BoilerHungry

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Product Backlog

Problem Statement

One of the problems with the dining courts is that they won't always serve good food or food that you would actually want to eat. Currently, there exist iPhone and Android apps that allow you to see what the Purdue dining courts will be serving on a given day. You can also check the menu online through a browser as well. However, there does not exist a desktop application that allows a user to track only the foods that they like and see at which dining courts their preferred foods will be served on a given day. People have different dietary requirements and tastes: vegetarian, low calorie, lactose free, vegan, etc. Our product will be special in that it will allow for users to easily keep track of only their preferred dining court foods on their desktop. There will be no more need to scrape through entire menus to see if your preferred foods are being served at a dining court anymore.

Background Information

There are multiple dining court apps already on the market for iPhone and Android as well as for the majority of browsers through the purdue dining court website. However, there is lack of a desktop application that can keep track of one's preferred foods in one place without having to scrape through an entire menu to find desired items and where to find them. This app will be the first desktop application to allow users to find what they would like at the click of a button.

Environment

BoilerHungry will be developed as a standalone Java desktop application. The application will be distributed in the form of an executable Jar file. The backend will collect the external data for our application from the official Purdue dining court REST API. The application's frontend GUI will be designed using the Java Swing library. User preferences will be stored in the form of a JSON file.

Requirements

Functional

Backlog ID	Functional Requirement	Hours	Status	Status
1	As a user, I would like to open the application from the desktop	10	completed	Planned for sprint 1
2	As a user, I would like to save my dietary preferences in the application (eg. vegetarian only, no allergens, etc)	10	completed	Planned for sprint 1
3	As a user, I would like to see the daily menu of every dining court	15	completed	Planned for sprint 1
4	As a user, I would like to add the food that I searched for and add it to the list of preferred foods, "MyFoods", that I want to be notified about	15	completed	Planned for sprint 1
5	As a user, I would like to delete items from the list of "MyFoods", that I want to be notified about	15	completed	Planned for sprint 1 - Moved to Sprint 2
6	As a user, I would like to see what hours the dining courts are open	10	completed	Planned for sprint 1 - Moved to Sprint 2
7	As a user, I would like to be able to close the application at anytime	20	completed	Planned for sprint 1
8	As a user, I would like to see how long the line is at a certain dining court	15	Incomplete	Planned for sprint 1
9	As a user, I would like to use a search bar to look for foods and see the details for each food (e.g ingredients, allergens)	20	Incomplete	Planned for sprint 1 - Moved to Sprint 2
10	As a user, I would like to scroll through the menu and see the allergens that are contained in each food being served.	20	Incomplete	Planned for sprint 2
11	As a user, I would like to see the menu of a certain day in the future if it is available	15	completed	Planned for sprint 2
12	As a user, I would like to have the daily menu refresh automatically and have an option to refresh the menu manually	20	completed	Planned for sprint 2

13	As a user, I would like the application to notify me if a preferred food is being served at a certain dining court	10	completed	Planned for sprint 2
14	As a user, I would like the application to suggest a dining court to go to depending on my "MyFoods" (e.g. pancakes, cookies, stir fry)	10	incomplete	Planned for sprint 2
15	As a user, I would like the application to suggest a dining court to go to depending on my dietary preferences (e.g. vegetarian, allergens)	20	incomplete	Planned for sprint 2
16	As a user, I would like to be able to "star" a certain food, which adds it to my "MyFoods", as I'm scrolling through the menu, rather than having to manually search for the food to add it.	20	completed	Planned for Sprint 1 - Moved to Sprint 2
17	As a user, I would like to be able to "unstar" a food that is "starred", which removes it from my "MyFoods" list, as I'm scrolling through the menu.	15	completed	Planned for sprint 2
18	As a user, I would like to know at what times (Breakfast, Lunch, Dinner) a food is being served at a dining court.	15	completed	Planned for sprint 2
19	As a user, I would like to be able to see the address of any given dining court.	10	completed	Planned for sprint 2
20	As a user, I would like to be able to see the number of calories a certain food at the dining court has.	15	incomplete	Planned for sprint 2
21	As a user, I would like to be able to see images of the food in the menus	20	incomplete	Planned for sprint 2
22	As a user, I would like to easily access the "MyFoods" list	15	completed	Planned for sprint 2

Non-Functional

- The application will run on Windows
- The application should have very light memory usage
- Updating the menu and any other information should be quick
- The interface should be readable and simple to use
- Any stored data should be secure and encrypted

- Application must store data locally on the target system
- Application backend will be well structured and easy to reuse
- Application will be written with code for error checking for easy debugging
- Application will gracefully handle errors by catching exceptions
- Application will not overwrite files not created by the app without explicit permission to do so
- Application will gracefully handle an unsuccessful update to the menu

Use Cases

Case: Open the Application from the Desktop

Action	System Response
1. Double click on application icon.	2. Program GUI will appear.

Case: View Daily Menu of a Dining Court

Action	System Response
1. Click on the icon of the desired dining court. 1a. If needed, click on the left or right arrows to view more dining courts.	2. Dining court food menu will appear with the list of details (e.g. hours, number of people in the lobby, location)

Case: Food Notification

Action	System Response
1. Open the application	2. A notification ticker will appear to notify the user of the foods they have in their "MyFoods" list that are currently being served.

Case: View "MyFoods" list

Action	System Response

1. Click on the "MyFoods" icon in the top right corner of the application window.	2. The list of all the preferred foods will appear on the drop down menu

Case: Delete Food from "MyFoods"

Action	System Response
1. Click on the "My Foods" icon in the top right corner of the application window. 3. Click on the "star" button next to the food to be deleted.	2. The list of all the preferred foods will appear on the drop down menu 4. The food will be removed from the list of watched foods.

Case: View Future Menu

Action	System Response
1. In the URL box, enter "/menu/<DiningCourtName>/MM-DD-YYYY" 2. Hit Enter	3. Dining court food menu will appear with the list of details (e.g. hours, number of people in the lobby, location) for the day specified in the URL.

Case: Save dietary preferences

Action	System Response
1. Click on the "Preferences" icon in the top right corner of the screen 3. Enter a dietary preference or exclusion into the input box. 4. Click "Add"	2. Two input dialogs will appear where the user can add dietary preferences and dietary exclusions. 5. The preferences will be saved and a checkbox with the added preference will appear.

Case: View Dining Court Hours

Action	System Response
1. Click on the icon of a desired dining court	2 .Dining court food menu will appear with the list of details (e.g. hours, number of people in the lobby, location) 3. The dining court open hours for the week will appear on the left bar.

Case: Close the application

Action	System Response
1. Click on the X at the top of the application window.	2. Application closes

Case: Refresh Dining Court Menu

Action	System Response
1. (On dining court menu window) Click "refresh" button	2. Menu will reload and display the updated results in the window.

Case: "Star" Preferred Food

Action	System Response
1. Click on the icon of a desired dining court 3. Click on the "star" button next to the name of the food	2. Dining court food menu will appear with the list of details (e.g. hours, number of people in the lobby, location) 4. "starred" food is added onto the "MyFoods" list

Case: "Unstar" Preferred Food

Action	System Response
1. Click on the icon of a desired dining court	2. Dining court food menu will appear with the list of details (e.g. hours, number

3. Click on the "star" button next to the name of the food that is already "starred"	of people in the lobby, location) 4. The food will be "unstarred" and removed from the "MyFoods" list

Case: Time of food being served

Action	System Response
1. Click on the icon of a desired dining court 4. Click on the arrows to switch off between the times of food being displayed	2. Dining court food menu will appear with the list of details (e.g. hours, number of people in the lobby, location) 3. On the menu the current time(e.g. breakfast, lunch, dinner) of the food being served is displayed 5. The new menu of food will be displayed based on the time the user switched to

Case: View Dining court's location

Action	System Response
1. Click on the icon of a desired dining court 4. Click on the location(address)	2. Dining court food menu will appear with the list of details (e.g. hours, number of people in the lobby, location) 3. The dining court's location(address) will appear on the left bar. 5. It will open up a page which takes them to Google maps