# IST256 Project Phase 2: The Plan

## [1] Blackboard Group Number.

Enter your blackboard Group number: 3

## [2] Group Members and their contributions to this deliverable

Enter the names of your group members and highlight their contributions to the project to date:

|  |  |
| --- | --- |
| **Name** | **Summary of contributions** |
| Jonathan Quinlan | Question 3 and 5 |
| Nathan Whitman | Question 4 and 1 |
| Ibrahim Magassa | Question 6 and 2 |

## [3] Feedback from Proposal

Explain how your project has changed (if at all) based on the feedback provided by your Faculty Mentor.

Our proposal has not changed too drastically since our original proposal. The main change is that we will be expanding our search options from strictly the Syracuse area to the nation as a whole. Since the API’s that we will be uploading are sources for the entire nation it would make the most sense for our program to offer the same service. We feel it is important to offer all of these services in one location because that is the way that technology is moving. All inclusive technology is something that will eventually be the common practice so we feel it is necessary to create this program before someone else does.

## [4] Project Requirements

Provide a list of Systems, API’s, Python Packages, Web Services, etc. you will require to complete your project. For each explain what it is and provide a link to its source, so your Faculty Mentor can research them.

Imports:

Json, Requests,Pandas,Numpy.

APIs:

Distance Matrix API- Retrieve duration and distance values based on the recommended route between start and end points. Link: <https://developers.google.com/maps/documentation/distance-matrix/>

Google Places API- [Search for](https://developers.google.com/places/web-service/search) and [retrieve](https://developers.google.com/places/web-service/details) rich information about local businesses and points of interest, available on every screen. Link: <https://developers.google.com/places/>

Google Maps API- Provide your users with the reliable location information they need throughout the world. Link: <https://developers.google.com/maps/>

Weather API- Get weather on data for the day. Link: <https://www.aerisweather.com/?gclid=Cj0KCQjw_ODWBRCTARIsAE2_EvXeawQrOJDtYdplD6IdEFSmAcCmxglKhc918y-wKO2_WcHSAKoE6kQaAmASEALw_wcB>

## [5] Project Github Repository

Provide a link to your project’s GitHub repository. In this repository should be code examples your team has written which demonstrate you know how to use the project requirements in section [4].

https://github.com/jmquinla-su/IST-256-Group-3.git

## [6] Program Design

Provide a high-level program design and flow for your project. This should mimic the final desired behavior of your project. This demonstrates to your Faculty Mentor that you’ve given some thought as to how the program will work and be demonstrated. Specifically, provide:

[6.1] Inputs

* Imports(Requests,Json, Pandas, Numpy)
* Input location.
* Input desired day to go to restaurant.
* input selected restaurant.
* input mode of transportation.
* input expected meals.

[6.2] Outputs

* The weather on the particular day.
* A list of local restaurants with information of indoor/outdoor seating.
* Reviews on the selected restaurant.
* Distance to the restaurant and time from mode of transportation.
* List of restaurant meals.

[6.3] High-Level Algorithm (step by step, plain English no Python!)

* Import(Requests,Json, Pandas, Numpy)

#Functions

* Create a function using the google maps api that gives you information on your location.
* Create a function using the weather api that allows you to enter location details and date of visit to receive info on expected weather.
* Create a function using google places api that takes map details to put out a list of local restaurants.
* Create a function using yelp api that uses the restaurant details to show reviews and menus.
* Input statement to get user location.
* input statement to get user desired date
* Create location detail variable that uses google maps function to get location details.
* Create weather variable that uses weather function by using location and date to see weather information.
* Create a restaurant list variable using google places function to get a list of the local restaurants by using location.
* Input statement to select one restaurant from the list.
* Input statement to get user to enter desired for of travel(Car, bike, and train)
* Create a distance variable using Distance Matrix function to approximate distance from restaurant location by using desired travel, location and selected restaurant location.