SUNY Oswego - CSC 380

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Software Engineering Project

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**Project Description**

In this restaurant searching application (name pending), users would be able to search up restaurant by names, or by types either with or without users’ current locations. This restaurant searching application is aimed to provide users a platform to find good restaurants and to post ratings for restaurants. Instead of believing in restaurants’ own beautiful advertisements, users would be able to find real restaurant critiques and reviews from other users who have already experienced or consumed in these restaurants. This will ensure that they, as users, will be able to make the best decision possible upon choosing restaurants. This application will also track similar restaurants in the area so that if the users fancy themselves some Asian cuisine they don't just have to settle for one restaurant.

Food is a significant part of human lives, and eating out is also an important part of people’s social experiences. Being able to find decent restaurants can be a pain, thus the aim of our restaurant searching application is to lighten this load by having a restaurant rating system, which are mainly composed by user critiques and carefully maintained by administrators. This ensures a lower likelihood of a restaurant getting false reviews, and also saves consumers from spending money and time on terrible dining experiences.

**Project Requirements**

Part A: The Systems Requirement

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| **ID** | **System Requirement** | **Priority Weight**  **(in a scale of 1 to 5 stars)** | **Estimated Completion Time** |
| SREQ1 | The system should be able to save information and retrieve information in the database. | ★★★★★ | 15 days  (SREQ1, SREQ2, SREQ 2.1, SREQ3) |
| SREQ2 | The system should allow existing users to login. | ★★★★★ | 15 days  (SREQ1, SREQ2, SREQ 2.1, SREQ3) |
| SREQ2.1 | The system should allow new users to sign up. | ★★★★★ | 15 days  (SREQ1, SREQ2, SREQ 2.1, SREQ3) |
| SREQ3 | The system should keep every user’s login information confidential. | ★★★★★ | 15 days  (SREQ1, SREQ2, SREQ 2.1, SREQ3) |
| SREQ4 | The system should be able to send an automated confirmation E-mail upon completion of creating a new account. | ★★☆☆☆ | 5 days |
| SREQ5 | The system should get restaurant data based on users’ search and list results based on total average ratings (from highest to lowest). | ★★★★★ | 20 days |
| SREQ6 | The system should have a help page, about page, FAQ page, and a feedback page. | ★☆☆☆☆ | 3 days |
| SREQ7 | The system should have a way of tracking user preferences. | ★☆☆☆☆ | 3 days |
| SREQ8 | The system should have a welcome page that displays app logo for a few seconds before allowing users to login/sign up. | ★☆☆☆☆ | 3 days |
| SREQ9 | Each restaurant should have a separate page that displays its address and user ratings. | ★★★★☆ | 20 days  (SREQ9, SREQ10) |
| SREQ10 | In addition to SREQ9, each restaurant should displays its menu and operation hours. | ★★☆☆☆ | 20 days  (SREQ9, SREQ10) |
| SREQ11 | System should provide users an option of setting up new password in case they forget their password. | ★☆☆☆☆ | 3 days |

Part B: User stories

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| --- | --- | --- |
| **ID** | **User Stories** | **Priority Weight**  **(in a scale of 1 to 5 stars)** |
| UST1 | As an administrator I should be able to access the user account data. | ★★★★★ |
| UST2 | As an administrator I should be able to delete a user account. | ★★★★★ |
| UST3 | As a potential user I should be able to make an account. | ★★★★★ |
| UST4 | As a user I should be able to access my account. | ★★★★★ |
| UST5 | As a user I should be able to search restaurants by names (fetch restaurants data nearby with or without user current location). | ★★★★★ |
| UST6 | As a user I should be able to search restaurants by types (fetch restaurants data nearby with or without user current location). | ★★★★★ |
| UST7 | As a user I should be able to post ratings for restaurants (text & images). | ★★★★★ |
| UST8 | As a user I should be able to see my own rating history. | ★★★☆☆ |
| UST9 | As a user my interaction with the application should be easy and appealing. | ★★☆☆☆ |
| UST10 | As an administrator I should be able to delete user unwanted and non-sense ratings. | ★★☆☆☆ |
| UST11 | As a user I should be able to see restaurants’ address (displaying on the map) and ratings. | ★★★★☆ |
| UST12 | As a user I should be able to see each restaurant’s operation hour and menu. | ★★★☆☆ |
| UST13 | As a user I should be able to save restaurants to my favorite list. | ★☆☆☆☆ |
| UST14 | As a user i should be able to have an option of either making my profile private or public. | ★☆☆☆☆ |
| UST15 | As a user i should be able to see profiles and rating history of other users, if allowed. | ★☆☆☆☆ |
| UST16 | As a user I should be able to change account password. | ★☆☆☆☆ |

Use Cases

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| --- | --- | --- |
| **Actor** | **Actor’s Goal** | **Use Case Name** |
| User | To be able to sign up as a new user. | signUp (UC-1) |
| User | To be able to log in as a previous user. | logIn (UC-2) |
| Admin | To be able to log in. | logIn (UC-2) |
| Admin | To remove user accounts | removeUser (UC-3) |
| Admin | To add and remove restaurant info data | saveRestaurant(UC-4) |
| User | To search restaurants by types, and have the option to list either from high to low ratings, or from low to high ratings. | search(UC-5) |
| User | To search restaurants by name, and have the preference either from low to high ratings, or from high to low ratings. | search(UC-5) |
| Admin | To search restaurants by types, and have the option to list either from high to low ratings, or from low to high ratings. | search(UC-5) |
| Admin | To search restaurants by name, and have the preference either from low to high ratings, or from high to low ratings. | search(UC-5) |
| User | To inspect past rating history | inspectRatingHistory(UC-11) |
| System | To control and authenticate user signup and user logins | signUp (UC-1)  logIn(UC-2) |
| System | To send confirmation email to users upon signup completion | sendConfirmation(UC-6) |
| System | To display restaurant data result based on user search and preference | DisplayResRank(UC-7) |
| System | To have a help, FAQ, feedback page. | helpPage(UC-8) |
| System | To have a welcome page | welcomePage(UC-9) |
| User | To change passwords | changePassword(UC-10) |
| Admin | To change passwords | changePassword(UC-10) |

**Traceability Matrix**

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| **Requirements** | **PW** | **UC1** | **UC2** | **UC3** | **UC4** | **UC5** | **UC6** | **UC7** | **UC8** | **UC9** | **UC10** |
| **SREQ 1** | 5 |  |  | ✔ | ✔ |  |  |  |  |  |  |
| **SREQ 2** | 5 | ✔ | ✔ |  |  |  |  |  |  |  |  |
| **SREQ 3** | 5 | ✔ | ✔ |  |  |  |  |  |  |  |  |
| **SREQ4** | 2 |  |  |  |  |  | ✔ |  |  |  |  |
| **SREQ5** | 5 |  |  |  |  | ✔ |  |  |  |  |  |
| **SREQ6** | 1 |  |  |  |  |  |  |  | ✔ |  |  |
| **SREQ7** | 1 |  |  |  |  | ✔ |  |  |  |  |  |
| **SREQ8** | 1 |  |  |  |  |  |  |  |  | ✔ |  |
| **SREQ9** | 4 |  |  |  |  | ✔ |  | ✔ |  |  |  |
| **SREQ10** | 3 |  |  |  |  | ✔ |  | ✔ |  |  |  |
| **SREQ11** | 1 |  |  |  |  |  |  |  |  |  | ✔ |