/her preferences, when the user clicks on a menu item then a notification will appear to allow a user to add the item to their favorites.
- 2. Given a user clicks on a item, when they do not wish to add it to their favorites, then when clicking the option to not add it to favorites the item should not appear in the saved preferences.
- 3. Given a user attempts to save a preference, when the preference has already been saved by the user, then the user should receive a notification
- 4. Given a user attempts to save a preference, when it is not possible to save the preference (memory,etc.), the user should receive a notification.

User story #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.

#	Description	Time (hrs)	Owner
1	Create function to read user input after every key press	3	Jackson
2	Create list of potential fill options	2	Corey
3	Implement function that determines top suggestions based on user input	4	Corey
4	Implement function to show user suggestions in drop down menu	4	Corey

Acceptance Criteria / Testing Criteria:

- 1. Given a user that taps on the textbox, when the user begins typing, then reasonable suggestions should appear below where the user is typing.
- 2. Given input text that does not match any item in the list, when the user checks for suggestions, then the dropdown should display text communicating that there is no match.
- 3. Given a user fills the space allotted for input completely, then the user should be notified by either a notification or an audio cue.

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	Plan out various dietary practices based on available data	3	Siravit
2	Design more logos and button animations for each dietary practices button	5	Siravit
3	Edit ranking algorithm to account for new dietary practices	6	Wonwin
4	Implement buttons and adjust layout of buttons in diets page	2	Siravit
5	Add button animations for each dietary practices button	3	Siravit
6	Implement onClick methods for each dietary button to save dietary preferences in SharedPreferences	6	Siravit
7	Ensure that dietary preferences are saved even when the application is killed	3	Siravit

Acceptance Criteria / Testing Criteria:

- 1. 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.
- 2. Given a long queue of toast to display when user repeatedly make changes to the list, then the app should flush the old toast for the new ones.
- 3. Given dietary practice preferences has been saved when user views dietary practice activity, then the app should sort the dining court correctly when displaying on the main page activity.

User story #12

As a user, I would like to view nutritional values for each food dish, so that I can decide which dish is healthy.

#	Description	Time (hrs)	Owner
1	Create method to allow user to swipe on individual menu items	4	Corey
2	Create function that redirects user to webpage with nutritional information upon swiping in a particular direction	6	Corey

Acceptance Criteria / Testing Criteria:

- 1. Given a user wants to view nutritional data, when a user swipes on a menu item then the user will be redirected to a webpage with nutritional information.
- 2. Given a user swipes on an item, when the user does not want to view nutritional information, then if they do not release the swipe the user is not redirected.
- 3. Given a user accidentally interacts with an item, when the user releases the item, then we do not expect the user to be redirected.
- 4. Given a user is attempting to access nutritional information, when the internet is inaccessible, then the user should receive an error message.

User story #13 and #14

- 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.
- 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.

#	Description	Time (hrs)	Owner
1	Create class for notification handling	2	Jackson
2	Create function to push notification to the user when it is called	6	Jackson
3	Create function to automatically send notifications at appropriate dining times	3	Jackson

Acceptance Criteria / Testing Criteria:

- 1. Given a user allows for notifications, notifications will be processed through a notification handling class.
- 2. Given a user clicks the notification, the sorted list of dining courts should be displayed when the app opens.
- 3. Given the time is a popular dining court time, a user will receive a notification

with their most prefered dining court at the time.

User story #20

As a user, I would like to be able to refresh the app, so that I can get the latest dining court information.

#	Description	Time (hrs)	Owner
1	Create onResume method for on-campus dining court page so that the application states do not have any conflicts with each other	5	Siravit
2	Implement onResume method in a way that allows the application to refresh itself when users reopen the application after a long period of time	3	Siravit
3	Enable swipe down function in on-campus dining court page	4	Siravit
4	Create onRefresh method to listen to users gestures when users swipe from top to bottom	6	Siravit
5	Ensure that the refresh animation or icon disappears after the page has reloaded	3	Siravit

Acceptance Criteria / Testing Criteria:

- 1. Given users swipe from top to bottom on the on-campus dining court page when there is internet, then the page should show a refresh animation and update the dining court information accordingly.
- 2. Given a refresh animation is shown when users has already swiped down to refresh, then the refresh animation should disappear when the page has been updated.
- 3. Given users reopen the application after a long period of time, then the application should refresh itself to get updated information on dining courts.

User story #21

As a user, I would like to be able to cache current dining court details, so that I can decide which dining court to eat without internet.

#	Description	Time	Owner
---	-------------	------	-------

		(hrs)	
1	Add function to sharedPreferences manager to save cached dining court data	6	Wonwin
2	Add function to sharedPreferences manager to verify integrity and update cached dining court data	5	Wonwin
3	Modify all network functions to not fetch data from internet if cached data is valid to save data and improve response time	4	Wonwin
4	Notify user of no internet connection when the cache is invalid	2	Wonwin
5	Modify main activity page and all related modules to use cached data instead of trying to fetch from internet in offline mode	7	Wonwin

Acceptance Criteria / Testing Criteria:

- 1. Given user has opened the app with internet connection once, when the user open the app without internet, the user should still able to see the ranking of dining court with its banner details.
- 2. Given user has never opened the app with internet connection once, when the user open the app without internet, the user not see any dining court cards.
- 3. Given user has opened the app with internet connection once but on the other day, when the user open the app without internet with invalid cache, the user not see any dining court cards.
- 4. Given user has opened the app with internet connection once, when the user open the app with internet, the app should not fetch any more data that has already been fetched and cached.
- 5. Given user has opened the app with internet connection once, when the user open the app with internet, no warning should be shown to the user.

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 user, I would like to be able to cache current dining court details, so that I can decide which dining court to eat without internet.
- 22. As a developer, I would like to collect anonymous user's preferences data, so that I can improve suggestion system.
- 23. 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.

- 24. 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.
- 25. 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.
- 26. 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.
- 27. 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.
- 28. 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.
- 29. 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.
- 30. 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.
- 31. If time allows, as a user, I would like to leave a review of a dish, so that users can understand the rating.
- 32. 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.
- 33. 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.
- 34. 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.