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Acknowledgment



Overview :

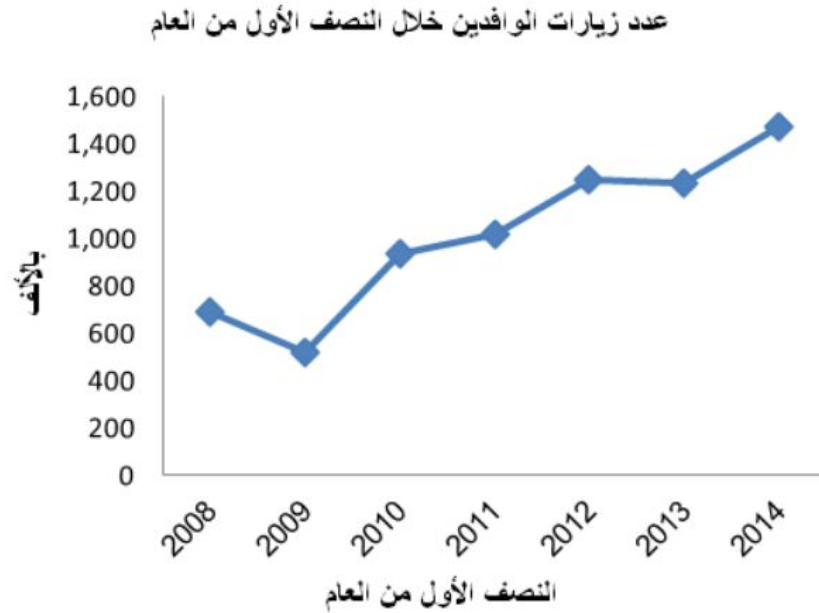
- Introduction
- Similar projects
- Used technologies
- Ieat mobile app services
- Recommendation system
- Map services
- Filter system
- Administration website
- Future work



Introduction

- The increasing number of restaurants in Westbank.
- The fast spread in technology use in people's life .
- Increase in domestic and foreign tourism. [1]
- About 3.2 million visits to tourist sites in the West Bank during the first half of 2014.

About 3.2 million visits to tourist sites in the West Bank during the first half of 2014.



Similar projects

1. Yummy.[]



2. Food on time.





3. Palestine's Restaurants Guide



4. POPEYES Palestine





Used technologies



Angular



Angular NativeScript



Python & Flask



Used technologies

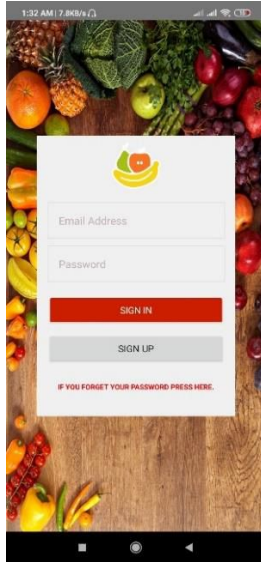


Sqlite

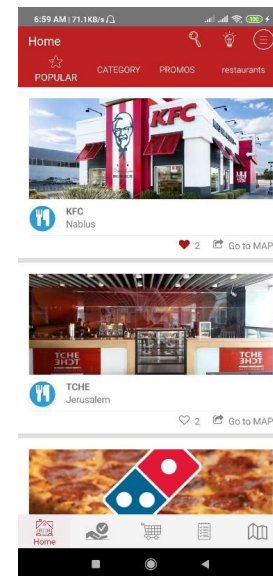
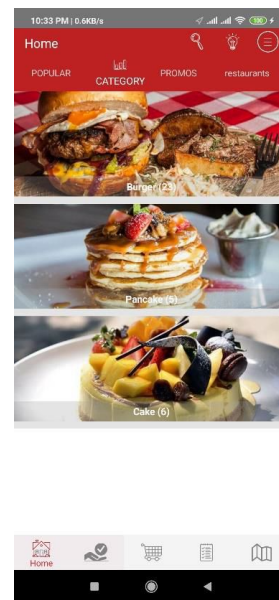
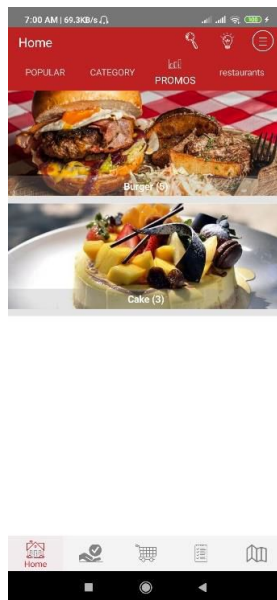
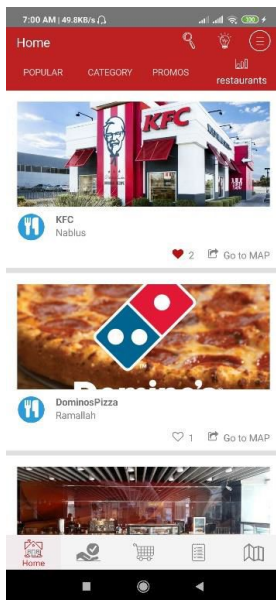


mapbox

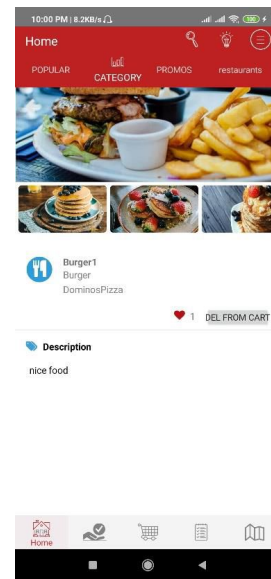
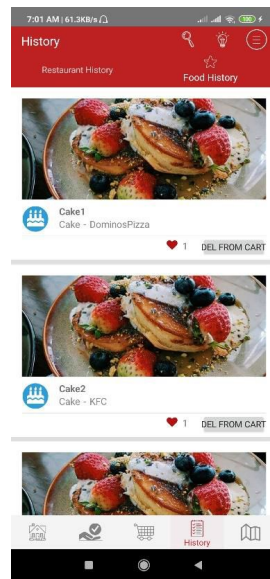
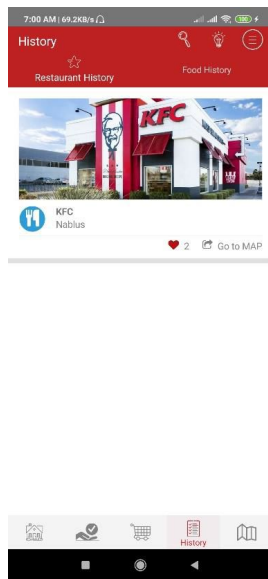
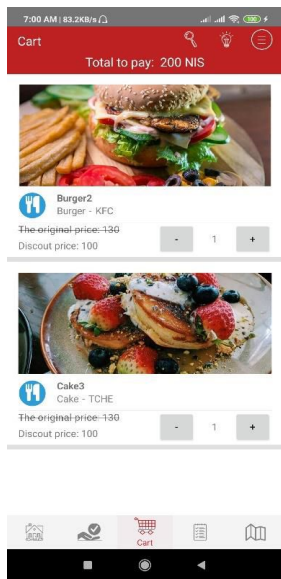
leat mobile app services



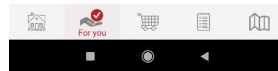
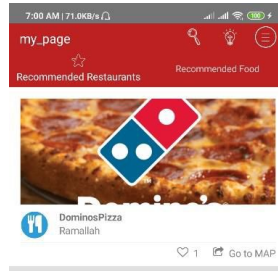
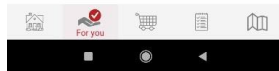
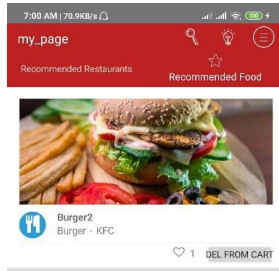
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Recommendation system





Recommendation system

AI and machine learning:

- Main objective: Discover new Contents.
- Ex. for Companies used Recommendation: Amazon, Youtube, Netflix, Google, Facebook.





Recommendation system

Terminologies:

- neighborhood -based collaborative filtering.
- Content-based.
- Model-based.
- Hybrid solutions.
- Personalized (past behaviour). Google search are most relevant to you.



Recommendation system

More Terminologies:

- Explicit and Implicit Ratings.
 - Explicit ex. : stars, like, favorite.
 - Implicit ex. : click data, purchase, minutes was watched.
- Youtube: how many minutes you spend watching.
- Amazon: has good recommendation System, has so much purchase data to work with it.



Recommendation system

More about Explicit and Implicit Rating



Recommendation system

How Recommender System work:

- Understanding you.
You: every customer or visitor
- Some sort data.
- Merge its data about you, with the collaborative behavior every one else like you, to recommend stuff you might like.

Recommendation system - Knn Algorithm

Is an AI machine learning Algorithm.

Step 0: Prepare the Dataset.

	Items Favorite behavior									
"RT":	[	1	,	1	,	1	,	0	,	0
	[	0	,	0	,	0	,	0	,	0
	[	1	,	0	,	1	,	0	,	0
	[	0	,	0	,	0	,	0	,	1
	[	1	,	0	,	1	,	0	,	1

users vectors

Recommendation system

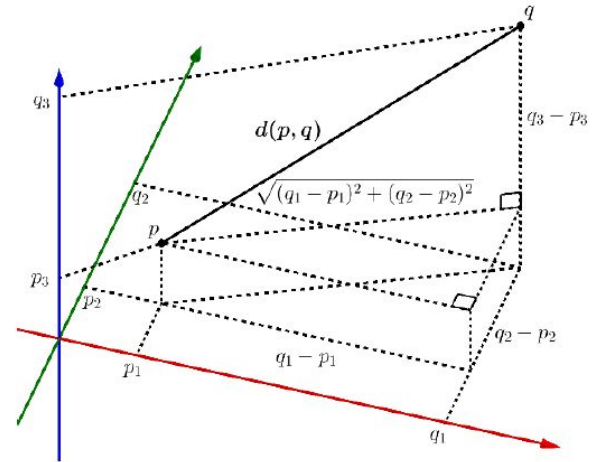
Step 1: Calculate Euclidean Distance.

$$\begin{aligned} d(\mathbf{p}, \mathbf{q}) &= d(\mathbf{q}, \mathbf{p}) = \sqrt{(q_1 - p_1)^2 + (q_2 - p_2)^2 + \dots + (q_n - p_n)^2} \\ &= \sqrt{\sum_{i=1}^n (q_i - p_i)^2}. \end{aligned}$$

While :

p : set of favorite status (1 or 0) for user p

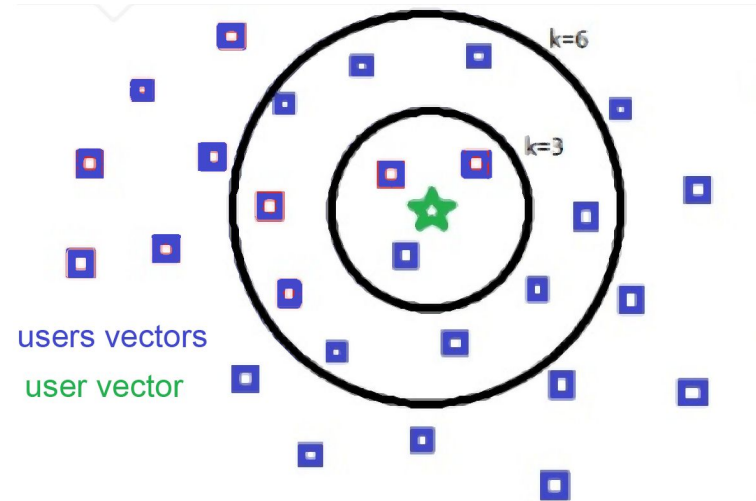
q : set of favorite status (1 or 0) for user q



Recommendation system

Step 2: Get Nearest Neighbors.

K: number of neighbors.



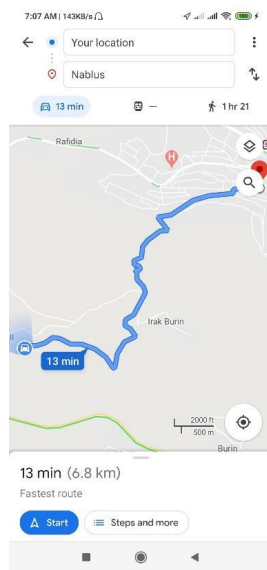


Recommendation system

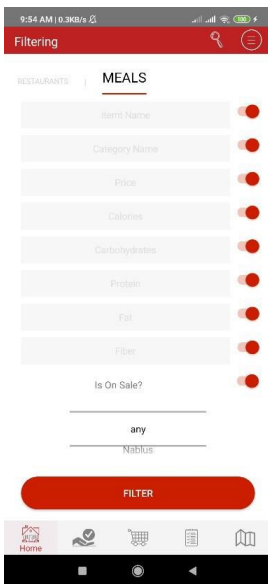
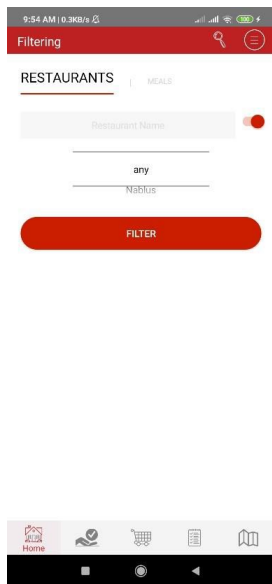
Step 3: Make Predictions.

```
for(i=0; i<k; i++){  
    for(j=0; j<RestCount; j++){  
        if( RT[userId][j] == 0 && RT[neighbors[i]][j] == 1){  
            RI.push(j);  
        }  
    }  
}
```

Map services



Filter system



Administration website

Login

Sign In to your account

Login

[Forgot password?](#)

Sign up

Looking for a great restaurant system to help you manage your products and make marketing easy for you, what are you waiting for ?

Register Now!

Register

Create your account

Address

Description

Cover Photo

Choose File

No file chosen

Create Account

Administration website

The screenshot displays a web application interface for managing items. On the left is a dark sidebar with navigation links: 'ADMINISTRATION', 'Options', 'Profile', 'Add Item' (highlighted), and 'My Items'. The main content area is titled 'Add new item' and contains a form with the following fields: 'Name' (text input), 'Category' (dropdown menu), 'Price' (text input with '0.00'), 'Is on Sale' (checkbox), 'Price on Sale' (text input with '0.00'), 'Calories' (text input with '0.00'), 'Carbs' (text input with '0.00'), 'Protein' (text input with '0.00'), 'Fat' (text input with '0.00'), and 'Fiber' (text input with '0.00'). Below these are two file upload sections: 'Cover photo' and 'Item Photos', each with a 'Choose File' button and the text 'No file chosen'. At the bottom of the form are 'Submit' and 'Reset' buttons. In the top right corner, a user profile dropdown menu is open, showing 'Settings', 'Profile', and 'Logout' options. The footer of the page includes a copyright notice: '© 2020 Ieat Project'.

ADMINISTRATION

Options

Profile

Add Item

My Items

Add new item

Name

Category

Price

Is on Sale

Price on Sale

Calories

Carbs

Protein

Fat

Fiber

Cover photo

Item Photos

Choose File No file chosen

Choose Files No file chosen

Submit Reset

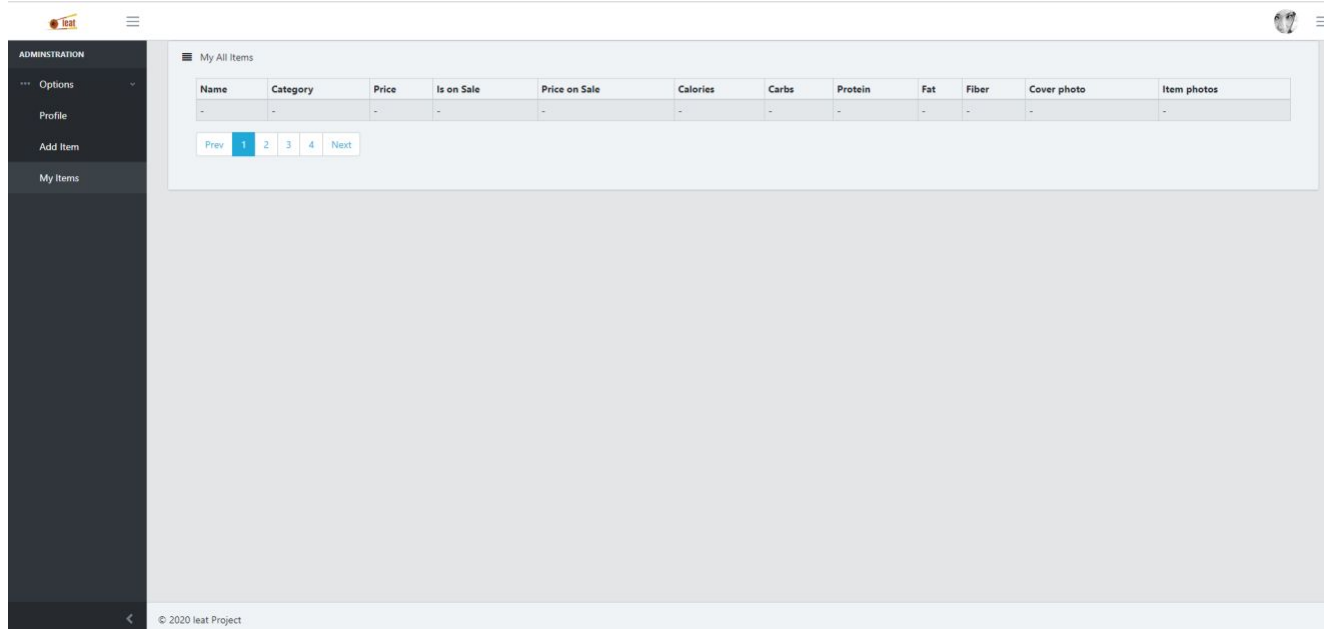
Settings

Profile

Logout

© 2020 Ieat Project

Administration website





Future work

- Deploy this application on an international stage.
- Calculating the fastest path from the client location to the desired restaurant location.
- Apply more complicated and smarter machine learning algorithm such as neural network at the recommendation system.
- Deploy chatting system between users themselves & Restaurants.
- Develop feedback messaging system between the client and the restaurant owners.
- Use more reliable and robust backend resources (back-end framework and database) that can handle huge number of requests.



References

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The End

Thanks for Watching !
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