Dharmsinh Desai University, Nadiad

Faculty of Technology, Department of Computer Engineering

B.Tech. CE Semester – VI

Subject: System Design Project

Project Title:

Recommedation System For Restaurants

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Faculty of Technology, Department of Computer Engineering

CERTIFICATE

This is to certify that System Design project entitled "Recommendation System For Restaurants" is the bonafied report of work carried out by

1) Kalathiya Sahil J. CE054 17CEUOS131

Of Department of Computer Engineering, Semester VI, academic year 2020-2021, under our supervision and guidance.

Guide	HOD
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1. Abstract

My Project “Recommendation System For Restaurants” provides recommendation to the user about the best restaurants in the city.It provides recommendation based on the restaurants the user has favourated or liked.

2. Introduction

This system would show the recommendation to the user.The user needs to login or register to the website ans then depending on what he liked or what he has made favourite,the system would show the recommendation.It also provides filters regarding the pocket friendly restaurants as well as the top rated restaurants.All the details of the restaurants have been taken from the “Zomato api”.Also with this,it provides the basic functionality of user like all the crud operation.

Tools/Technologies

Technologies:

Django

Jinja

Python

MongoD

Pandas

Tools:

Zomato Api

MongoDbCompass

Visual Studio Code

Platforms:

Website(For PC only)

3. Software Requirement Specifications

1 .) Functionality

R.1 : Registration/Login

Description : User can register/Login to the website

Input : User detail

Output : Confirm message

R.2 : Adding Favourite

Description : User can add restaurants as favourite

Input : Click on button for adding to favourite

Output : show recommendation based on favourite

R.3 : Removing Favourite

Description : User can remove restaurants as favourite

Input : Click on button for removing to favourite

Output : update recommendation based on favourite

R.4 : Showing Details of restaurants

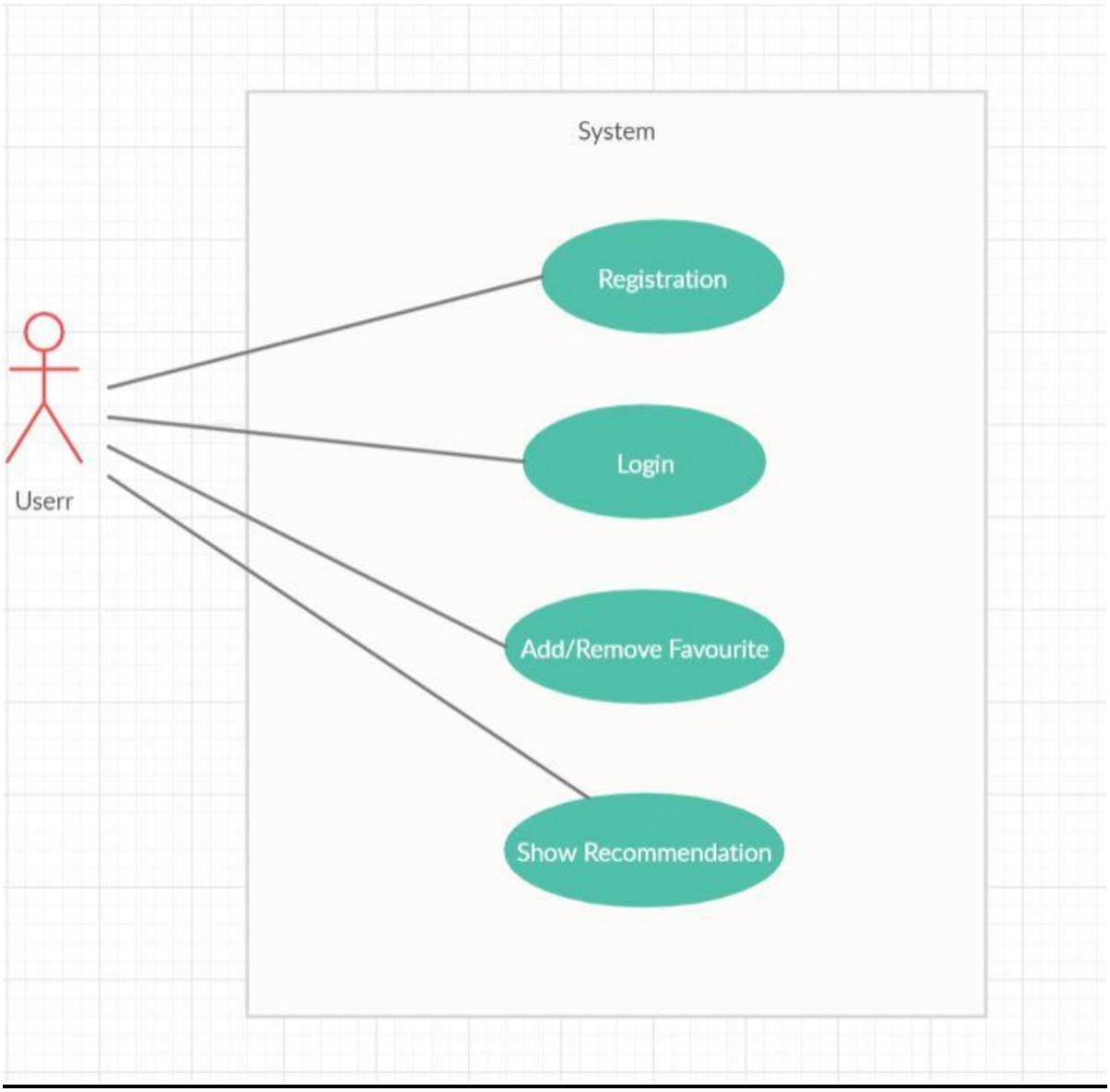
Description : User can see details of each restuarants

Input : Click on button for seeing detail

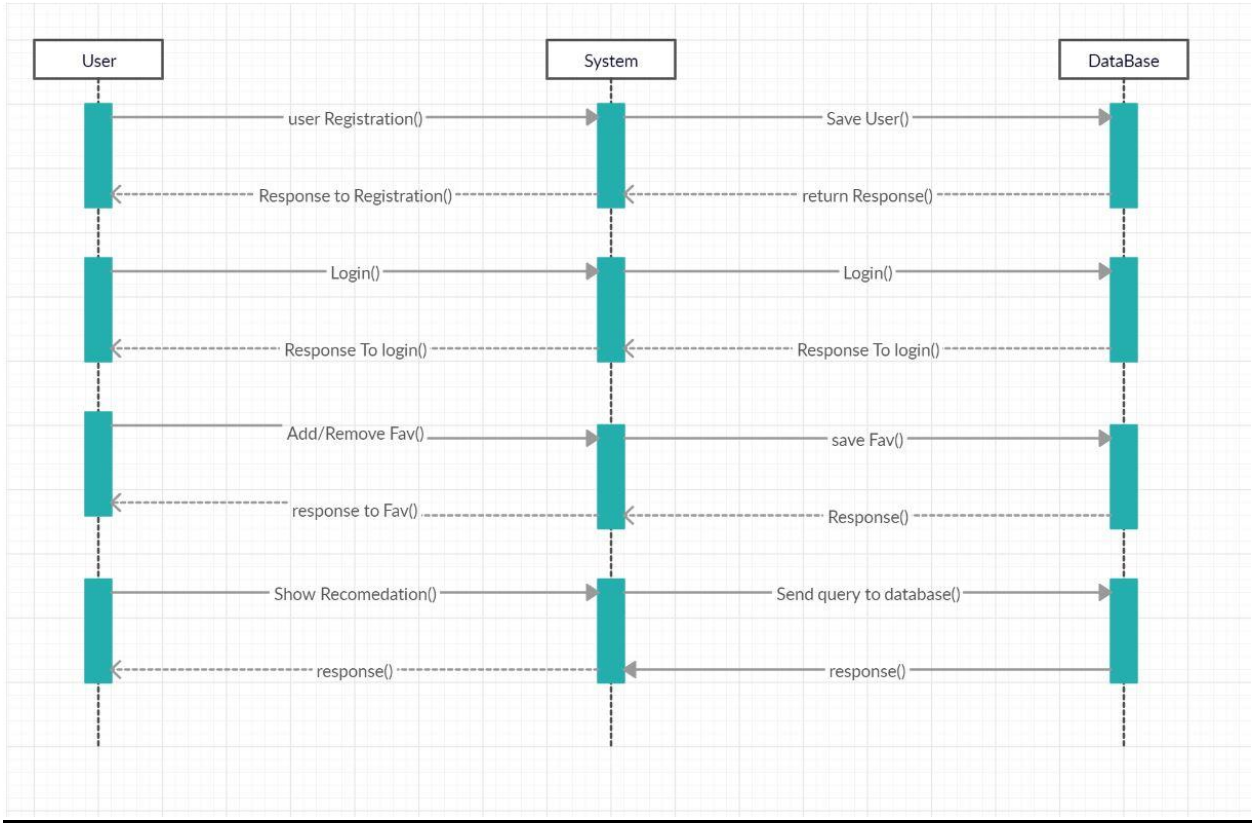
Output : show details of restaurants

4.Design

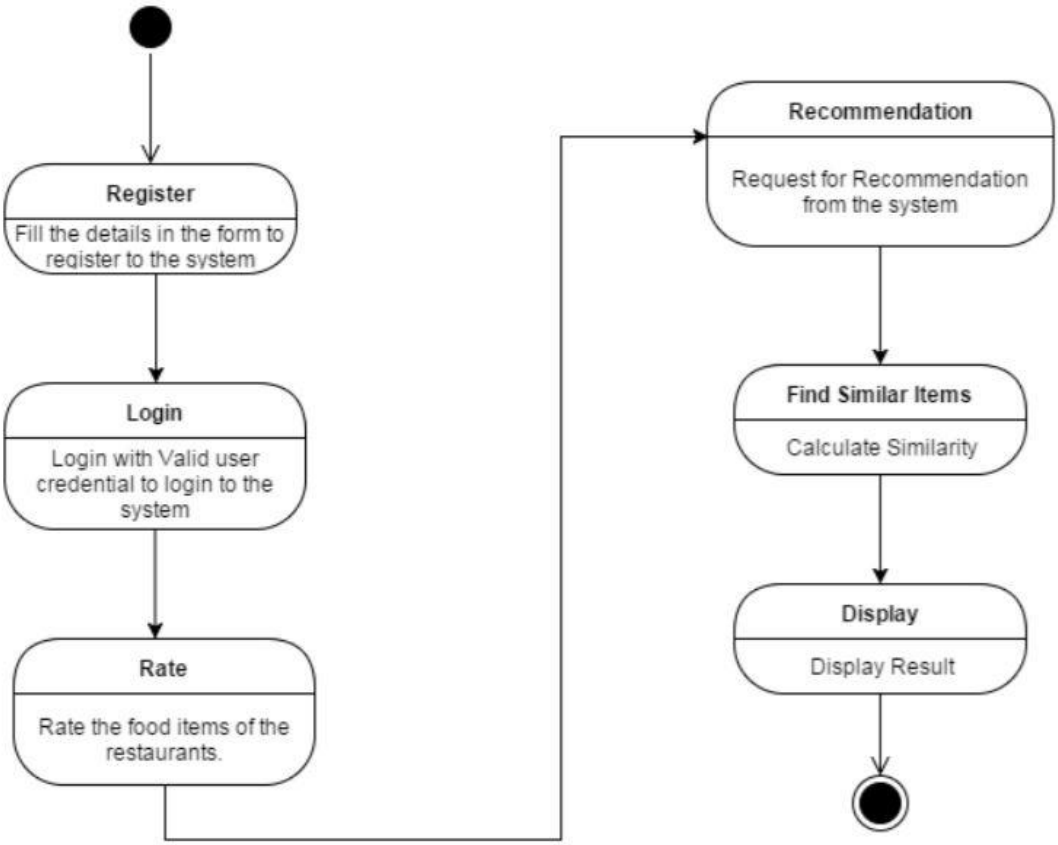
4.1 : Usecase Diagram



4.2 : Sequnce Diagram



4.3 : Activity Diagram



5. Implementation Detail

5.1: Modules

- **Home**

  This is the module which deals with recommending the restaurants depending upon the favourite restaurants list of the user.

  1)View Details

  This activity takes the name of the restaurant given in the request then it fetches all of its information from the database and calls the activity of recommendation and combine the results and show it to the User

  2)Recommendation

  This activity takes the name of the restaurant and then implements the simple filtering algorithm using the dictionary of all the restaurant in the city and then provides a list of 10 restaurants that are similar to the restaurant given to it.

  3)Home Recommendation

  This activity is almost same as above.It uses the information about the user. At last which restaurant was made favourite by the user, that is used to provides recommendation using simple filtering algorithm.It also provides a list of 10 restaurant.

- **User**

  This is the module which deals with every update,remove,add operation of the user details as well as maintaining the favourite list.

  1)View Details

  This activity takes the name of the user present in the session then it fetches all of its information from the database and show it to the User

  2)Update Details

  This activity takes the name of the user present in the session then it fetches all of its information from the database and show it to the User.And then when the user changes any information,it is saved in the database as well as in the session

  3)Update Favourite

  This activity is used to remove or add restaurant to the favourite list of user.based on this list,recommendation is provided.So,This is the main list of system.Also if there are no favourite,then it asks to do so.

  4)**Login/Registration**

  This activity manges the login and registration of the user in the system.When user logins it provides the last name of the city user has visited ,and so it is directly entered.Also Logout is manged by this module.During logout all the session information of the user is removed.

5.2: Functions In the System

- LoadRes()
- Load()
- LoadCity()
- LoadCityName()
- LoadData()
- Register()
- Login()
- makeFav()
- removeFav()
- Fav()
- LogOut()
- getData()
- Update()
- Updatepass()
- AddSub()

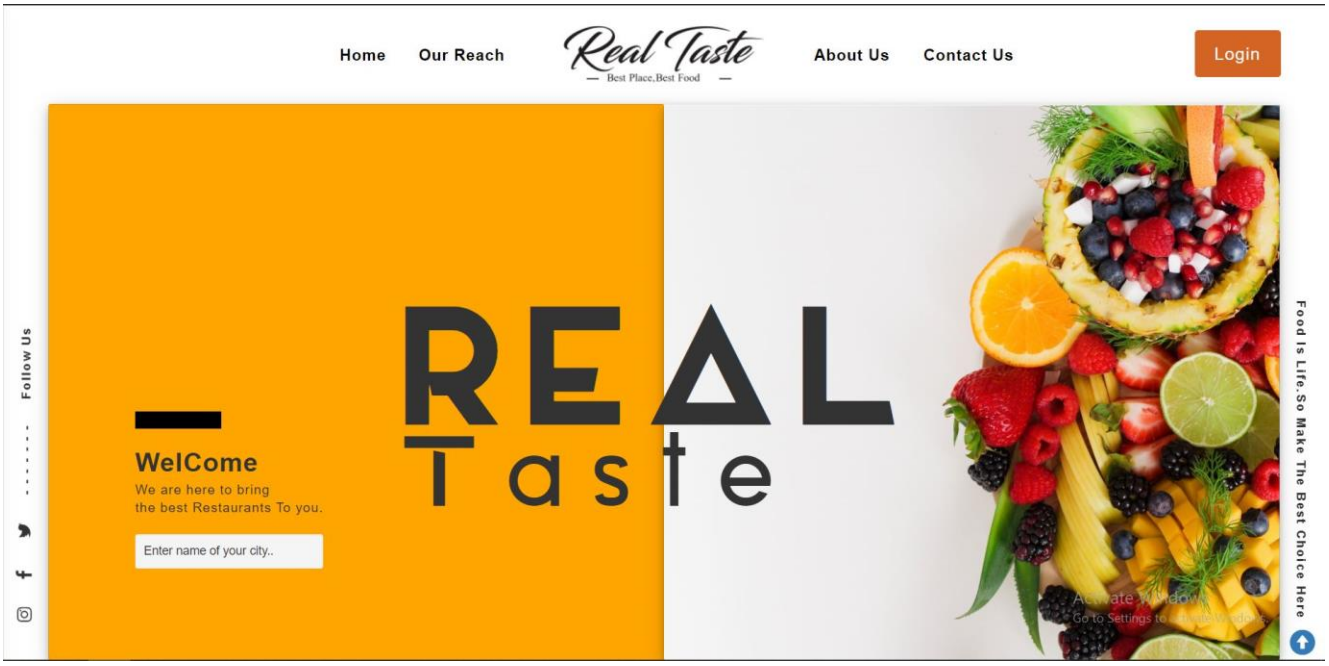
6. Testing

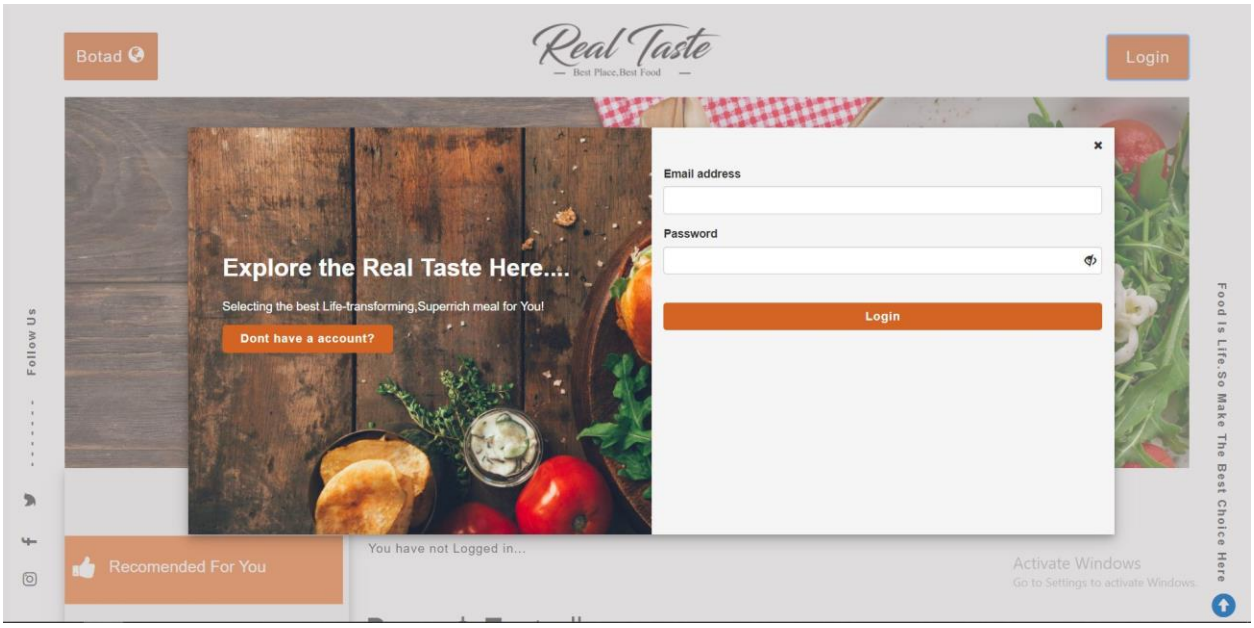
- For each module I have applied unit testing.

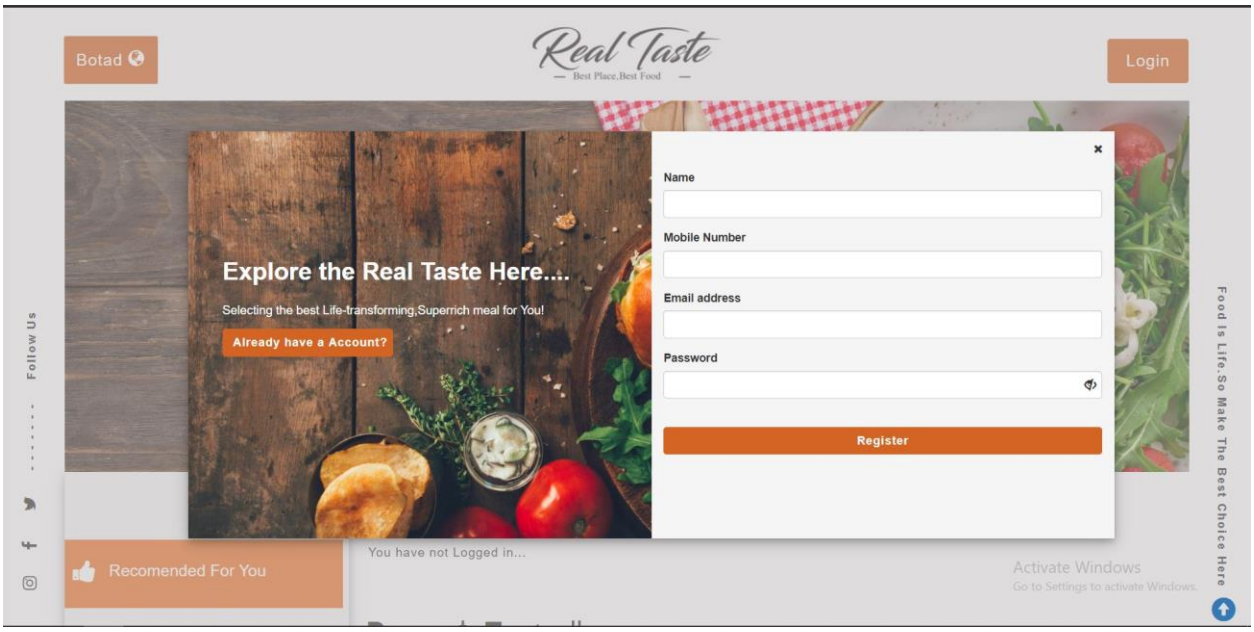
- After that with Database,i have done integration testing for crud operation of Favourite list as well as User details.

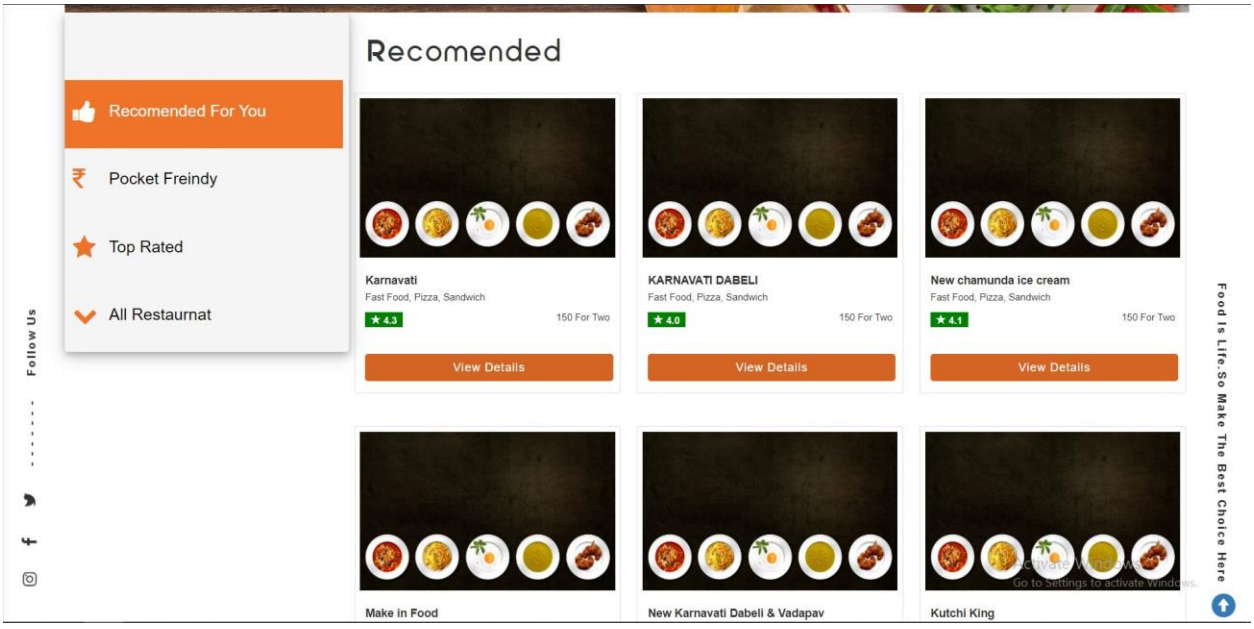
-At the end of the project,I have tested the whole system with end-end testing.

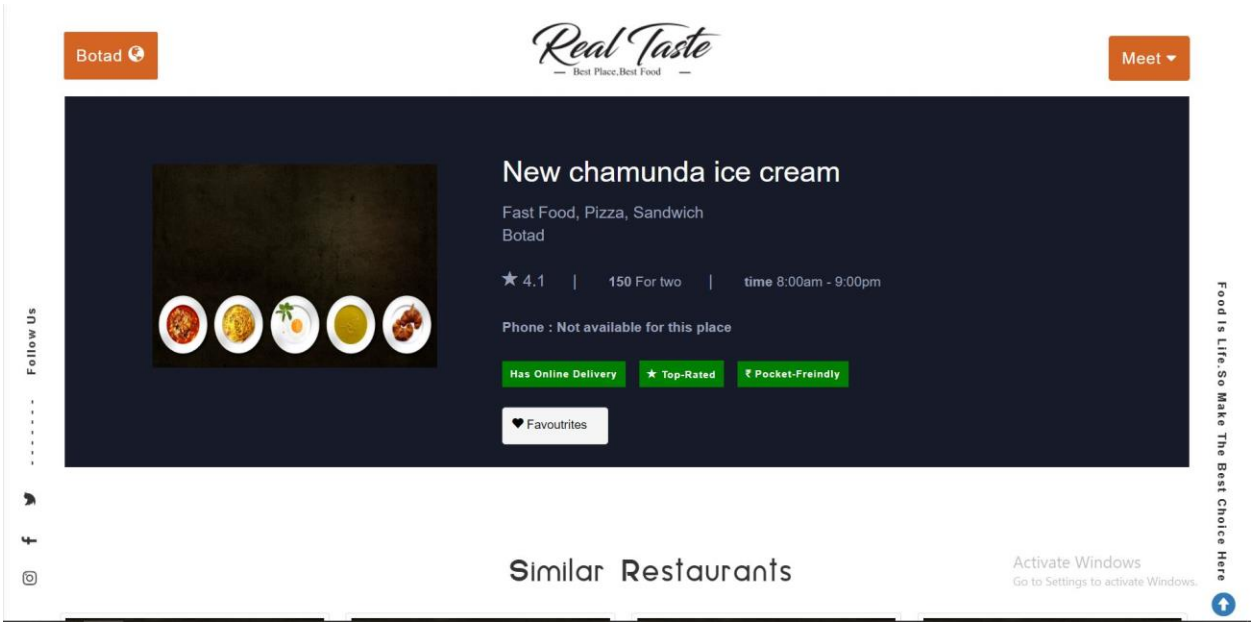
7. Screen shots






Botad
Real Taste
Best Place,Best Food
Login
Explore the Real Taste Here....
Selecting the best Life-transforming,Superrich meal for You!
Already have a Account?
Name
Mobile Number
Email address
Password
Register
Follow Us
Food Is Life.So Make The Best Choice Here
Recomended For You
You have not Logged in...
Activate Windows
Go to Settings to activate Windows.


Recomended
Recomended For You
Pocket Freindy
Top Rated
All Restaurnat
Karnavati
Fast Food, Pizza, Sandwich
★ 4.3
150 For Two
View Details
KARNAVATI DABELI
Fast Food, Pizza, Sandwich
★ 4.0
150 For Two
View Details
New chamunda ice cream
Fast Food, Pizza, Sandwich
★ 4.1
150 For Two
View Details
Make in Food
New Karnavati Dabeli & Vadapav
Kutchi King
Follow Us
Food Is Life.So Make The Best Choice Here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Real Taste
Best Place,Best Food
Meet
New chamunda ice cream
Fast Food, Pizza, Sandwich
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4.1 | 150 For two | time 8:00am - 9:00pm
Phone : Not available for this place
Has Online Delivery
Top-Rated
Pocket-Freindly
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Similar Restaurants
Follow Us
Food Is Life.So Make The Best Choice Here
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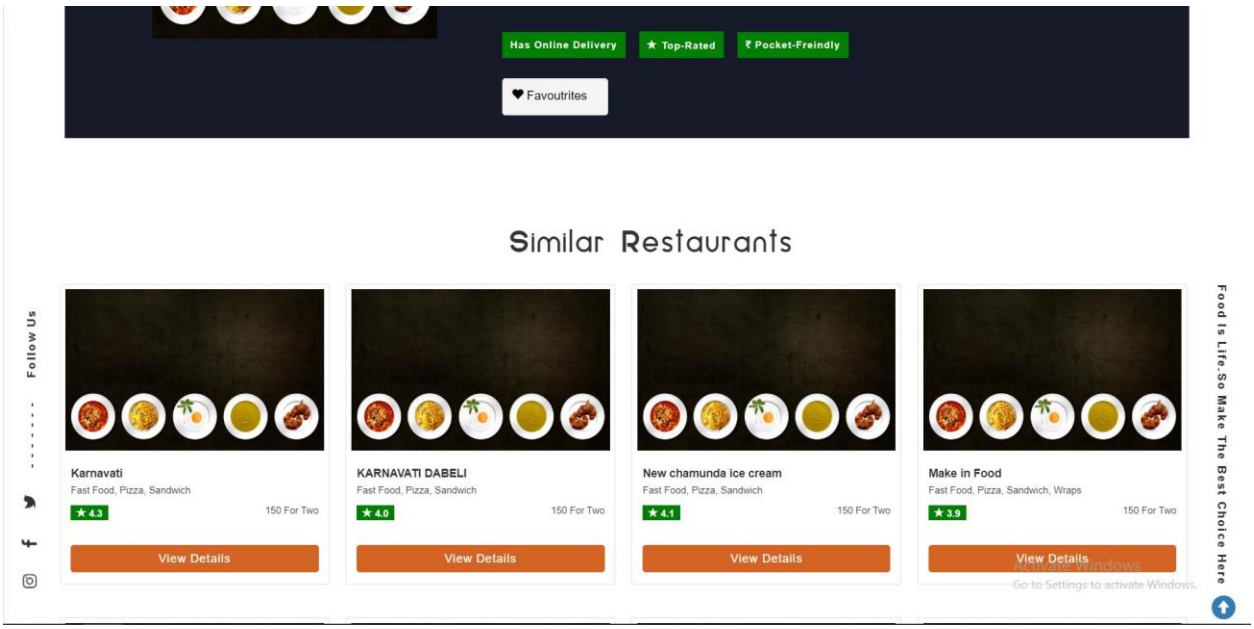
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View Details
New chamunda ice cream
Fast Food, Pizza, Sandwich
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150 For Two
View Details
Make in Food
Fast Food, Pizza, Sandwich, Wraps
3.9
150 For Two
View Details
Follow Us
Food Is Life.So Make The Best Choice Here
Activate Windows
Go to Settings to activate Windows.

Botad
Real Taste
Best Place,Best Food
Meet
Name
Meet
Email address
Sahil123@gmail.com
Mobile Number
7878451575
Update Details
Update Password
Similar Restaurants
Follow Us
Food Is Life.So Make The Best Choice Here
Activate Windows
Go to Settings to activate Windows.

Botad
Real Taste
Best Place,Best Food
Meet
Old Password
New Password
Update Password
Update Detail
Similar Restaurants
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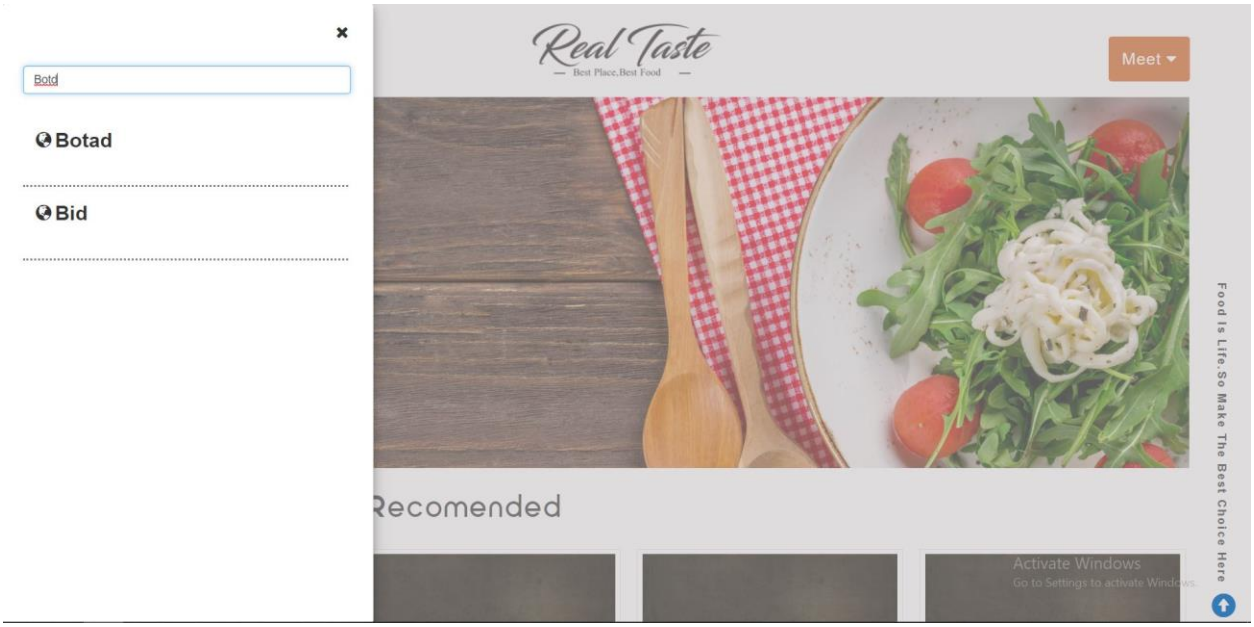
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150 For Two
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Remove
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8. Conclusion

Recommendation System For Restaurants Provide you with the choices of best restaurant in the city given by you.This restaurants are sleected on the basis of your favourate restaurants .

9. Limitations and Future Enhancements

9.1: Limitations:

Limitation of the project is that as there is less user data fro now,I was not able to implement the collaborative filtering which is much better than the filtering used here.

9.2 Future Enhancements:

For the future enhancement,first I will introduce the collaborative filtering and then also Trending functionality as well the advanced search functionality.

10. Reference / Bibliography

❖ Following links and websites were referred during the development of this project.

- https://www.google.co.in
- https://www.youtube.com/watch?v=Eeg1DEeWUjA
- http://www.stackoverflow.com
- https://www.youtube.com/watch?v=OTmQOjsl0eg
- https://developers.zomato.com/documentation