Team 4

Project Charter

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Smart Search - Purdue API

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PROBLEM STATEMENT

Currently, existing Purdue supplemental apps provide very little filtering and are mostly a graphic representation of all data Purdue offers to developers. We plan to differentiate our product from existing apps with extensive searching and filtering of existing API endpoints to allow users to only see the results they need.

PROBLEM OBJECTIVES

We will achieve these goals by creating an intelligent search system. Users would be able to search specific information that the system would then break down into the important components. The system would be able to recognize key tokens and return the specified information. Information would be displayed in a clear and easy to digest form via a web and android app. Users would be able to log in and save frequent searches to save time.

Using the public Purdue Dining API, we would develop the ability to allow users to freely search for their needs.

- The ability to find one's favorite food
- The ability to build a "healthy" calorie specific meal
- The use of location services that can be added to searches as a filtering option

Time permitting, we'd translate what we learned from the search tokenizing process and backend infrastructure to eventually include other API services. Ideally, we would also implement the Lafayette CityBus as a search option.

- The ability to use location services to find the nearest bus stop
- The ability to find the fastest route to a location
- The ability to find the route with the least walking

STAKEHOLDERS

Users: Purdue students, Lafayette Citybus riders

Project Charter

Developers: Sidhant Chitkara, Alexander Meyer, Apoorva Parmar, Yash Pujara, James Shao, Michael Vieck
Product Trashcan: James Shao
Product Owners: The development team working on the project. Owners of the APIs used (Purdue University, CityBus of Lafayette)

DELIVERABLES

We plan to build a web application that provides an intelligent meal search which can be easily ported to an Android application. Once basic functionality for the Purdue menu API has been implemented, we will use what we have learned and the backbone for tokenizing searches to begin adding other relevant search options. In the later sprints we plan to add the CityBus API, which would allow you to query things like the fastest route based on your current location and bus locations.

Platforms, Tools and Framework:

- Navicat, IntelliJ, Eclipse (Backend as well as Front-end)
- Bootstrap / Foundation frameworks for basic HTML and CSS
- Javascript, AngularJS, and JQuery for the web front
- Swagger for creating API Documentation
- MYSQL for creating a relational database
- Postman for API testing purposes
- Amazon Web Service for hosting the server
- Tomcat for the Java Application Server running on Amazon Elastic Beanstalk
- Github for version control
- Trello as an agile scrum board for daily stand-ups