

School of Arts and Sciences Computer Science Department

Mayor Guide

By Houssam Ali – Tawfik Zohbie CSCI490 Advisor Dr. Maher Abdulrahman Spring 2020

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1. Introduction:

We, as Computer Science students, were requested to implement our senior project for we are graduating. We had a variety of options based on what we have studied and encountered as courses throughout the three years of the learning process at our university.

Nowadays, technology has taken a grand part of our daily life whether at home or work. Most of the tasks are being automated and thanks to the IOT, we are trying to facilitate human life by connecting mainly everything to the internet in a way to serve our needs with a technological touch. We can obviously realize the expansion and spread of the ecommerce, which has an enormous benefit in the world of business.

PHP Language:

PHP is a server side scripting language. That is used to develop Static websites or Dynamic websites or Web applications. PHP stands for Hypertext Pre-processor, that earlier stood for Personal Home Pages. PHP scripts can only be interpreted on a server that has PHP installed PHP is a general-purpose scripting language that is especially suited to server-side web development, in which case PHP generally runs on a web server. Any PHP code in a requested file is executed by the PHP runtime, usually to create dynamic web page content or dynamic images used on websites or elsewhere.

According to W3Techs' data, PHP is used by 78.9% of all websites with a known server-side programming language. So almost 8 out of every 10 websites that you visit on the Internet are using PHP in some way

2. Requirement Analysis:

a) Project Title: Mayor guide

b) **Project Purpose:**

Technology has contributed efficiently in our daily life, and its main purpose to make it easy for us thus we think now in the Mayor's difficulties, it was necessary to make the system online and not hand written.

Initially, the purpose of the website is to make taking information about people in a specific town easier and get all the information of this person and his family especially that it is known how hard it is to take the information of a person's family from the big records -which is a big book containing every single information about this person only- that is not well arranged, so searching for a person's family will cost at least 10 to 20 minutes. The structure of this Mayor guide is very simple and easy to use and understand and the tasks are very clearly shown in the main page and the sub-pages and this is the main propriety of a good and well organized website which is presented in our website very clearly.

The project is targeting a web page that include pages for searching, get, and make an online records and make edit this information very easy with one tap and our project contains an important propriety which is chatting between the mayor himself and the admin and a sub-page to send the official documents by it which give the website the legitimacy to be an official website by Government.

The main tasks that Mayor Guide gives to its users are:

• Admin

The admin's can manage mayor account and towns and add officer (insert, delete, update) and receive the official documents from the mayor to make these changes.

Officer

The officer can add mayor and manage all the people system information (add, delete, update, make divorced, married, and dead) and chat with mayors and receive documents.

• Mayor

Chat with the admin to ask him about the tasks needed and send the documents to approve the editing on the information or the insertion of the information, search by first name and last name and registration number and see the population's count of its own town.

c) Scope:

It is obvious that technology and through its aspects play a major role in our daily life. Due to excessive work and lack of time of the mayor in his office searching about person's information and waste of the person's himself waiting for his document. It is very important to make and easy online system to solve this problem, so it is now easy to make any document to any person in the town with very low time due to the simple and easy use that presented in our information system, and especially that our information system is a website so the mayor and admin can reach it wherever and whenever they want to reach, which is make it portable and easy to reach. Our website is the one that serves these.

d) Project Vision:

To provide a well-advanced information system for the mayors as well through the features the website provides, which facilitates and makes the collecting information and makes documents process easier and faster.

e) Problem Statement :

At the beginning, important and essential need of guide for mayors nowadays in our country, and from the facilities that this website serves for mayors who own this guide, there was the idea of this website.

Mayors without Mayor Guide have no way to search and collect the informations of town's population rather than search manually in the hard copy of population records which is very difficult. which might seem not that efficient most of the time, due to the lack of time for mayors and the person who need the documents himself so Mayor Guide owners can do all these tasks very easy,

f) Functional Requirements:

i. Mayor can

- Search for person's information by first name, last name and number of registration
- See the person's family information
- See delisting regulations
- Chat with admin
- Send officials documents

ii. Admin can

- Manage officer account
- Manage mayor account
- Manage town

iii. Officer can

- Manage mayor account
- Manage people information
- Receive documents
- Chat with mayor

g) Technical Requirements:

- The system is developed as a Website using PHP
- The website is just workable on desktop browser
- Creating a well done database using PHPmyAdmin
- Searching process must be fast and efficient

3. Use Case Modeling

1. Definition:

A use case diagram is a **dynamic** diagram in UML. Use case diagrams model the functionality of a system using actors and use cases. Use cases are a set of actions, services, and functions that the system needs to perform that studies how the users associated to the system interact in this system.

2. Sections:

The use case modeling consists of the following sections

a. Use case Table:

Table showing the use cases and main functionality of it

b. Use Case Diagram

Diagram showing the actors with the associated use cases

c. Use Case Narrative:

Table for each use case describing it in details

3. Actors:

In our system, we only have three actors who have tasks and interaction with this system who are:

- Admin
- Officer
- Mayor

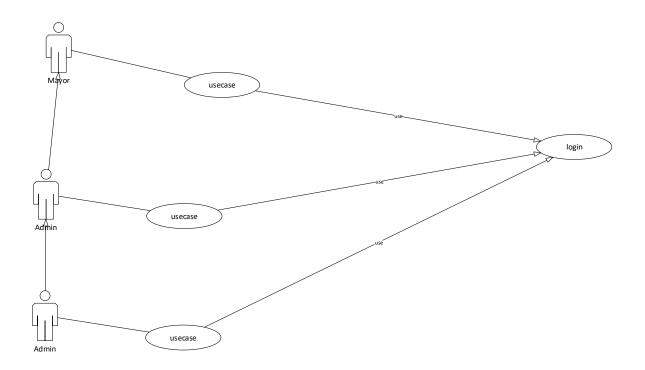
Section a. Use cases table

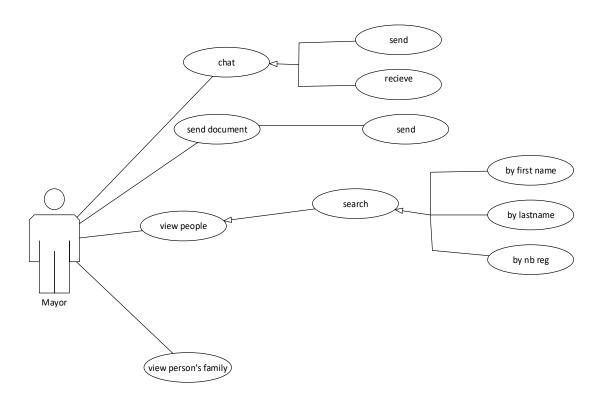
Sign Up	Description of how the mayor can join the system
Login	The mayor, admin, and officer must enter the required data to be able to enter the system
Manage mayor information	The admin and officer can delete, update or add a mayor information
Manage people information	The officer can delete, update or add a person.
Make a person dead-divorced	The officer can make divorced and dead to a person
Make two person married	The officer can make two couple married

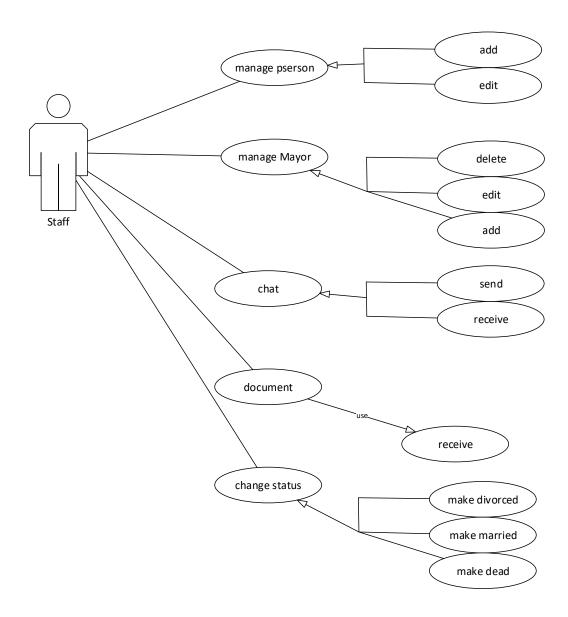
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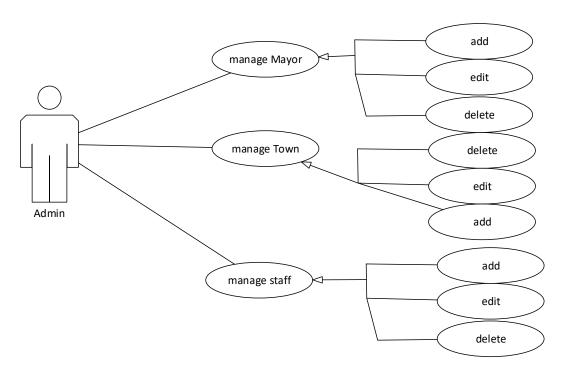
Chat	The admin can chat mayor and in reverse
Manage town	The user can manage comment
Search	The mayor and officer can search people informations and Officer, and admin search mayors
Document sending	The mayor can send documents to the officer
View person information	The mayor can see all person informations
View person's family information	The mayor can see all person's family informations

Section b. Use case Diagram









Section c. Use case Narrative

Use case Name	Login	
Actor	Admin-mayor-officer	
Description	The user enters his username and password in order to enter the system	
Preconditions	Already signed up	
Trigger	Press login button	
	Actor Action	System Response
Typical course of event	Enters his username and password	System validates his username and password
Alternative scenario	The user is given a wrong username or password in case of failure in validation	
Post condition	User is now logged in	

se case Name	Signup	
Actor	Mayor-officer	
Description	The Admin add officer and mayors	
Preconditions	Approved by admin	
Trigger	Press signup button	
Typical course of event	Actor Action	System Response
	Enters his information: username, phone, address, password	Verifies information and confirms registration
Alternative scenario	The admin is asked to add again	
Post condition	officer-mayor is added to user table	

Use case Name	Search	
Actor	Admin-Mayor-officer	
Description	User can search for the desired operations	
Preconditions	Logged in	
Trigger	Enter first name, last name or the registration number the search bar	
	Actor Action	System Response
Typical course of event	Enter first name, last name or the registration number the search bar	The system searches in the item table for the entered data It displays it in the list if found
Alternative scenario	If not found, table shown will be empty	
Post condition	The user then can be able click on and view its details and do operations	

Use case Name	Manage mayor account	
Actor	Admin-officer	
Description	Admin-officer can add, edit or delete mayor account	
Preconditions	Be a officer or an admin	
Trigger	Press add, delete or edit button	
	Actor Action	System Response
Typical course of event	The Admin adjust in the desired or tap the mayor information needed to be added or information or press delete button	The system send the information to Admin
Alternative scenario	The admin is asked to add-edit-delete again	
Post condition	Mayor is deleted-added-deleted	

Use case Name	Manage Town	
Actor	Admin	
Description	The admin can insert or delete or update on town	
Preconditions	Be an admin	
Trigger	Press delete or add or insert	
Typical course of event	Actor Action	System Response
	Admin can add or delete a member	Verifies information and confirms registration
Alternative scenario	The admin is asked to register confirm	
Post condition	town is updated-added-deleted	

Use case Name	Make person dead or divorced	
Actor	officer	
Description	The officer can make the person dead or divorced	
Preconditions	Be a officer	
Trigger	Press death-divorce	
Typical course of event	Actor Action	System Response
	Officer press on death-divorce then select the needed person and press make dead- divorced	Verifies information and confirms registration
Alternative scenario	The officer is asked to do the operation again	
Post condition	Done	

Use case Name	Make married	
Actor	officer	
Description	The officer can make a person married	
Preconditions	Be a officer	
Trigger	Press Marry	
	Actor Action	System Response
Typical course of event	Officer press on marry then select the needed man to be married then select the needed women then press make married	Verifies information and confirms registration
Alternative scenario	The officer asked to try again	
Post condition	Done	

Use case Name	Manage people information	
Actor	Officer	
Description	The officer can delete, update or insert a person	
Preconditions	Be a officer	
Trigger	Press add-delete-edit	
	Actor Action	System Response
Typical course of event	officer can add or delete or insert a person	Verifies information and confirms registration
Alternative scenario	The officer is asked to try again	
Post condition	Done	

Use case Name	Chat	
Actor	Officer-mayor	
Description	The mayor and officer can chat with each other	
Preconditions	Be a mayor or officer	
Trigger	Press chat	
	Actor Action	System Response
Typical course of event	Press chat	Verifies information and confirms registration
Alternative scenario	The mayor-officer asked to re-login	
Post condition	Message posted	

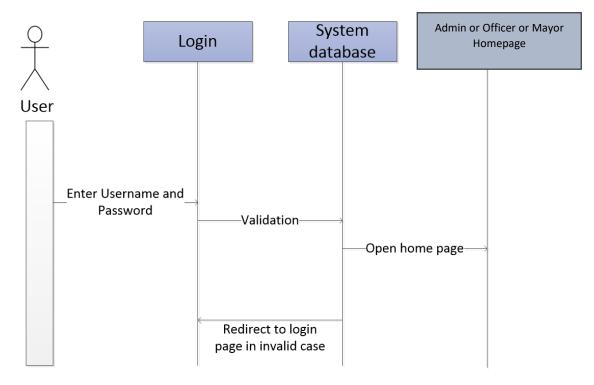
Use case Name	Document sending		
Actor	mayor		
Description	The mayor can send documents		
Preconditions	Be a mayor		
Trigger	Press document		
Typical course of event	Actor Action	System Response	
	Mayor press on document and attach the needed document	Verifies information and confirms registration	
Alternative scenario	The mayor is asked to try again		
Post condition	Done		

Use case Name	View person's information		
Actor	Mayor		
Description	The mayor can see the people information		
Preconditions	Be a mayor		
Trigger	Press people		
Typical course of event	Actor Action	System Response	
	Mayor press on people and they will be shown	Verifies information and confirms registration	
Alternative scenario	The mayor is asked to login again		
Post condition	Done		

Use case Name	View person's family information		
Actor	Mayor		
Description	The mayor can see person's family information		
Preconditions	Be a mayor		
Trigger	Press family		
Typical course of event	Actor Action	System Response	
	Press on family	Verifies information and confirms registration	
Alternative scenario	The member is asked to login again		
Post condition	Done		

4. Sequence Diagrams:

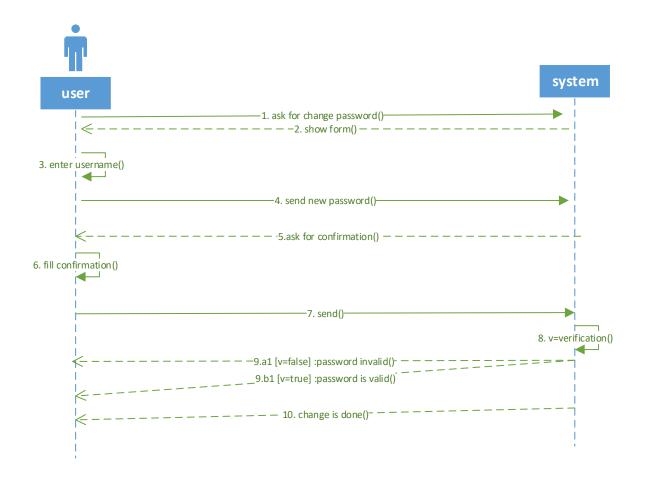
The sequence diagram shows object interactions arranged in time sequence. It depicts the objects and classes involved in the scenario and the sequence of messages exchanged between the objects needed to carry out the functionality of the scenario.



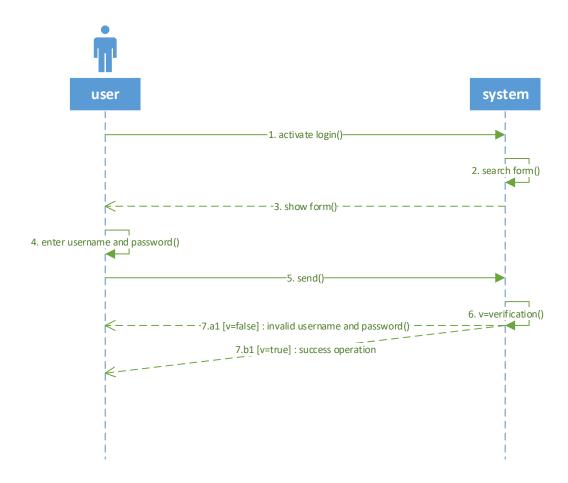
Sequence Diagram for Login

If the user is valid, the system redirects him to either the admin or the officer or mayor activity, which is their home page.

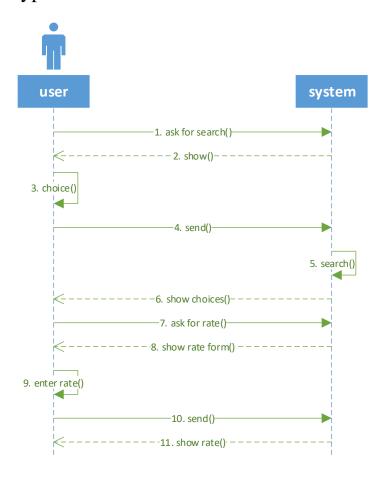
When change password, the system would be making sure that the new password inserted is correct and ask confirmation.



When login, the system would be making sure that username and password are correct to go to the specific page.



When search, the system would be making sure that the user search a type included in the site to know more information about it.



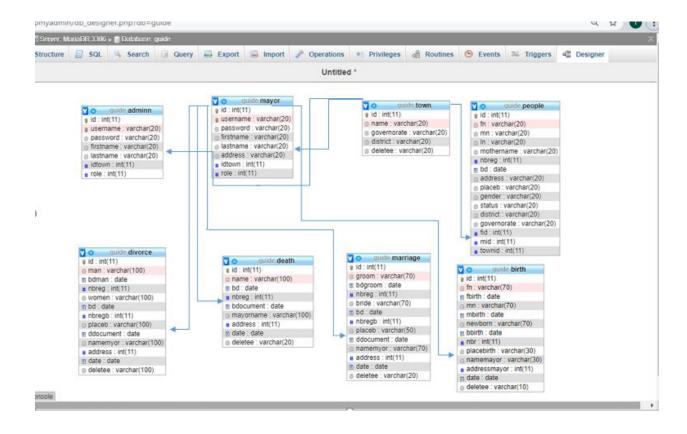
5. Data Modeling:

a. ER diagram- Conceptual



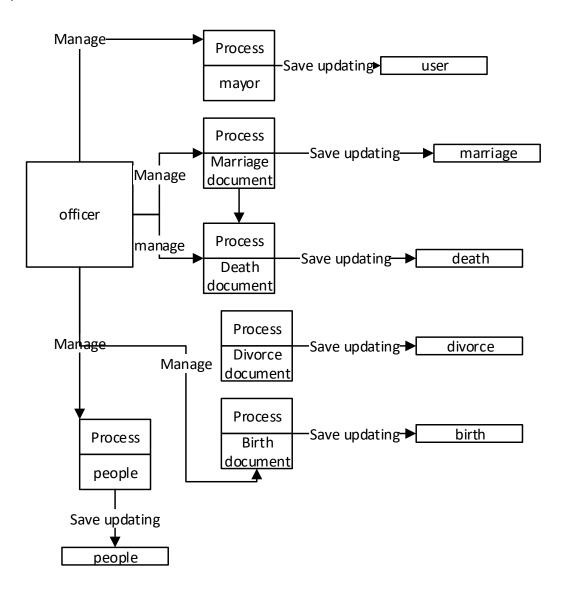


b. Physical Database:

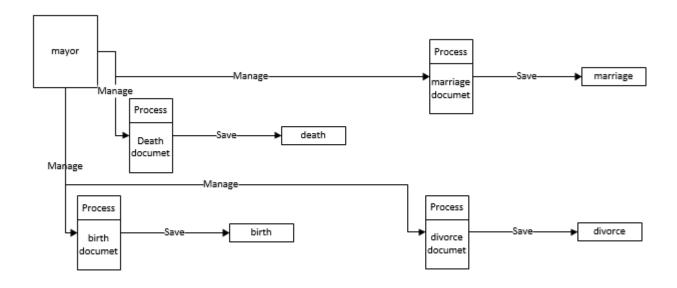


6. Data Flow Diagram:

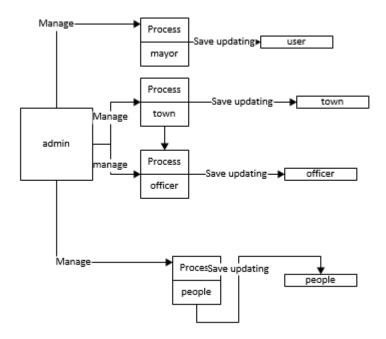
a) officer data flow



c) Mayor data flow



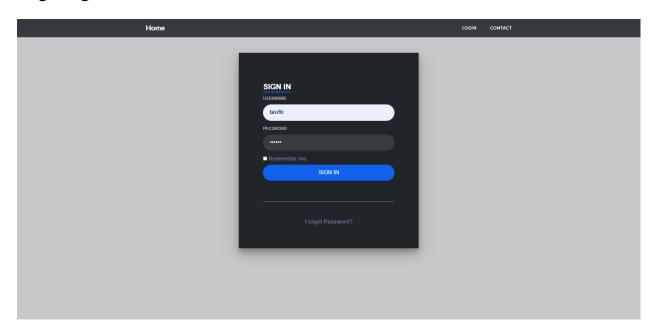
c) Admin data flow



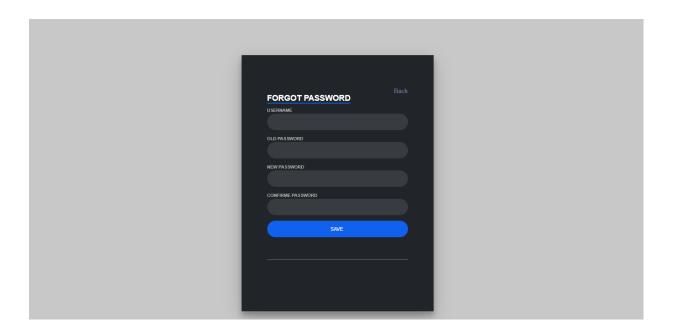
7. Website demo: Main page:



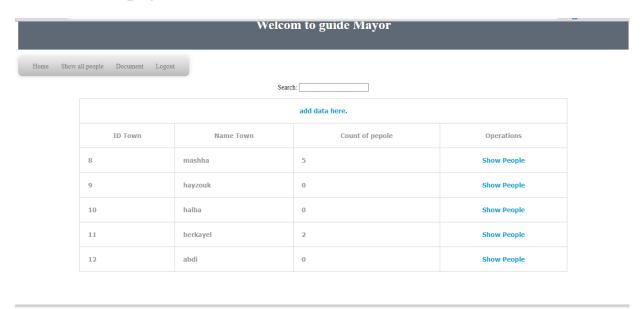
Page login



Tap to change the password



Admin main page



Mayor main page



Show family(father) page in mayor platform



Show family(father) page in mayor platform



Women page



Page for "خراج قيد فردي" just press on personnal information in the main page

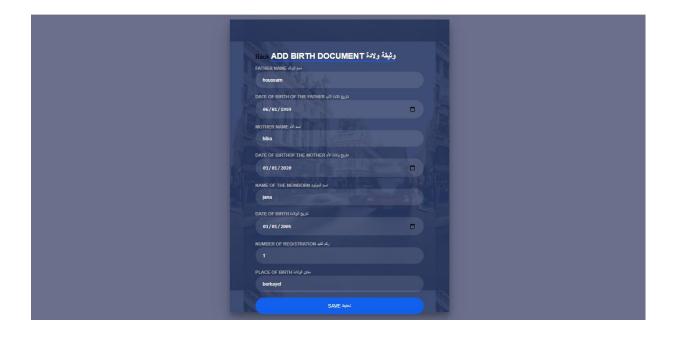


In this page"لوائح الشطب" show people in the town who can elects.



localhost:8080/tawfik3/mavor.nhn#

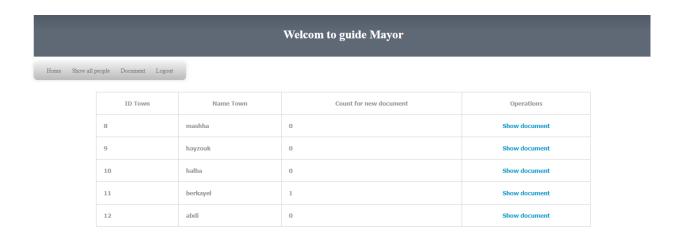
Mayor can add document dead ,birth ,devorce and marriage



Officer:

Officer can view all new document and save them.

When new document received the counter increase by one.



Saved document collored by red.

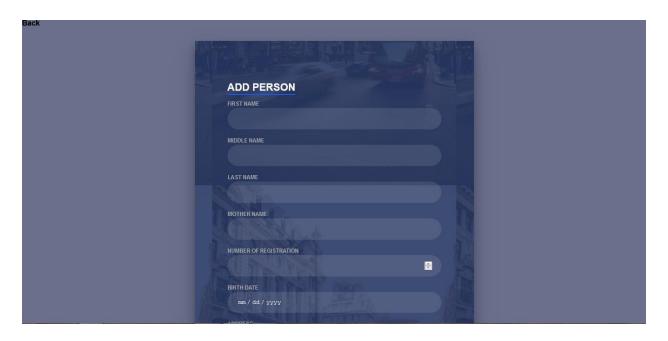


All access concerning people:

You can add a child of person just press on add family member and choose the father and then tap on operations "add family member"



This option is to Add the first father of a family or he is called "origin"



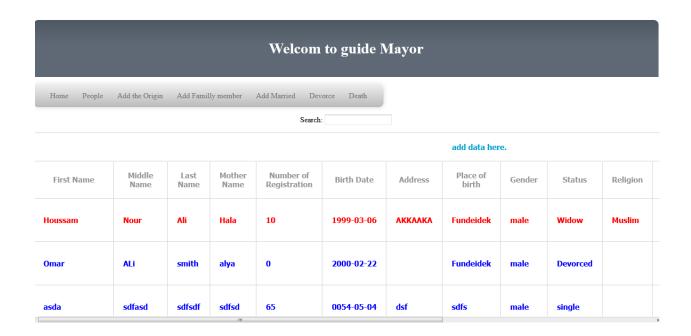
If you need to make devorce choose the option devorce, or if you need to make dead choose the option death, and then choose the needed person and then press on the operation



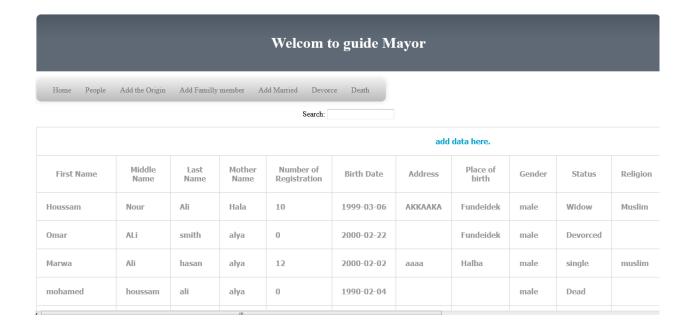
If you need to make marry choose the option add married and then choose the man and then the woman and the choose marry her.



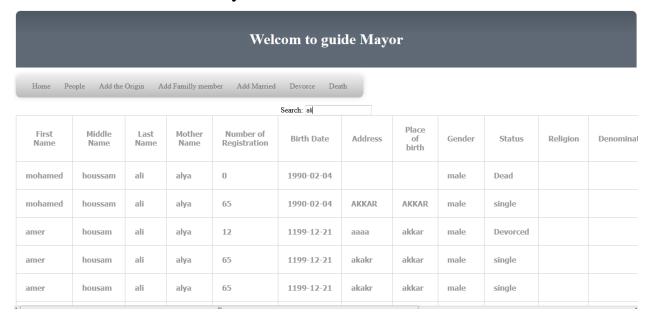
Here if you want to see the family tree all you need to do is tap "family" option in "operation" and it is shown in all windows.



Here is shown the whole people in the town. And it is the main page in the people domain.



Here is a search by last name:



Her is a search by first name:



To provide the connection between the project's users there is a chat platform to use it you need to tape on chat on the navigation bar:

