

## **PROJECT REQUIREMENTS:**

| USER REQUIREMENT |  |                |          |          |
|------------------|--|----------------|----------|----------|
| ID               | REQUIREMENT  | TOPIC AREA     | USER     | PRIORITY |
| UR-001           | New End user should be able to create a profile                  | Profile        | END USER | High     |
| UR-002           | End user should be able to get recommendations for restaurants   | Recommendation | END USER | Critical |
| UR-003           | End user should be able to get recommendations for food products | Recommendation | END USER | Critical |
| UR-004           | End user should be able to give feedback                         | Feedback       | END USER | High     |
| UR-005           | End user should be able to set filters                           | Database       | END USER | High     |
| UR-006           | New host should be able to create a profile                      | Profile        | HOST     | High     |
| UR-007           | host should be able update dishes list                           | Database       | HOST     | Critical |
| UR-008           | host should be able update services list                         | Database       | HOST     | High     |
| UR-009           | host should be able update availability                          | Database       | HOST     | Medium   |
| UR-010           | host should be able to see feedbacks                             | Feedback       | HOST     | Medium   |
| UR-011           | host should be able update promotions                            | Promotions     | HOST     | Medium   |
| UR-012           | Admin should be able to authorize new host profile               | Profile        | ADMIN    | Critical |
| UR-013           | Admin should be able to delete a host profile                    | Profile        | ADMIN    | Medium   |
| UR-014           | Admin should be able to delete an end user profile               | Profile        | ADMIN    | Medium   |
| UR-015           | Admin should be able to add advertisements                       | Promotions     | ADMIN    | Medium   |
| UR-016           | Admin should be able to set theme                                | GUI            | ADMIN    | low      |
| UR-017           | Admin should be able to add information tickers                  | Promotions     | ADMIN    | Medium   |
| UR-018           | Admin should be able to update permissions                       | Profile        | ADMIN    | Medium   |

| ID     | REQUIREMENT  | TOPIC AREA     | U SER    | PRIORITY |
|--------|--|----------------|----------|----------|
| UR-001 | New End user should be able to create a profile                  | Profile        | END USER | High     |
| UR-002 | End user should be able to get recommendations for restaurants   | Recommendation | END USER | Critical |
| UR-003 | End user should be able to get recommendations for food products | Recommendation | END USER | Critical |
| UR-004 | End user should be able to give feedback                         | Feedback       | END USER | High     |
| UR-005 | End user should be able to set filters                           | Database       | END USER | High     |
| UR-006 | New host should be able to create a profile                      | Profile        | HOST     | High     |
| UR-007 | host should be able update dishes list                           | Database       | HOST     | Critical |
| UR-008 | host should be able update services list                         | Database       | HOST     | High     |
| UR-009 | host should be able update availability                          | Database       | HOST     | Medium   |
| UR-010 | host should be able to see feedbacks                             | Feedback       | HOST     | Medium   |
| UR-011 | host should be able update promotions                            | Promotions     | HOST     | Medium   |
| UR-012 | Admin should be able to authorize new host profile               | Profile        | ADMIN    | Critical |
| UR-013 | Admin should be able to delete a host profile                    | Profile        | ADMIN    | Medium   |
| UR-014 | Admin should be able to delete an end user profile               | Profile        | ADMIN    | Medium   |
| UR-015 | Admin should be able to add advertisements                       | Promotions     | ADMIN    | Medium   |
| UR-016 | Admin should be able to set theme                                | GUI            | ADMIN    | low      |
| UR-017 | Admin should be able to add information tickers                  | Promotions     | ADMIN    | Medium   |
| UR-018 | Admin should be able to update permissions                       | Profile        | ADMIN    | Medium   |

| FUNCTIONAL REQUIRMENT |  |                |          |          |
|-----------------------|--|----------------|----------|----------|
| ID                    | REQUIREMENT  | TOPIC AREA     | USER     | PRIORITY |
| FR-001                | System should be able to store a End user profile              | Profile        | END USER | Critical |
| FR-002                | System should be able to store a host profile                  | Profile        | HOST     | Critical |
| FR-003                | System should be able to store a admin profile                 | Profile        | ADMIN    | Critical |
| FR-004                | System should be able to allow update of End user profile      | Profile        | END USER | High     |
| FR-005                | System should be able to allow update of host profile          | Profile        | HOST     | High     |
| FR-006                | System should be able to allow update of admin profile         | Profile        | ADMIN    | High     |
| FR-007                | System should be able to hold feedbacks for each end user      | Database       | END USER | Critical |
| FR-008                | System should be able to hold feedbacks for each host          | Database       | HOST     | High     |
| FR-009                | System should be able to create a recommendation list          | Recommendation | ALL      | Medium   |
| FR-010                | System should be able to allow end user to make a reservation  | Reservation    | END USER | Medium   |
| FR-011                | System should be able to allow end user to see availability    | Reservation    | END USER | Medium   |
| FR-012                | System should be able to allow host to update availablity      | Reservation    | HOST     | Medium   |
| FR-013                | System should be able to send reservation request to host      | Reservation    | HOST     | Medium   |
| FR-014                | System should be able to send reservation reminder to end user | Reservation    | END USER | Medium   |
| FR-015                | System should be able to send reservation reminder to host     | Reservation    | HOST     | Medium   |

| NON-FUNCTIONAL REQUIRMENT |  |               |      |          |
|---------------------------|--|---------------|------|----------|
| ID                        | REQUIREMENT  | TOPIC AREA    | USER | PRIORITY |
| NF-001                    | System should be able to allow theme change              | GUI           | ALL  | Low      |
| NF-002                    | System should delete a profile dormant for past 1 year   | Storage       | ALL  | Low      |
| NF-003                    | system should look same on different platforms (browser) | Portability   | ALL  | Medium   |
| NF-004                    | System should handle multile same user sessions          | Availaibility | ALL  | Medium   |
| NF-005                    | System should transition on image clicks                 | GUI           | ALL  | Medium   |
| NF-006                    | system should be able to recommend within 2 mins         | Response      | ALL  | High     |
| NF-007                    | system should reset on crash                             | Safety        | ALL  | Medium   |
| NF-008                    | system should restrict one profile per login id          | Safety        | ALL  | Medium   |

## **Summary:**

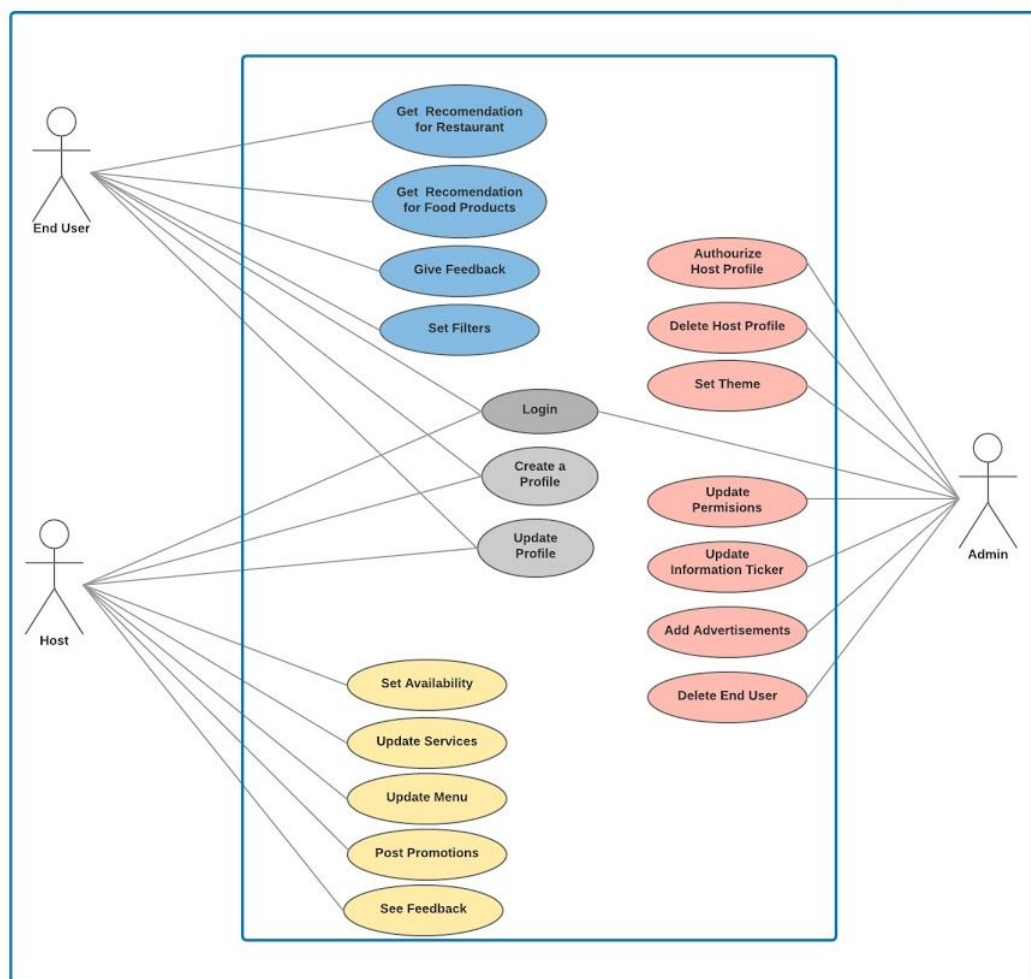
Our system for the project will be a website that will enable end users to find new restaurants or food product to try based on their profile, past experiences and random projection. It will also allows new restaurants to get registered and promote their business, old restaurants and food product manufacturers to add new cuisines/dishes and get feedback.

## USE CASES:

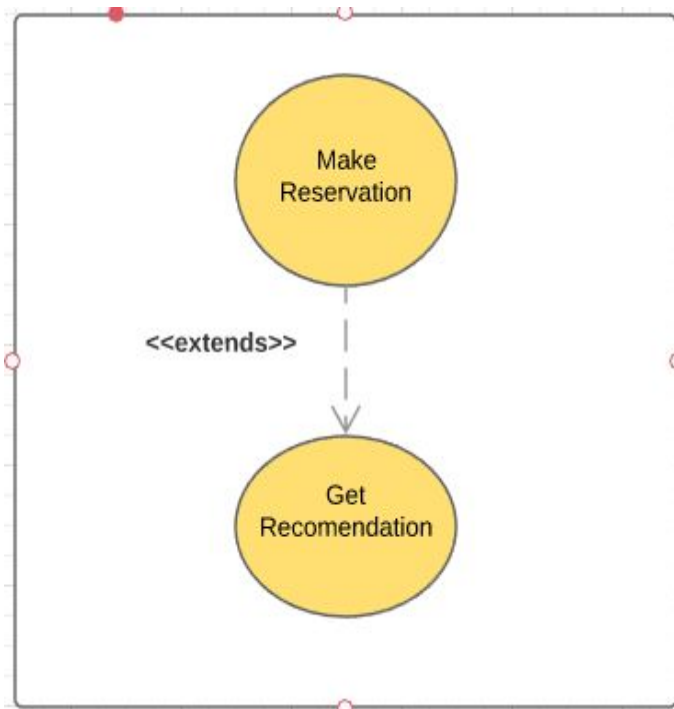
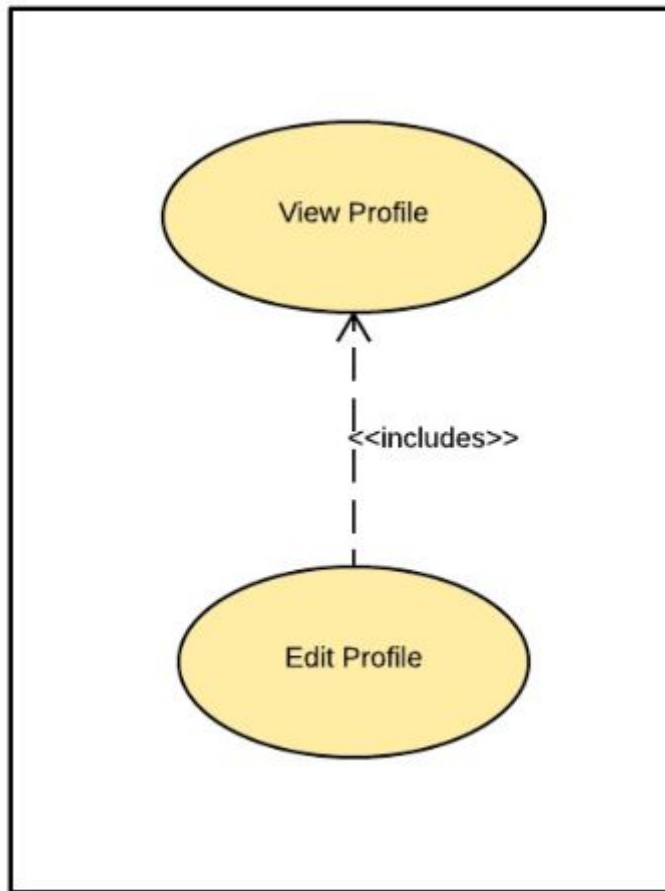
**Actors:** End User, Host, Admin

## Use Case Overview:

### USE CASE DIAGRAM



**Sub Diagram:**



### Use case document:

## Use case document – Host updating menu

|                       |   |
|-----------------------|---|
| <b>Use case ID:</b>   | UC-02   |
| <b>Use case Name:</b> | Update dishes list  |
| <b>Description:</b>   | Host can update the menu. This could include adding new items or removing some items from the menu. |

| Actors            | Host  |   |  |
|-------------------|---|---|--|
| Pre-conditions:   | Host is logged in into the system   |   |  |
| Post-conditions:  | Host has updated the menu with new items.   |   |  |
| Frequency of use: | Whenever the host has to update the menu (either add or remove items). This could happen daily if there’s something like `Today’s special`. |   |  |
| Flow of events:   |   |   |  |
|                   |   | Actor Action  | System Response                                    |
|                   | 1   | Host accesses his / her profile                             | System fetches host profile from database.         |
|                   | 2   | Host adds a new item or removes existing item from the menu | System saves the changes and updates the database. |
|                   | 3   |   | System displays the updated list to the host.      |
| Variations:       | 1. No variations in this use case.  |   |  |
| Exceptions:       |   |   |  |
| Developer Notes:  |   |   |  |

Use case document – End User gets restaurant recommendations and seat reservation options

Use case ID: UC-01

|                       |   |
|-----------------------|---|
| <b>Use case Name:</b> | Get restaurant recommendations  |
| <b>Description:</b>   | End User gets a list of restaurant recommendations. Recommendations are based on the his/her history of reviews and preference of cuisines and/or by setting filters. User can reserve a time slot in the selected restaurant. Host is notified of the reservation by the system. |

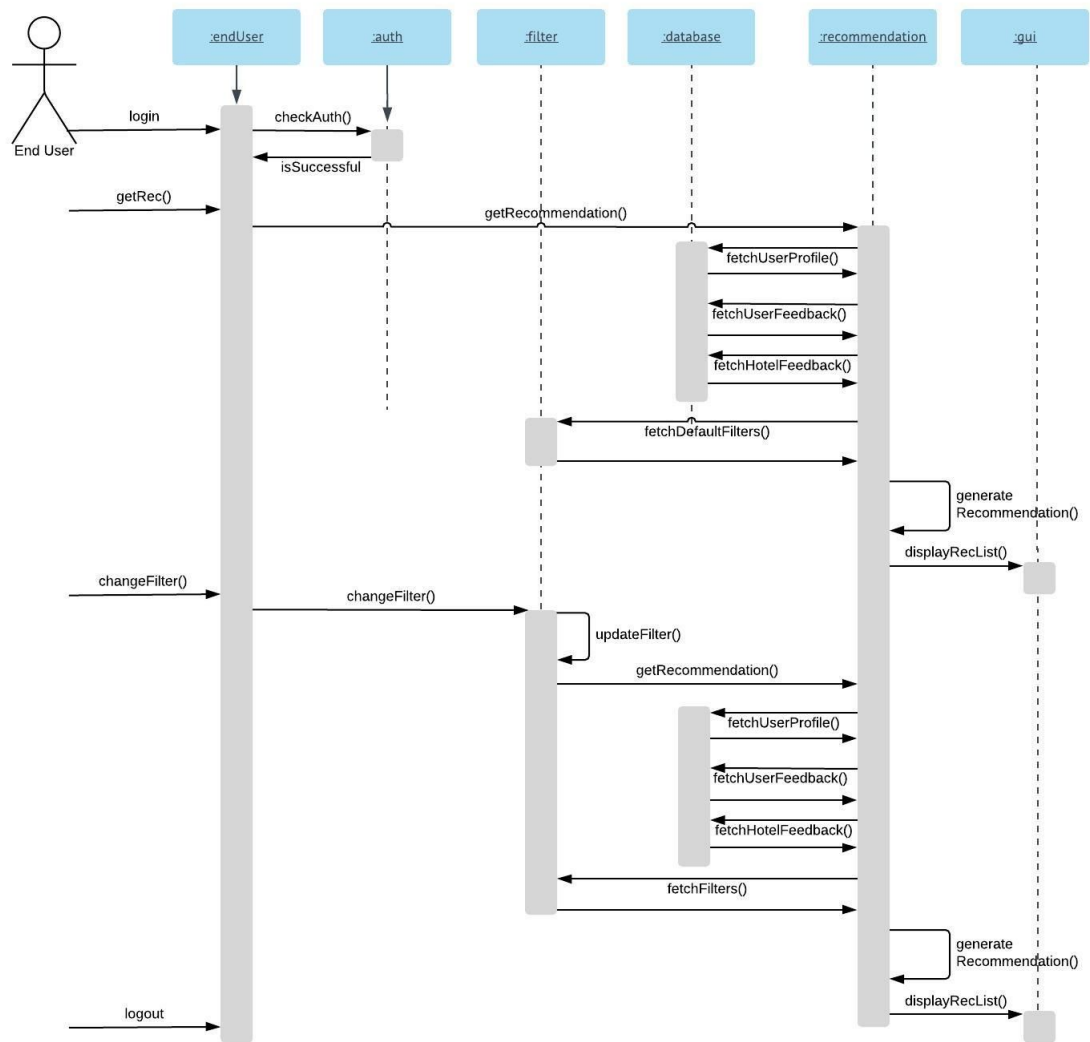
| Actors                   | End user  |  |  |              |                 |    |  |  |    |  |   |    |  |  |    |  |  |    |  |  |    |   |   |    |   |  |    |                                   |   |    |   |   |     |  |  |     |  |  |
|--------------------------|---|--|--|--------------|-----------------|----|--|--|----|--|---|----|--|--|----|--|--|----|--|--|----|---|---|----|---|--|----|-----------------------------------|---|----|---|---|-----|--|--|-----|--|--|
| <b>Pre-conditions:</b>   | End user is logged in into the system   |  |  |              |                 |    |  |  |    |  |   |    |  |  |    |  |  |    |  |  |    |   |   |    |   |  |    |                                   |   |    |   |   |     |  |  |     |  |  |
| <b>Post-conditions:</b>  | End user has a list of recommendations to select from.  |  |  |              |                 |    |  |  |    |  |   |    |  |  |    |  |  |    |  |  |    |   |   |    |   |  |    |                                   |   |    |   |   |     |  |  |     |  |  |
| <b>Frequency of use:</b> | Whenever the end user requests a list of recommendations from the system.   |  |  |              |                 |    |  |  |    |  |   |    |  |  |    |  |  |    |  |  |    |   |   |    |   |  |    |                                   |   |    |   |   |     |  |  |     |  |  |
| <b>Flow of events:</b>   | <table> <tr> <th></th><th>Actor Action</th><th>System Response</th></tr> <tr> <td>1.</td><td>User is given the option to set preferences (through a filter) for the system to generate recommendations.</td><td>If filter is set, system fetches the filter data and the user profile data. System directly fetches user profile data if no filter is set.</td></tr> <tr> <td>2.</td><td></td><td>System fetches the user feedback from the database.</td></tr> <tr> <td>3.</td><td></td><td>System fetches restaurant feedback from database</td></tr> <tr> <td>4.</td><td></td><td>System generates recommendation from the fetched data.</td></tr> <tr> <td>5.</td><td></td><td>System displays the list of recommendations.</td></tr> <tr> <td>6.</td><td>User asked to edit filters if not satisfied with recommendations.</td><td>Steps 1 to 5 are repeated if user not satisfied with recommendations.</td></tr> <tr> <td>7.</td><td>User satisfied with recommendations and does not change filter. User selects restaurant</td><td></td></tr> <tr> <td>8.</td><td>User asked to make a reservation.</td><td>System stops if user does not choose to make a reservation.</td></tr> <tr> <td>9.</td><td>User wants to reserve a time slot. Requested to enter preferred date.</td><td>System fetches the available slots for that date to make the reservation.</td></tr> <tr> <td>10.</td><td></td><td>If no slots available for selected date, system displays that no slots are available. Asks user change date.</td></tr> <tr> <td>11.</td><td>User does not wish to change date. Program ends.</td><td></td></tr> </table> |  |  | Actor Action | System Response | 1. | User is given the option to set preferences (through a filter) for the system to generate recommendations. | If filter is set, system fetches the filter data and the user profile data. System directly fetches user profile data if no filter is set. | 2. |  | System fetches the user feedback from the database. | 3. |  | System fetches restaurant feedback from database | 4. |  | System generates recommendation from the fetched data. | 5. |  | System displays the list of recommendations. | 6. | User asked to edit filters if not satisfied with recommendations. | Steps 1 to 5 are repeated if user not satisfied with recommendations. | 7. | User satisfied with recommendations and does not change filter. User selects restaurant |  | 8. | User asked to make a reservation. | System stops if user does not choose to make a reservation. | 9. | User wants to reserve a time slot. Requested to enter preferred date. | System fetches the available slots for that date to make the reservation. | 10. |  | If no slots available for selected date, system displays that no slots are available. Asks user change date. | 11. | User does not wish to change date. Program ends. |  |
|                          | Actor Action  | System Response  |  |              |                 |    |  |  |    |  |   |    |  |  |    |  |  |    |  |  |    |   |   |    |   |  |    |                                   |   |    |   |   |     |  |  |     |  |  |
| 1.                       | User is given the option to set preferences (through a filter) for the system to generate recommendations.  | If filter is set, system fetches the filter data and the user profile data. System directly fetches user profile data if no filter is set. |  |              |                 |    |  |  |    |  |   |    |  |  |    |  |  |    |  |  |    |   |   |    |   |  |    |                                   |   |    |   |   |     |  |  |     |  |  |
| 2.                       |   | System fetches the user feedback from the database.  |  |              |                 |    |  |  |    |  |   |    |  |  |    |  |  |    |  |  |    |   |   |    |   |  |    |                                   |   |    |   |   |     |  |  |     |  |  |
| 3.                       |   | System fetches restaurant feedback from database   |  |              |                 |    |  |  |    |  |   |    |  |  |    |  |  |    |  |  |    |   |   |    |   |  |    |                                   |   |    |   |   |     |  |  |     |  |  |
| 4.                       |   | System generates recommendation from the fetched data.   |  |              |                 |    |  |  |    |  |   |    |  |  |    |  |  |    |  |  |    |   |   |    |   |  |    |                                   |   |    |   |   |     |  |  |     |  |  |
| 5.                       |   | System displays the list of recommendations.   |  |              |                 |    |  |  |    |  |   |    |  |  |    |  |  |    |  |  |    |   |   |    |   |  |    |                                   |   |    |   |   |     |  |  |     |  |  |
| 6.                       | User asked to edit filters if not satisfied with recommendations.   | Steps 1 to 5 are repeated if user not satisfied with recommendations.  |  |              |                 |    |  |  |    |  |   |    |  |  |    |  |  |    |  |  |    |   |   |    |   |  |    |                                   |   |    |   |   |     |  |  |     |  |  |
| 7.                       | User satisfied with recommendations and does not change filter. User selects restaurant   |  |  |              |                 |    |  |  |    |  |   |    |  |  |    |  |  |    |  |  |    |   |   |    |   |  |    |                                   |   |    |   |   |     |  |  |     |  |  |
| 8.                       | User asked to make a reservation.   | System stops if user does not choose to make a reservation.  |  |              |                 |    |  |  |    |  |   |    |  |  |    |  |  |    |  |  |    |   |   |    |   |  |    |                                   |   |    |   |   |     |  |  |     |  |  |
| 9.                       | User wants to reserve a time slot. Requested to enter preferred date.   | System fetches the available slots for that date to make the reservation.  |  |              |                 |    |  |  |    |  |   |    |  |  |    |  |  |    |  |  |    |   |   |    |   |  |    |                                   |   |    |   |   |     |  |  |     |  |  |
| 10.                      |   | If no slots available for selected date, system displays that no slots are available. Asks user change date.                               |  |              |                 |    |  |  |    |  |   |    |  |  |    |  |  |    |  |  |    |   |   |    |   |  |    |                                   |   |    |   |   |     |  |  |     |  |  |
| 11.                      | User does not wish to change date. Program ends.  |  |  |              |                 |    |  |  |    |  |   |    |  |  |    |  |  |    |  |  |    |   |   |    |   |  |    |                                   |   |    |   |   |     |  |  |     |  |  |



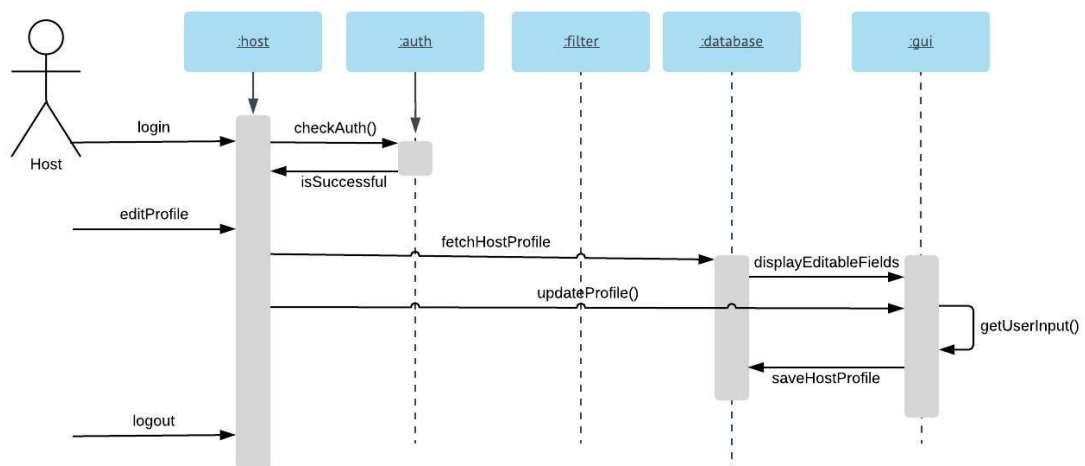
|                         |   |  |  |
|-------------------------|---|--|--|
|                         | 12<br>.   | User wishes to change date and steps 8 to 11 are repeated. |  |
|                         | 13<br>.   |  | Available slots are displayed by the system. |
|                         | 14<br>.   | User selects a time slot.                                  | System books the time slot.                  |
|                         | 15<br>.   |  | System updates the database.                 |
|                         | 16<br>.   |  | System displays booking confirmation.        |
|                         | 17<br>.   |  | System notifies the host about the booking.  |
| <b>Variations:</b>      | 1. User does not select time slot from available slots.                     |  |  |
| <b>Exceptions:</b>      | Error message: System cannot generate recommendations from set preferences. |  |  |
| <b>Developer Notes:</b> |   |  |  |

## Sequence Diagram:

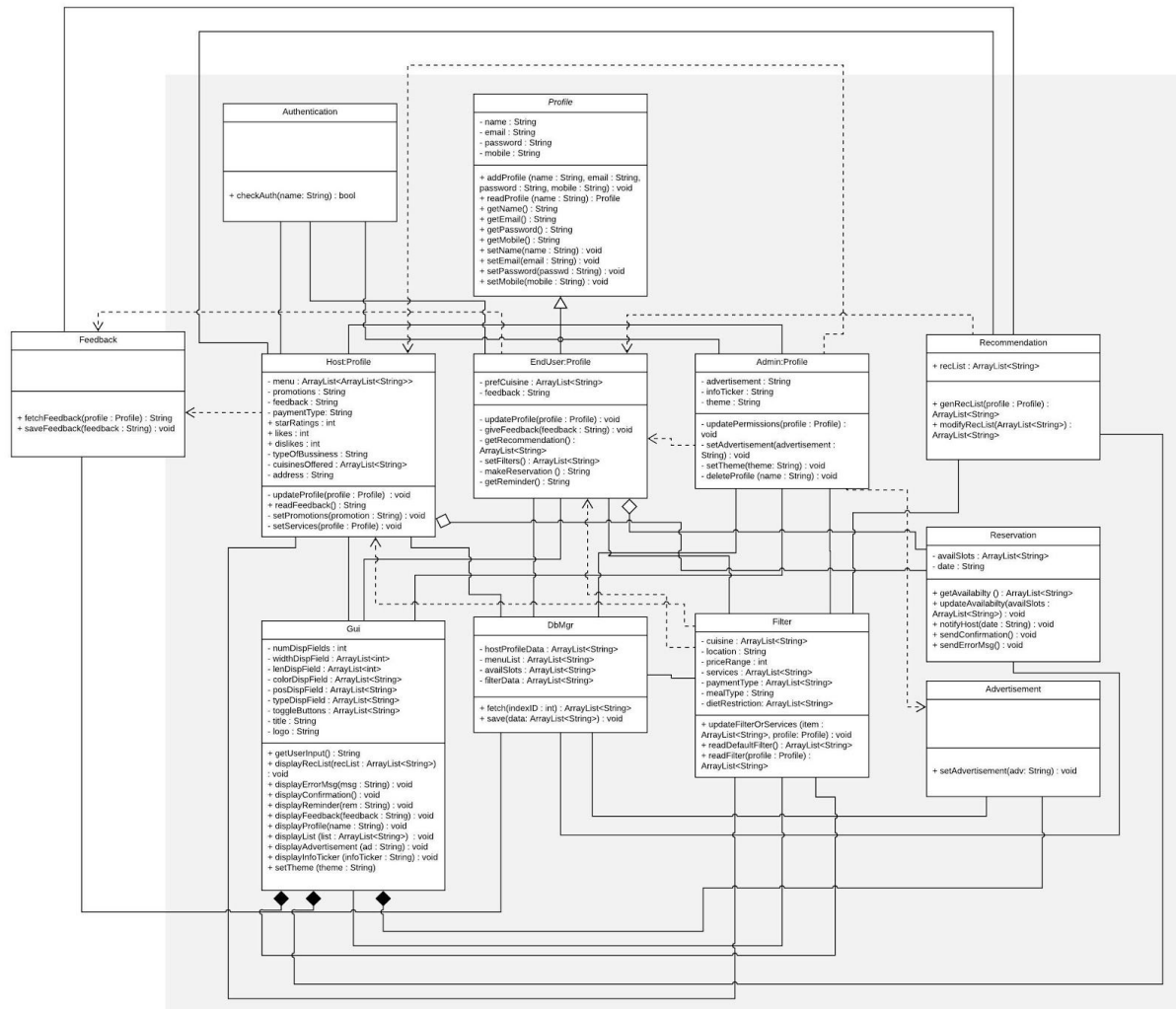
**SS - 01**



## SS - 02

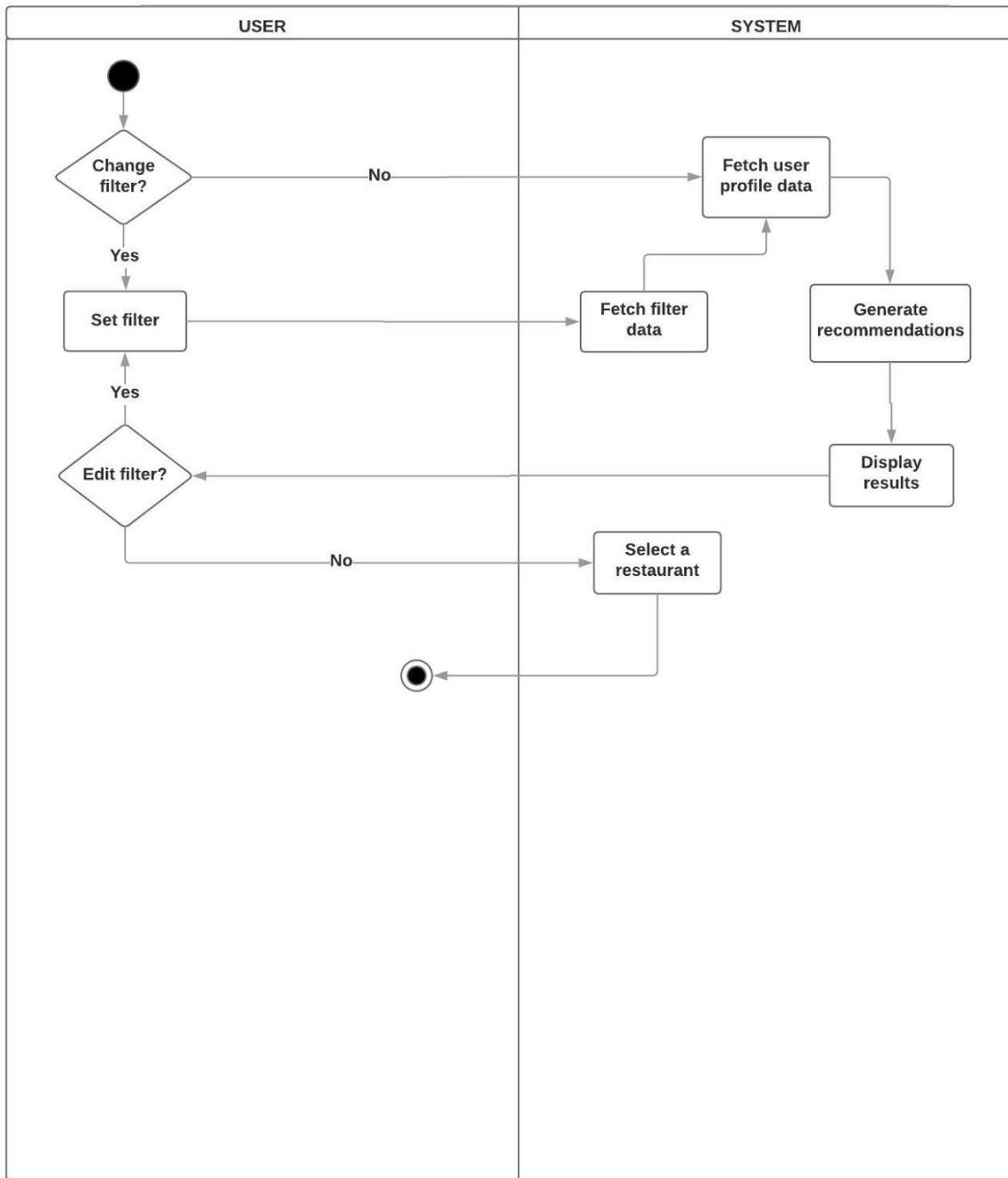


## Class Diagram:

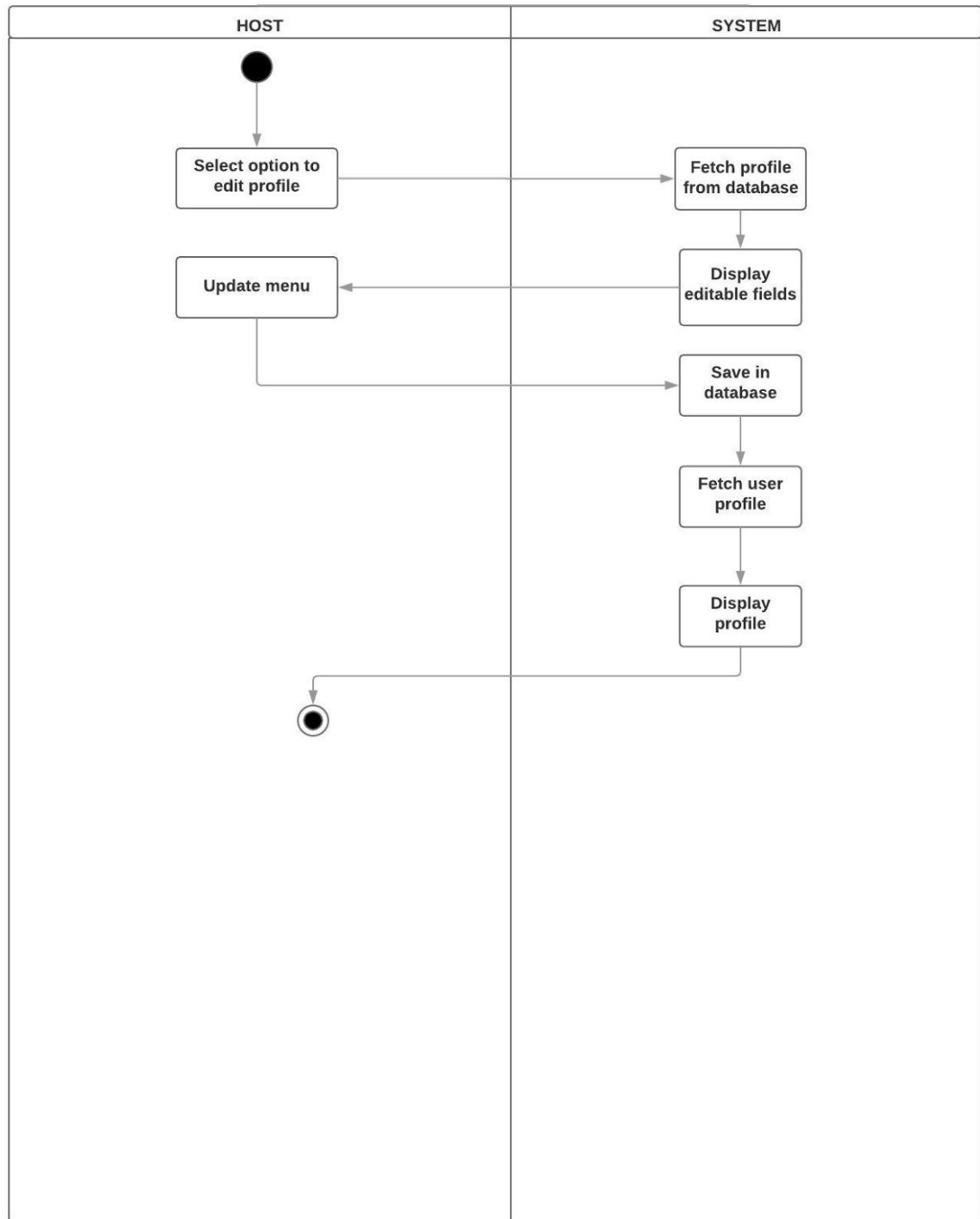


## Activity Diagram:


## Activity Diagram - 01



**Activity Diagram - 02**



## Mock GUI:

 **FoodBuddy**

Sign In


Login

[Forgot Password ?](#)

Sign Up

Are you a food business owner?

☐ Yes ☐ No

 **FoodBuddy**

Sign Up



# FoodBuddy



# FoodBuddy

Logged In as : XYZ

.....Information Ticker.....

[Edit Profile](#)

## Set Filters

- ☐ Indian
- ☐ Italian
- ☐ Chinese
- ☐ Thai
- ☐ Continental
- ☐ Mediterranean
- ☐ Vietnamese

### Price Range:

\$0  \$50

### Payment Type:

- ☐ Cash ☐ Apple Pay
- ☐ Credit Card ☐ Net Banking

### Services:

- ☐ Wifi ☐ Take Out
- ☐ Parking ☐ Drive Through
- ☐ Banquet Hall ☐ Home Delivery

### Meal Types:

- ☐ Breakfast ☐ Dinner
- ☐ Lunch ☐ Snacks

### Diet Restriction:

- ☐ Vegan ☐ Dairy Free
- ☐ Gluten Free ☐ Vegetarian

## Our Recommendation

Host 1 Name  
Location  
Promotions



234 likes 3 dislikes

[Make Reservation](#)

Host 2 Name  
Location  
Promotions



200 likes 5 dislikes

[Make Reservation](#)

Host 3 Name  
Location  
Promotions



35 likes 2 dislikes

[Make Reservation](#)

Host 4 Name  
Location  
Promotions



100 likes 7 dislikes

[Make Reservation](#)

Host 5 Name  
Location  
Promotions



20 likes 5 dislikes

[Make Reservation](#)

## Your Past Feedbacks

Host Name : "not good food" ; date : 12/2/2016

Host Name : "Loved it" ; date : 12/2/2016

Host Name : "Too Spicy" ; date : 12/2/2016

[Give New Feedback](#)

[Read whole list...](#)

Reminder >>> Host Name <> Date: <> Time:<>  
Location<>

[Add](#)





# FoodBuddy

Logged In as : XYZ

.....Information Ticker.....

Edit Profile

## Set Services and Cuisine Offered

- ☐ Indian  
☐ Italian  
☐ Chinese  
☐ Thai  
☐ Continental  
☐ Mediterranean  
☐ Vietnamese

### Price Range:

\$0  \$50

### Payment Type:

- ☐ Cash ☐ Apple Pay  
☐ Credit Card ☐ Net Banking

### Services:

- ☐ Wifi ☐ Take Out  
☐ Parking ☐ Drive Through  
☐ Banquet Hall ☐ Home Delivery

### Meal Types:

- ☐ Breakfast ☐ Dinner  
☐ Lunch ☐ Snacks

### Diet Restriction:

- ☐ Vegan ☐ Dairy Free  
☐ Gluten Free ☐ Vegetarian

## Your Menu

Dish 1 Cuisine Price Promotion

Dish 2 Cuisine Price Promotion

Dish 3 Cuisine Price Promotion

Dish 4 Cuisine Price Promotion

Dish 5 Cuisine Price Promotion

Dish 6 Cuisine Price Promotion

Dish 7 Cuisine Price Promotion

Set Availability

See Reservations

Set Promotions

Your Star Rating :



Adds

## Feedback you got..

User Name : "good food" ; date : 12/2/2016

User Name : "not good food" ; date : 12/2/2016

User Name : "stale food" ; date : 12/2/2016

User Name : "good services" ; date : 12/2/2016

User Name : "not good food" ; date : 12/2/2016

User Name : "not good food" ; date : 12/2/2016

User Name : "Loved it" ; date : 12/2/2016

User Name : "Too Spicy" ; date : 12/2/2016

Read whole list...

Adds