



FoodBuddy - Food Recommendation System

Team Members:

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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.

PROJECT REQUIREMENTS:

BUSINESS REQUIREMENT				
ID	REQUIREMENT	TOPIC AREA	USER	PRIORITY
BR-001	Restrict to particular location i.e, Boulder	Location	ALL	Medium
BR-002	Promote a certain franchisee eg:Subway	Business Contacts	ALL	Low
BR-003	stretch : use paypal	Payment	ALL	High
BR-004	use a specific trademark	Registration	ALL	Low
BR-005	restrict it to a particular domain names (for monetary reasons)	Registration	ALL	Medium

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 re commendations for restaurants	Recommendation	END USER	Critical
UR-003	End user should be able to get re commendations 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
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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

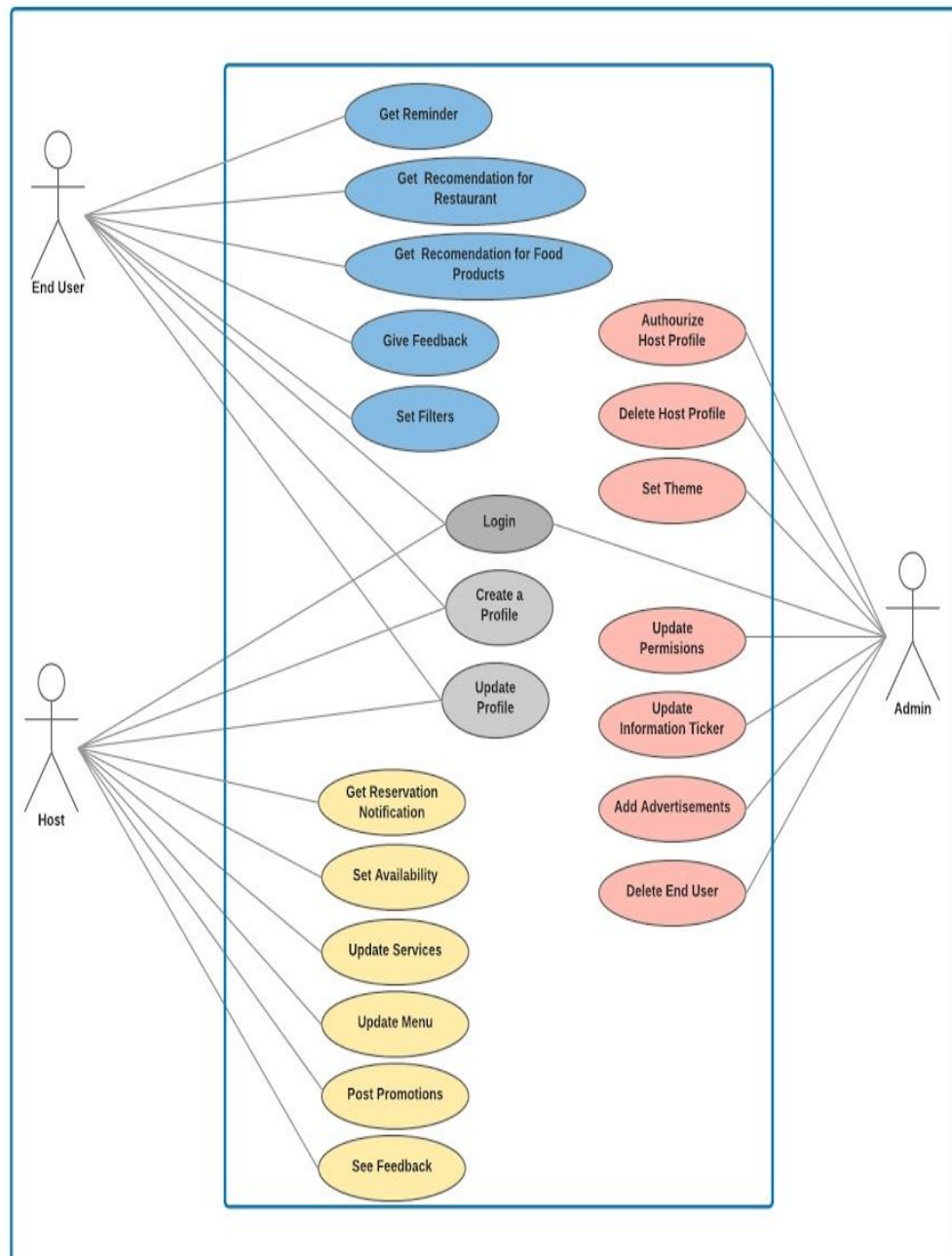
NON-FUNCTIONAL REQUIRMENT				
ID	REQUIREMENT	TOPIC AREA	USER	PRIORITY
NF-001	System should be able to allow theme change	GUI	ALL	Low
NF-002	System should delete a profile dormant for past 1 year	Storage	ALL	Low
NF-003	system should look same on different platforms (browser)	Portability	ALL	Medium
NF-004	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

USE CASES:

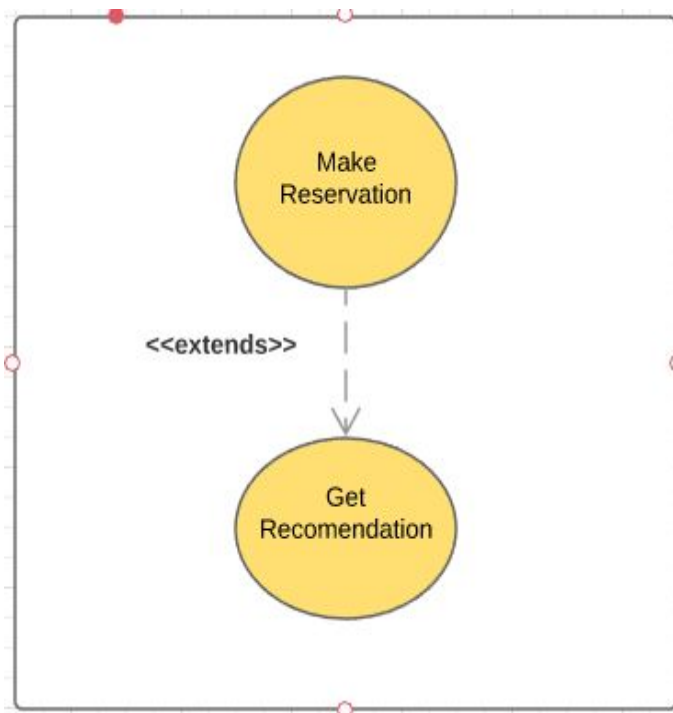
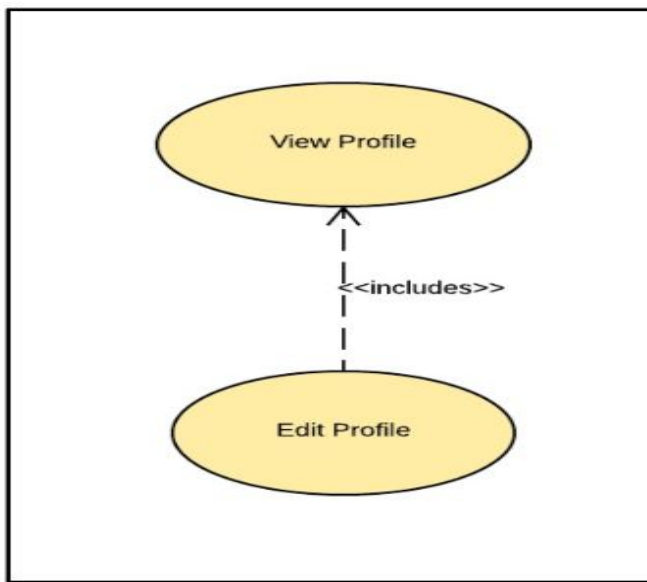
Actors: End User, Host, Admin

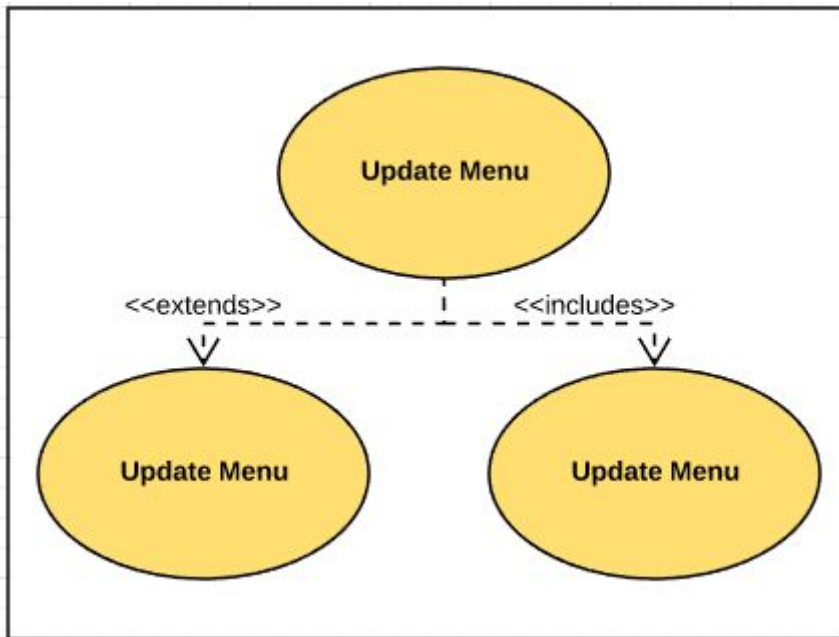
Use Case Overview:

USE CASE DIAGRAM



Sub Diagram:





Use case document:

Use case document – Host updating menu

Use case ID:	UC-02
Use case Name:	Update dishes list
Description:	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

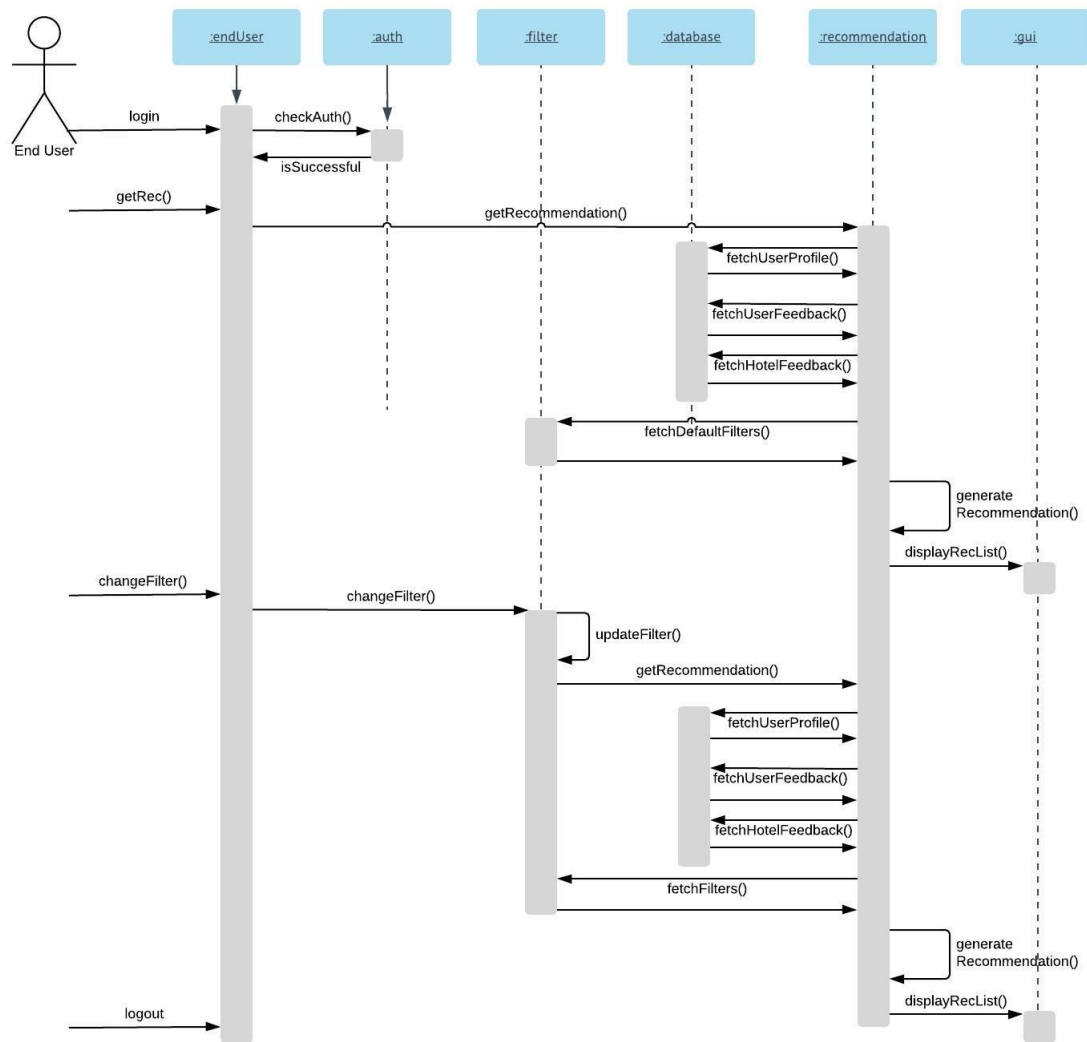
Use case ID:	UC-01
Use case Name:	Get restaurant recommendations
Description:	End User gets a list of restaurant recommendations. Recommendations are based on the his/her history of reviews and preference of cuisines and/or by setting filters. User can reserve a time slot in the selected restaurant. Host is notified of the reservation by the system.

Actors	End user																																		
Pre-conditions:	End user is logged in into the system																																		
Post-conditions:	End user has a list of recommendations to select from.																																		
Frequency of use:	Whenever the end user requests a list of recommendations from the system.																																		
Flow of events:	<table border="1"> <thead> <tr> <th></th><th>Actor Action</th><th>System Response</th></tr> </thead> <tbody> <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</td></tr> </tbody> </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
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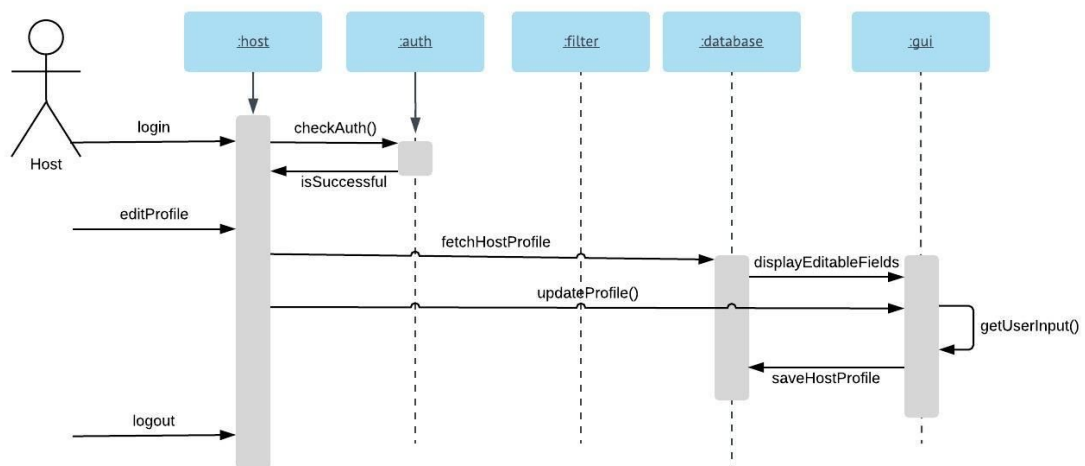
			that no slots are available. Asks user change date.
	11 .	User does not wish to change date. Program ends.	
	12 .	User wishes to change date and steps 8 to 11 are repeated.	
	13 .		Available slots are displayed by the system.
	14 .	User selects a time slot.	System books the time slot.
	15 .		System updates the database.
	16 .		System displays booking confirmation.
	17 .		System notifies the host about the booking.
Variations:	1. User does not select time slot from available slots.		
Exceptions:	Error message: System cannot generate recommendations from set preferences.		
Developer Notes:			

Sequence Diagram:

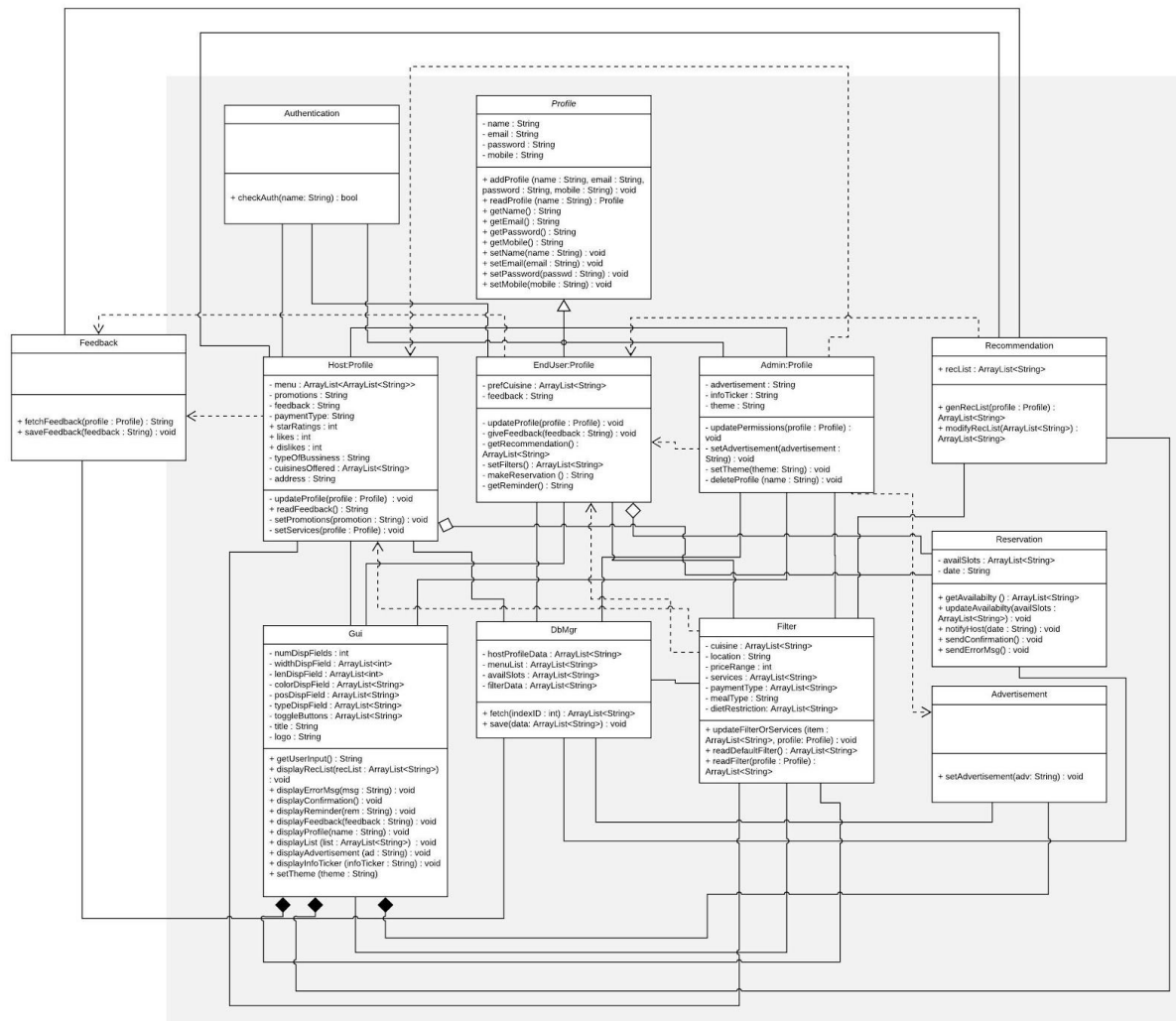
SS - 01



SS - 02

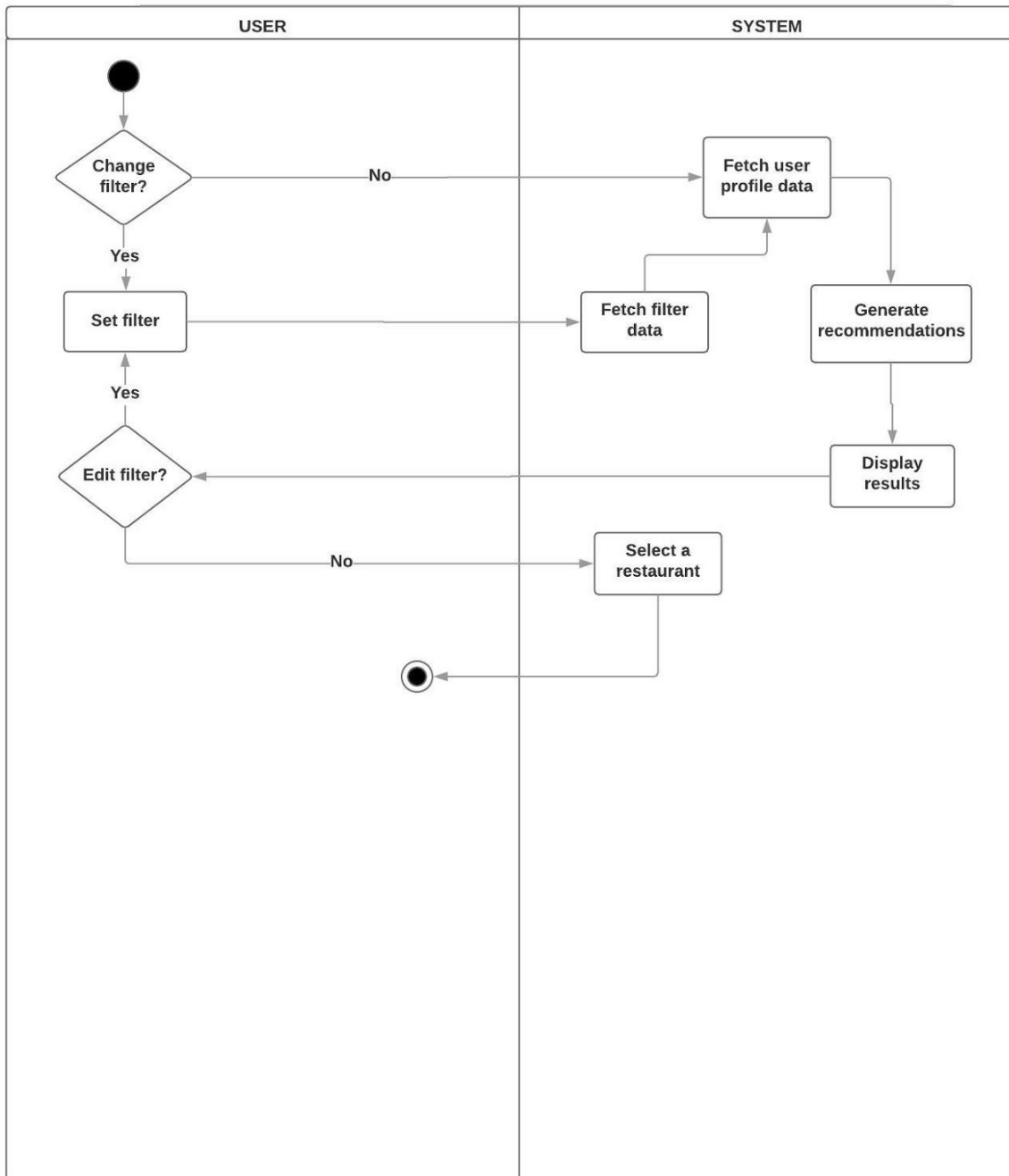


Class Diagram:

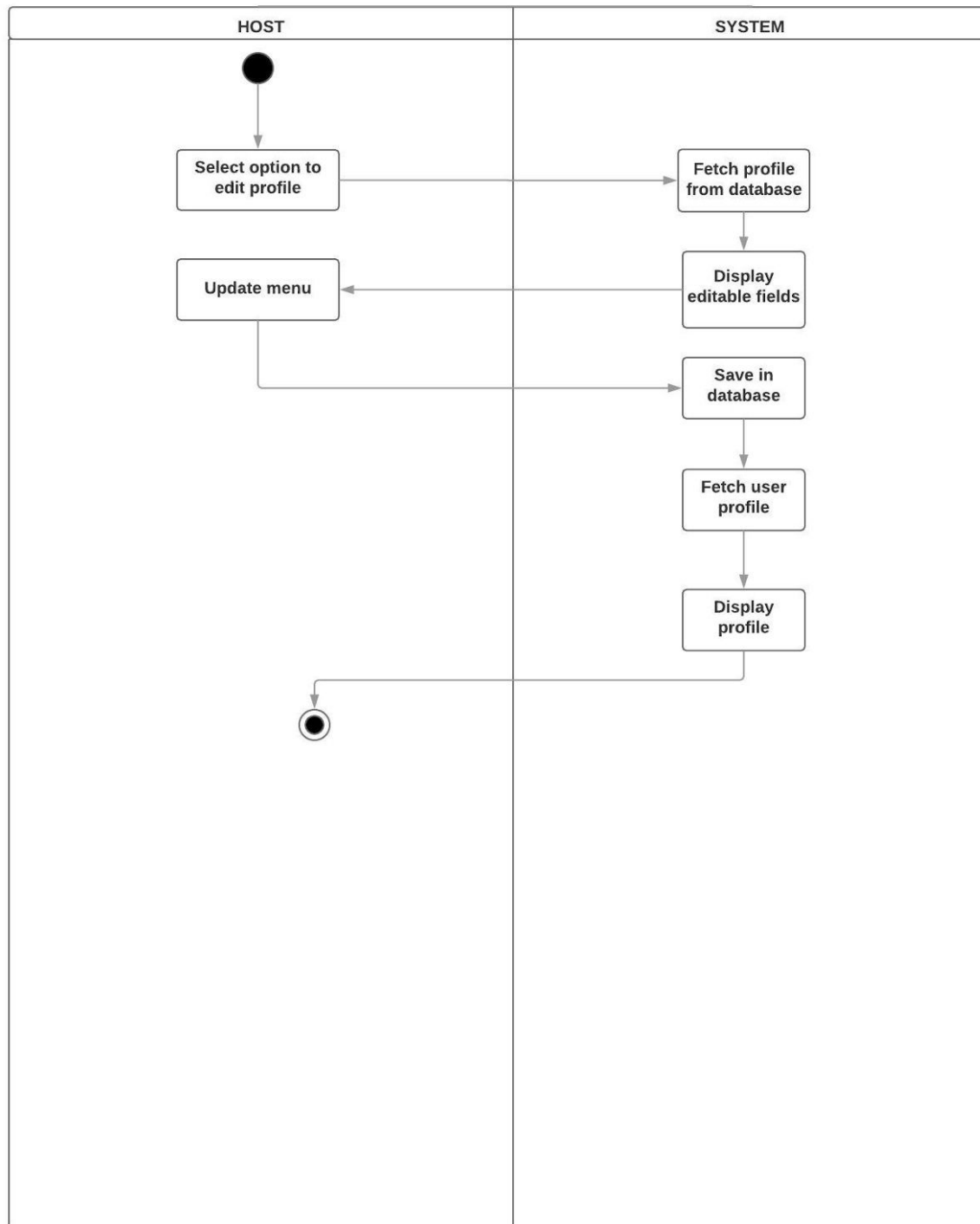


Activity Diagram:


Activity Diagram - 01



Activity Diagram - 02



Mock GUI:


 **FoodBuddy**

Sign In

 [Forgot Password ?](#)

Sign Up

Are you a food business owner?
☐ Yes ☐ No

 **FoodBuddy**



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
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Meal Types:

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☐ Lunch ☐ Snacks

Diet Restriction:

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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