Intelligent Search

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PROBLEM STATEMENT

There are many inefficiencies that Purdue Students must deal with to get relevant information about the dining courts or CityBus locations. While there are apps regarding both, they are both essentially glorified data dumps. Many students have gone through the struggle of manually sifting through the app's data, but no common platform has been provided yet. This service would definitely be popular among college students who value efficiency and ease of use.

BACKGROUND INFORMATION

Audience

This app aims to provide an easy user experience to Lafayette residents and Purdue Students, where the user base just have to worry about figuring out exactly what they want. Instead of having to manually sift through the data to find the answer, our app would do the dirty work - much faster and with all possible results.

Domain

While there is a dining court app, it is a data dump from the API. We hope to provide a "smarter" service that can show the user exactly what he has searched for. This is a service that is not currently provided by any dining court apps and would help us stand out from competitors.

While the CityBus side of things would be very similar to the CityBus app, it would provide convenience as a one-stop shop for Purdue/Lafayette relevant APIs. API aggregator services at Purdue do not currently exist and could serve incredibly useful for future Purdue students.

Limitations

Our greatest limitation would be the reliance on the lexical search to accurately interpret a user's query. If the search cannot understand or misunderstands what the

user wants, incorrect or null data could be returned. In this case, we would be less efficient than official apps because we would be returning garbage data instead of just dumping everything for the use to use. The lexical search analysis is crucial to setting ourselves apart from the competitors and attracting users.

Another limitation would be the lack of an iOS application. While there are plans for a webapp and Android app, iOS devices are incredibly common on college campuses and the lack of a convenient app might be the tipping point for power-users.

REQUIREMENTS

Functional

Backlog ID	Functional Requirements
1	As a user, I would like to create an account.
2	As a user, I would like to logout as in needed.
3	As a user, I would like to be able to search for menus at Purdue Dining Courts.
4	As a user, I would like to be able to search for specific foods.
5	As a user, I would like to be able to search for allergen information (dietary restrictions).
6	As a user, I would like to be able to search for specific cuisines (food styles).
7	As a user, I would like to be able to save favorite foods or queries.
8	As a user, I would like to sort food items based on popularity, meal type and cuisine type.
9	As a user, I would like to be able to have a meal built around my certain dietary restrictions.
10	As a user, I would like to be able to track calories consumed.
11	As a user, I would like to search for Veg/Non-Veg food items.

12	As a user, I would like to be able to find foods around a certain calorie level.
13	As a user, I would like to be able to use location service to find the closest dining court.
14	As a user, I would like to have notifications sent to my phone about my favorite foods being served.
15	As a user, I would like to have a profile image.
16	As a user, I would like to change my user settings such as name and profile image.
17	As a user, I would like to be able to find the nearest bus.
18	As a user, I would like to be able to find the shortest time to my destination.
19	As a user, I would like to find the estimate bus time.
20	As a user, I would like to have the ability to search routes.
21	As a user, I would like to login through Facebook.
23	As a user, I would like to change my password if forgotten.

Non- Functional

Backlog ID	Non-Functional Requirements
1	As a user, I would like to have a fast response time.
2	As a system admin, I would like to be able to scale the project up, if need be.
3	As a user, I would like the accuracy of my searches to be high.
4	As a user, I would like to have access to this on Mobile.
5	As a user, I would like to have access to it on Web.

6	As a developer, I would like to be able to add more APIs in the future.
7	As a developer, I want to be able to handle a large volume of traffic at any given point in time.
8	As a user, I want a fast and secure way to log in.