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| HCI - COMP 171 |
| Assignment 2 |
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**Restaurant Locator**

1. **Product Description**

Resturant locator is a web application that helps to search and reserve a nearby resturant. It also allows user to look through the restaurant menu, photos, reviews and directions to the restaurant. The concept behind Restaurant Locator is to provide a unified interface where customer can look through all the information about a restaurant and can then make his choice.

1. **User Analysis**

Primary User: Restaurant Customers

Age: 13 and older

Manual Skills: Basic Reading and Typing capability

Computer Skills: Novice to Expert

The target users of Restaurant Locator application are restaurant customers. There is no age limit for using this application but most of the restaurants set a minimum age limit of 13 and above for reservation purposes, so it is meant for anyone 13 and older. The manual skill required for using this application is basic reading and typing skills. The only technical requirement is the ability to use the computer/smartphone with an internet.

1. **Task analysis**

***User goal***

Theuser main tasks of this product are for searching a restaurant, look over the menu, reserve a table and get directions. Moreover it will help the customer to find the restaurant of their choice easily and also saving time at the same time.

User task:

* On the application home page customer can choose/select which type of cuisine they are looking for (Ex: American, Chinese, Thai, Indian, etc.).
* Then enter the location in the Where box on Search Screen and click on Search button.
* Select from the list of restaurants on the search results page.
* On the selected restaurant page, customer has the option to see Reviews, see Menu, Photos, make Reservation and get Directions.
* When the customer clicks on the Review button customer can see as well as write review for that particular restaurant.
* When the customer clicks on the Menu button he/she can see the selected restaurant’s menu.
* When the customer clicks on the Photo he/she can see the restaurant’s pictures.
* When the customer clicks on the reserve button he/she needs to enter information (Ex: Name, Seats, Date, Phone number, E-mail, etc.) and click on the save button.
* When the customer clicks on the direction button he/she needs to enter their address and select how they are planning to go there (Ex: Car, bus, bike, etc.) then click on the get direction button.

System task:

* Once the customer selects their cuisine from the cuisine list then the system will ask the location for finding restaurants based on their cuisine choice.
* Once the customer types their location in the search box the system will search the database for the customer entry and if it matches then the system will show all the matching entries, otherwise the system will show an error message saying “No Restaurants found matching your selection”.
* When the customer selects one of the restaurants from the search results list the system will show all the details of the corresponding restaurant (Ex: address, phone number, review, etc.) along with the option to see the menu, photos, reserve table and get directions.
* If the customer wants to reserve a table the system will show a form to reserve a table and ask some details (Ex: Name, Seats, Date, Phone number, E-mail, etc).
* Once the customer saves the details the system will trigger a message to the restaurant’s email address.
* The system also has the functionality to provide directions. If the customer needs directions to the restaurant, the system will ask the customer to type their address on the address box and select how they are planning to go there (Ex: car, bike, bus, etc.) then the system will show directions with help of **Google maps**.

1. **Functionality And Usage Scenarios**

Restaurant locator is a web application for finding a nearby restaurant. It has the following functionalities:

* Search Restaurants
* View and write customer reviews
* View Menu & Photos
* Make Reservation
* Get directions

Below is a brief description about each functionality:

**Search Restaurants**:-The restaurant locator provides search functionality, if a customer clicks on any of the listed cuisines on the home page then the system will navigate to the search page, where the customer can enter location and click to perform the search. The system will check the database to see if there is anything matching customer’s entry, if it matches then the system will display all the matching results; otherwise it will display an error message “No Restaurants found matching your selection”.

**Write and view customers review**: - Here the customer has the option to view and write feedback about the restaurant.

**View photos and menu**: - It also has the functionality for viewing menu and photos of the restaurant. This functionality helps the customer to make a decision about the restaurant without going to the restaurant.

**Reserve seats**: - This functionality helps the customer to reserve seats without going or calling the restaurant. If the customer clicks on the reserve button the system will show a form to fill their basic information (Ex: Name, Seats, Date, Phone number, E-mail, etc) and then submit the reservation details.

**Get Directions**: - Another important functionality is getting direction, if the customer needs directions to the restaurant this interface can easily perform this task using Google Maps without navigating out of this web application.

**Usage Scenario**:

**Customer: Jack, 29, Male**

Jack is a Consultant living in the Medford area. After his busy schedule he felt like eating something from his favorite Thai cuisine, he decided to open restaurant locator and select his favorite Thai cuisine from the home page, and then enter his location in the Where box and hit search. Then restaurant locator application listed all the restaurants near Medford. He then clicks on Thai Basil restaurant from the list and check its menu as well as price. He feels Thai Basil is affordable and good and decides to go there. He also takes directions from his office to the restaurant.

**Customer: Tom, 60, Male**

Tom is a businessman in Boston; this Friday is his 25th marriage anniversary he decides to give a surprise to his wife Julie. He is planning to go to the most elegant American restaurant in Boston. He opens the restaurant locator and clicks on the American Cuisine icon and enters Boston in the location box then clicks to perform search. The locator lists all the American restaurants near Boston. Tom clicks on Union Oyster restaurants link and reads previous customers reviews, he also views restaurants pictures but he is not satisfied. He then goes back and clicks on Top of the Hub restaurants link, he sees that most of the previous customers have given a good feedback. So Tom decides to go there and also plans to reserve two seats for Friday. Tom then clicks on the reserve button and fills all the required information and submits his reservation for Friday.

**Customer: Ellen, 15, Female**

Ellen decides to give a birthday party to three of her classmates, but she has only $60 with her. So she plans to go to an affordable nearby restaurant. She takes her Smartphone and opens Restaurant Locator web application and chooses Mexican cuisine. Then she enters her location in the where box and taps to do a search. She clicks on one of the restaurant links from the listed restaurants and checks the price on the menu page but she feels that she cannot afford that price. She then goes back and checks another affordable restaurant which fits her budget and makes a reservation.

1. **Conceptual Design**

**Conceptual Model**

**Objects:**

* Customers
* Cuisines
* Restaurants
* Locations
* Google map

**Object Attributes:**

* Cuisine Type
* Customer Choice
* Customer Details (Ex: Name, Phone, E-mail)
* Restaurant Details (Ex: Restaurant Name, Address, E-mail, Etc.)
* Restaurant Menu
* Restaurant Photos
* Customer Feedback

**Object Relationships:**

* Cuisines are used for customer choice
* Locations are used for searching nearby restaurants
* Restaurants are listed for customer selection
* Google maps are used for getting directions

**Actions on Objects:**

* Cuisine Selection
* Location Selection
* Restaurant Search
* List Restaurants
* Reserving Seats
* Get Directions

**Actions on Object Attributes:**

* Cuisine types are used by the customer to select their choice of restaurant.
* Customers name/phone number/e-mail is used for the seat reservation.
* Restaurant e-mail address is necessary for triggering message when the customer makes a reservation.
* Restaurant review, menu and photos are helpful to make a decision about the restaurant.

**Actions on Object Relationships:**

* When the customer selects a cuisine from the home screen the system will go to the search screen for customers to enter their location and perform search for finding nearby restaurants.
* Once the customer does the search, the system will compare the customer entry with system database and if it is matches then the system will show all the matching results otherwise it will show an error message.
* If the customer needs directions, the system asks the address of the customer and then it provides directions with the help of Google map.

**Concept Art**

**Welcome Screen**: System will show different cuisine types for customer to select cuisine of their choice.

Click the cuisine to continue…

**Search Screen**: Search screen will give options to search nearby restaurants.

What are you looking for? Where?

Thai

Search

Where?

**Search Results screen**: Lists all the restaurants based on user’s selection i.e. Location and Cuisine.

**Details Screen**: This screen will show the details of a particular restaurant and also have the options to show reviews, make reservations, get directions and see menu or photos.

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| --- | --- | --- | --- | --- |
| **Reviews** | **Menu** | **Photos** | **Reserve** | **Directions** |

**Reservation screen**: On this screen user needs to enter information for reserving seats

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| --- | --- |
| **Name** |  |
| Number of seats |  |
| Phone |  |
| E-mail |  |

**Get Directions Screen**: Get the directions from the customers place to the restaurant with help of Google maps.

 Address: By:

Get Directions