**Project Name: Mixed Reviews** Naveen K

11-1-17

**Project Requirements**

**Project Description**: Mixed Reviews is a program and website which allows users to read reviews of businesses from different websites such as Yelp, TripAdvisor, etc.

**Service of Need**: Users always want to search for a restaurant of their choice, and they want to know how the restaurant is rated. They begin to look at different sites such as Yelp or TripAdvisor. However, the problem is that they have to constantly switch between tabs to read reviews. Even if they place their windows side by side, they still have to shift their focus on one review site to another review site.

**Scope and Purpose**: Allow a more simplified view of different ratings from different sites all on one page. This allows users to look at two reviews in one page and get a sense of how different sites review that particular business.

**End Users**: Restaurant enthusiasts, and people who are lazy and don’t want to have multiple windows or tabs open on their browser

**Technical Requirements**

**Functionality**

* This project will require the use of Mac OS X as the primary OS, HTML for the webpage, MySQL for the database, and Java JDBC.
* **Primary**
* Users can search for a particular business
* Users can filter their search by:
  + Rating
  + Sites
  + Distance
  + City / Location
* The user’s search query gets stored into the database
* The program works in all browsers
* The program works in all platforms (Windows, Mac)
* The web page with the results will display about 10 results per page (site name, average rating, name of business, and the first 2-4 reviews from sites from criteria)
* **Secondary**
  + Users have to enroll in order to save their search query on the database
  + Make the webpage pretty
  + Make the UI fancy but readable to users

Project Constraints

* ***Time Constraints***: By the end of this semester, the Java JDBC and MySQL code must be written. The front end HTML page skeleton must also be finished. Winter Break will be spent working on making API calls.
* ***Cost constraints***: Project is limited to one programmer who will be implementing the database, HTML, referencing online APIs, and interface between the database using Java JDBC.
* ***Scope Constraints***: The APIs are the most important aspect of this project. The project will be in jeopardy if at least 1 API call cannot be authenticated

Usability Requirements

1. The program works in Chrome and Firefox or Opera
2. The program is supported in all platforms (Windows, Mac, Linux)

**Use Cases**

1. User wants to search for the nearest restaurant
   1. 1.) User enters the name of restaurant in the search bar, chooses to search within a 5 mile radius of their current location, San Jose, CA
   2. 2.) Chooses to show only 5 star reviews from Yelp and Foursquare
   3. 3.) Clicks the search button, and the webpage automatically opens, displaying the results
2. User wants to retrieve and modify their last search
   1. 1.) Assuming the user does not have a profile and remembers at least 1 part of their criteria, it will be retrieved from the database.
   2. 2.) However the program won’t begin the search until the user clicks the search button.

1. User wants to store their search query in the database
   1. 1.) User signs up with their own login. Any future searches they make will get stored into the database.
   2. 2.) The user performs their desired search. Search results will also be saved into the database for future reference.
2. User wants to search for a restaurant, but their criteria doesn’t work
   1. 1.) User enters “South Indian restaurant”. Chooses to look near Bakersfield, CA
   2. 2.) User chooses $$ as their price range, and looks within a 10 mile radius
   3. 3.) User clicks Search.
   4. 4.) Web page tells user that no matches were found
3. User doesn’t filter at least one of the criteria in their search. Ex: Nearest Mechanic
   1. 1.) User enters the city
   2. 2.) User doesn’t enter the distance
   3. 3.) Program defaults the distance to 5 miles radius
   4. 4.) User doesn’t customize the rating.
   5. 5.) Rating will default to 3 stars or higher
   6. 6.) User doesn’t choose a website filter
   7. 7.) Web page will display reviews with the default settings from the criteria from all sites.

Use Cases for Tasks

1. Create the interface for the JDBC and mySQL database
   1. Will take the user’s search criteria and store them in the database
2. Work on the UI for Java, where the user searches for what they want
   1. Incorporate a search bar, and drop down list for the criteria, as well as other important UI components
3. Work on the HTML Front end page. Learn JQuery to make API calls
   1. Research on how Yelp uses their UI. How their UI is laid out. Decide whether to create new kind of UI or conform to Yelp’s UI standard
4. Get API authentication working from sites such as Yelp, Tripadvisor, Foursquare, Google Places
   1. As of now, Yelp and Google Places have been taken care of in terms of getting authentication.
   2. Need help learning JQuery to figure out how to make API calls