

Real Estate Agency Management System

CME 3201 Database Management Systems

Term Project Report

Phase 3 (Final)

2020-2021 FALL

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1. Abstract

Real Estate Agency Management System provides innovative and easy-to use solution for people who especially interested in real estates. Thanks to its well designed structure for both client-side and server-side. There is three type of user. First one is visitor, can just display and search for advertisements. Second one is individual user that can also favorite advertisements that are stored and they can save interests which automatically displays all matching advertisements. Third one is official user that can delete, edit and add advertisement with 15 parameters and multiple images. Official users can display count of display and count of favorited data of advertisement also. Thanks to all of mentioned services, real estate oriented operation much more powerful, fast and easy.

2. Completion Report

We completed all requirements that we specified previously. All type of users and all related operations of them are implemented in an appropriate format. We defined three type of users, and all of their interaction and related system responses. Problems that we encountered were more about layer of data. Data layer of our program were complex. For example for adding advertisement there were 15 parameters and multiple images. Managing this data was important. At this point we applied some standards in our team. Naming variables, syntax, usage of local storage and cookies etc. Also about backend we had some challenges. But we fixed them all with strong communication. We used Github for CI and Jira for Kanban board.

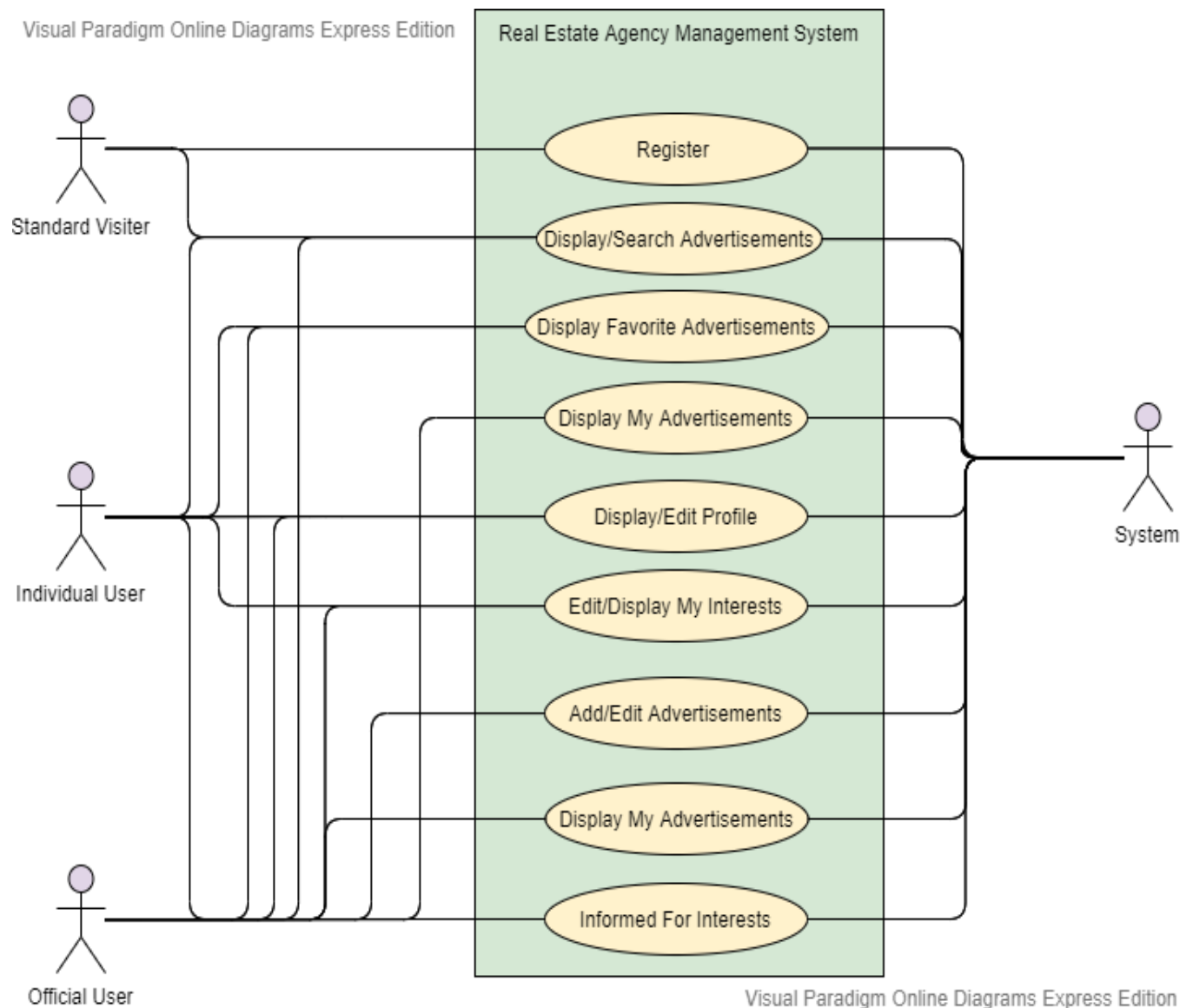
We handled most of problems with strong communication in our team. We had discussions over problems that aimed to fix that in better way. In early periods, we defined problem that we motivated to solve, this definition was very clear. This clean definitions were helped us so much. All of our team members understood problem clearly. Lastly, one of our interesting challenge was about creating dynamic components like pagination etc. At this point we applied some mathematical formulas to display in appropriate format. This was one of interesting challenge for us.

Finally, we completed all tasks that are previously defined. Thanks to strong communication in our team, we always handled problems. For both frontend and backend, we designed well for both users and developers.

3. Functional Decomposition

Real estate agency management system provides lots of services. That are mainly focused on the users benefits and how to make jobs much more easier and faster. Thanks to well designed fronted and backend, all needs of our program provided for both users and developers.

The main user case diagram of our program, given below:



To describe much more better our program, we focused to user types. Depending on their permissions and capabilities described below with their roles.

Standard Visitor:

- Displays main page within standard search, advanced search components, sorting components.
- Display advertisements in preview mode as cards row by row. This preview card mode includes only limited and significant information about related real estate. The cards includes following attributes:
 - An image preview
 - Price
 - Date of publishment
 - Rent or sale information
 - Type of real estate
 - Number of rooms
 - Information of area as meter square
 - Description of real estate
 - Address of real estate
 - Name of real estate agency officer
- Display advertisements with all details just by clicking on it. These details are:
 - All images of real estate
 - Price
 - Date of publishment
 - Rent or sale information
 - Type of real estate
 - Number of rooms
 - Information of area as meter square
 - Description of real estate
 - Address of real estate within maps component
 - Information of heating system
 - Information of floor
 - Age of real estate
 - Facade of real estate
 - Additional information like garden, garage, security etc.
 - Detailed information of real estate agency office

- Register to system as individual user. When standard visitors attend to our system as a type of user that called individual user, we take following data from them to complete registration:
 - First name and last name
 - Profile photo
 - Mail address
 - Phone number
 - Password
- Register to system as official user. When standard visitors attend to our system as a type of user that called official user, we take following data from them to complete registration:
 - Name of firm
 - Profile photo
 - Address of office
 - Mail address
 - Phone Number
 - Password
 - Card number for payment
 - Name of card owner for payment
 - Deadline of card for payment
 - CVV code of card for payment

Individual User:

- Login to Real Estate Agency Management System with user mail and password.
- Log out from system.
- Display/Edit My Profile. Mentioned functionality allows to individual users display and edit following attributes for own:
 - First name and last name
 - Profile photo
 - Mail address
 - Phone number
 - Password
- Display main page within standard search, advanced search components, sorting components.

- Display advertisements in preview mode as cards row by row. This preview card mode includes only limited and significant information about related real estate. The cards will include following attributes:
 - An image preview
 - Price
 - Date of publishment
 - Rent or sale information
 - Type of real estate
 - Number of rooms
 - Information of area as meter square
 - Description of real estate
 - Address of real estate
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- Display advertisements with all details just by clicking on it. These details are:
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 - Price
 - Date of publishment
 - Rent or sale information
 - Type of real estate
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 - Information of area as meter square
 - Description of real estate
 - Address of real estate within maps component
 - Information of heating system
 - Information of floor
 - Age of real estate
 - Facade of real estate
 - Additional information like garden, garage, security etc.
 - Detailed information of real estate agency office
- Favorite/unfavorite an advertisement.
- Display previously favorited advertisements.

- Define interests about real estates. Mentioned functionality allows to individual users defining interests for real estates with following options which are going to use for informing them about new advertisements that matched with definitions:
 - Interval of price
 - Rent or sale information
 - Type of real estate
 - Number of rooms
 - Interval of area as meter square
 - Location of real estate
 - Information of heating system
 - Information of floor
 - Age of real estate
 - Facade of real estate
 - Additional information like garden, garage, security etc.
- Display newly added advertisements that matched with user's interests definitions.
- Informed with SMS about new advertisements that matched with interest definitions.

Official User:

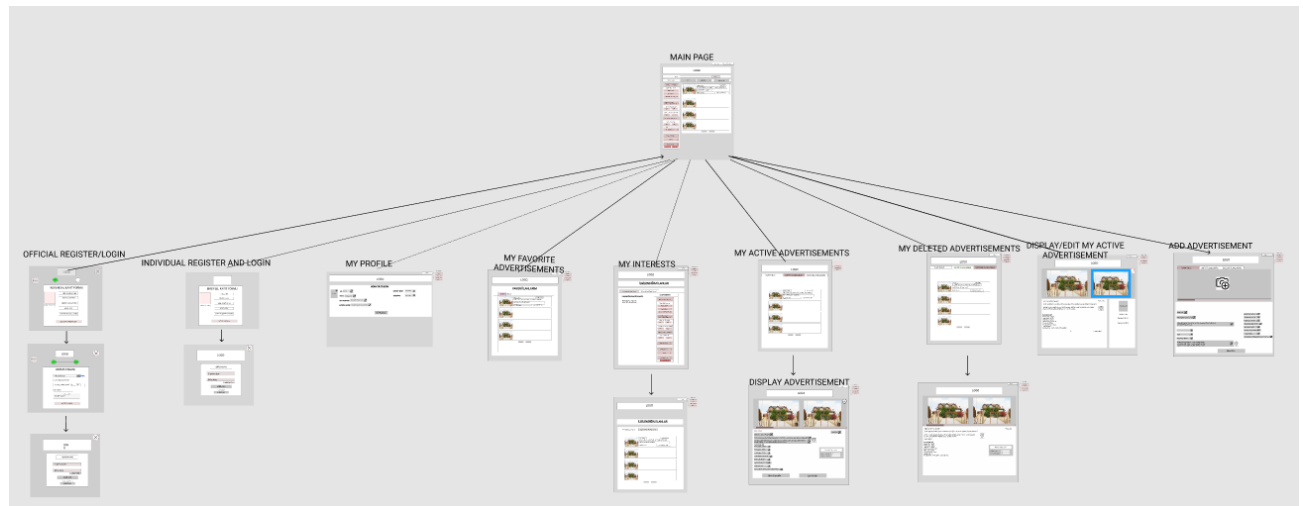
- Login to Real Estate Agency Management System with official mail and password.
- Log out from system.
- Display/Edit My Official Profile. Mentioned functionality allows to individual users display and edit following attributes for own:
 - Name of firm
 - Profile photo
 - Mail address
 - Address of office
 - Phone number
 - Password
- Display main page within standard search, advanced search components, sorting components.
- Display advertisements in preview mode as cards row by row. This preview card mode includes only limited and significant information about related real estate. The cards will include following attributes:
 - An image preview

- Price
- Date of publishment
- Rent or sale information
- Type of real estate
- Number of rooms
- Information of area as meter square
- Description of real estate
- Address of real estate
- Name of real estate agency officer
- Display advertisements with all details just by clicking on it. These details are:
 - All images of real estate
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 - Description of real estate
 - Address of real estate within maps component
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- Favorite/unfavorite an advertisement.
- Display previously favorited advertisements.
- Define interests about real estates. Mentioned functionality allows to individual users defining interests for real estates with following options which are going to use for informing them about new advertisements that matched with definitions:
 - Interval of price
 - Rent or sale information

- Type of real estate
- Number of rooms
- Interval of area as meter square
- Location of real estate
- Information of heating system
- Information of floor
- Age of real estate
- Facade of real estate
- Additional information like garden, garage, security etc.
- Display newly added advertisements that matched with user's interests definitions.
- Add/edit advertisements with following attributes for own office:
 - All images of real estate
 - Price
 - Rent or sale information
 - Type of real estate
 - Number of rooms
 - Information of area as meter square
 - Description of real estate
 - Address of real estate
 - Information of heating system
 - Information of floor
 - Age of real estate
 - Facade of real estate
 - Additional information like garden, garage, security etc.
- Display viewing information of related advertisements. Which tells about how many times displayed from users corresponding advertisement.
- Display my active advertisements.
- Delete an advertisement.
- Display my deleted advertisements.

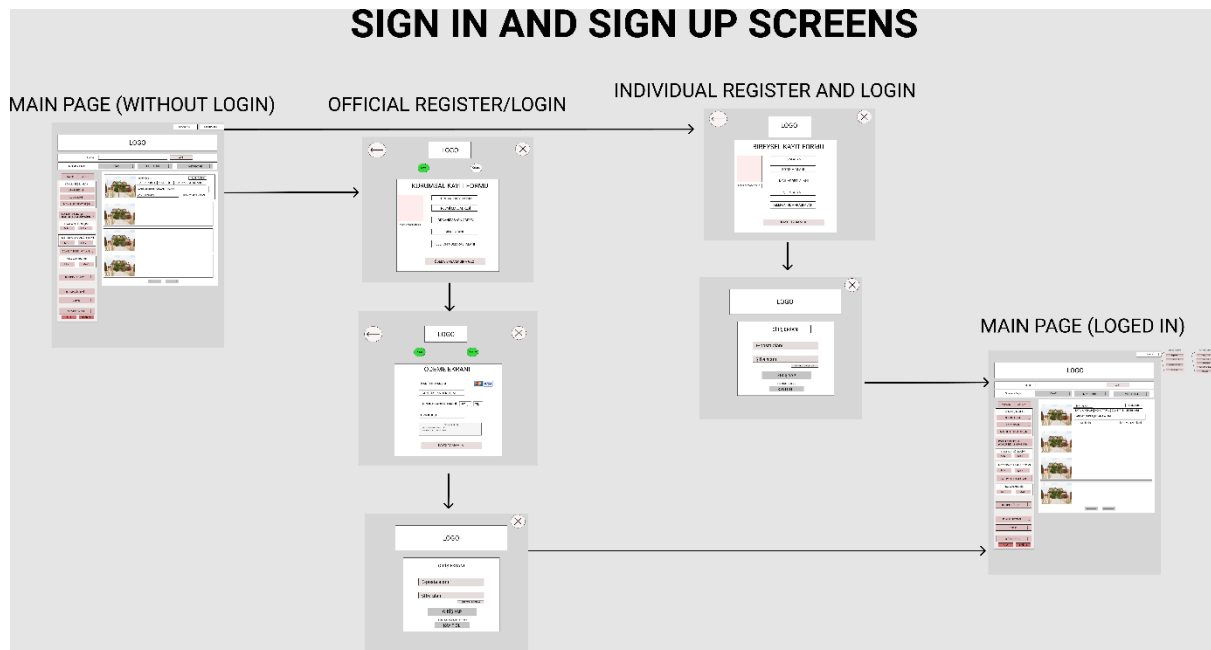
4. High Level Organization

High level organization is given below.

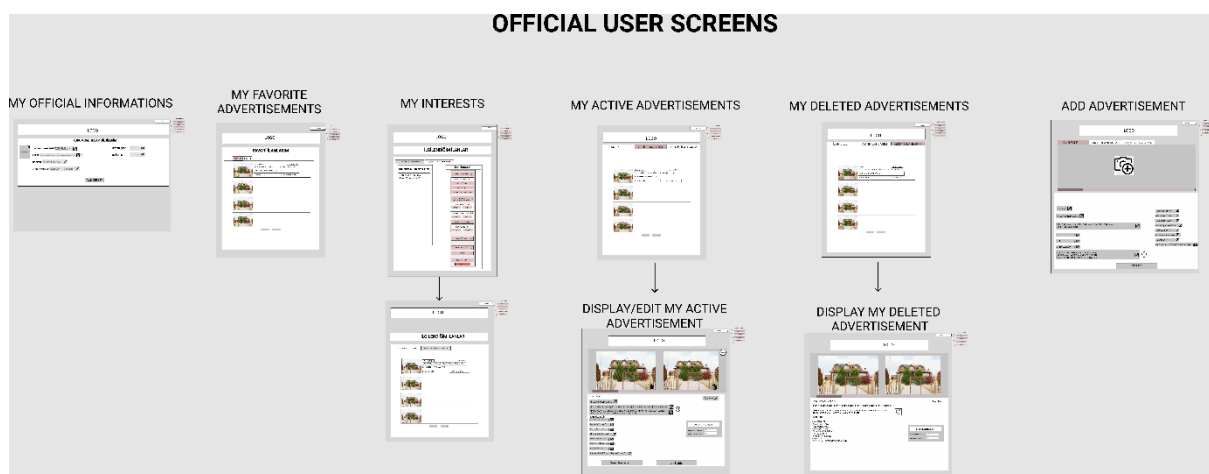


5. LAYOUT

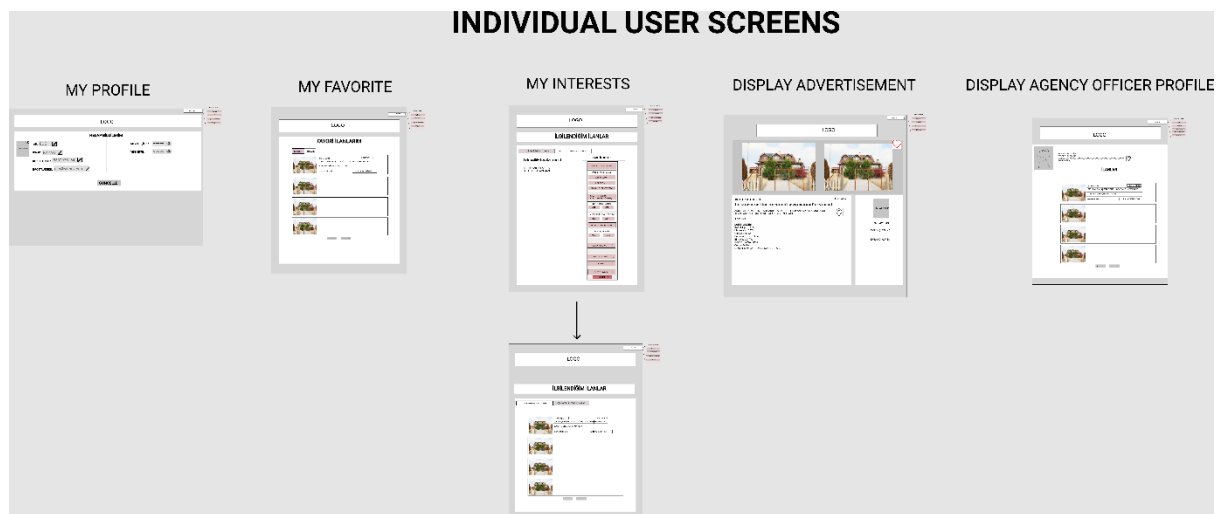
The high-level organization of Real Estate Agency Management System will be given as wire-frame as following with descriptions:



Sign in and sign up screens for both official and individual users as given above. Also included main page design which can be even displayed for both login and log out situations.




Official user screens are given above as My Official Information, My Favorite Advertisements, My Interests, My Active Advertisements, Display/Edit My Active Advertisement, My Deleted Advertisements, Display My Deleted Advertisements, Add Advertisement.



Individual user screens are given above as My Profile, My Favorite Advertisements, My Interests, Display Advertisement, Display Agency Officer Profile.

6. Implementation



Move to what moves you...

Arama: Ara

Fiyat ↓ ↑ İlan Tarihi ↓ ↑ Metrekare ↓ ↑

İLAN FİLTRELERİ

Satılık/Kiralık ▼

İl ▼

İlçe ▼

Mahalle ▼

Konut Tipi ▼

Fiyat Aralığı

Metrekare Aralığı

Oda Sayısı ▼

Bina Yaş Aralığı


Bulunduğu Kat ▼

Isınma Sistemi ▼

Cephe ▼

Ek Özellikler ▼

Ara
Temizle



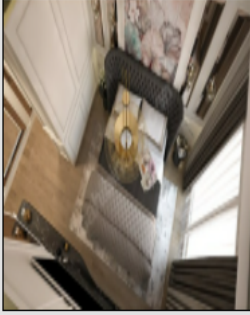
21000000₺

2021-01-19 22:54:25

Satılık
Daire
3+1
120 m²

Yeni bina, merkeze yakın, avmye yakın.

ANTALYA KEMER KUZDERE 130/4 Sokak Abc Emlak



3200₺

2021-01-19 22:54:22

Kiralık
Daire
3+1
110 m²

Güzel ev

ANTALYA KONYAALTI DAĞ 13 Sokak Nalan Ak

1
2
3
→



Move to what moves you...

FAVORİ İLANLARIM



2300₺ 2021-01-19 22:53:41

Kiralık	Daire	1+1	90 m ²
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Güzel ev

MANİSA ŞEHZADELER DERE 30 Sokak Mehmet Us



28000000₺ 2021-01-19 22:26:35

Satılık	Villa	5+1	450 m ²
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Her odası ıfık alıyor, çevresi neziğ

İZMİR GAZİEMİR SEVGİ 48 Sokak No 9 Mehmet Us

1

2

3

→

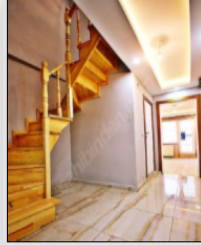


Move to what moves you...

İlan Ekle

Aktif İlanlarım

Geçmiş İlanlarım



800000₺

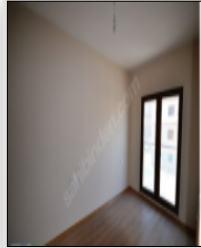
2021-01-19 22:53:45

Satılık	Müstakil Ev	4+1	250 m ²
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Çevresi sakin ve doğaya yakın

ANKARA MAMAK BAŞAK 25 Sokak

Nalan Ak



1400₺

2021-01-19 22:54:17

Kiralık	Daire	1+1	85 m ²
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Yakında AVM var

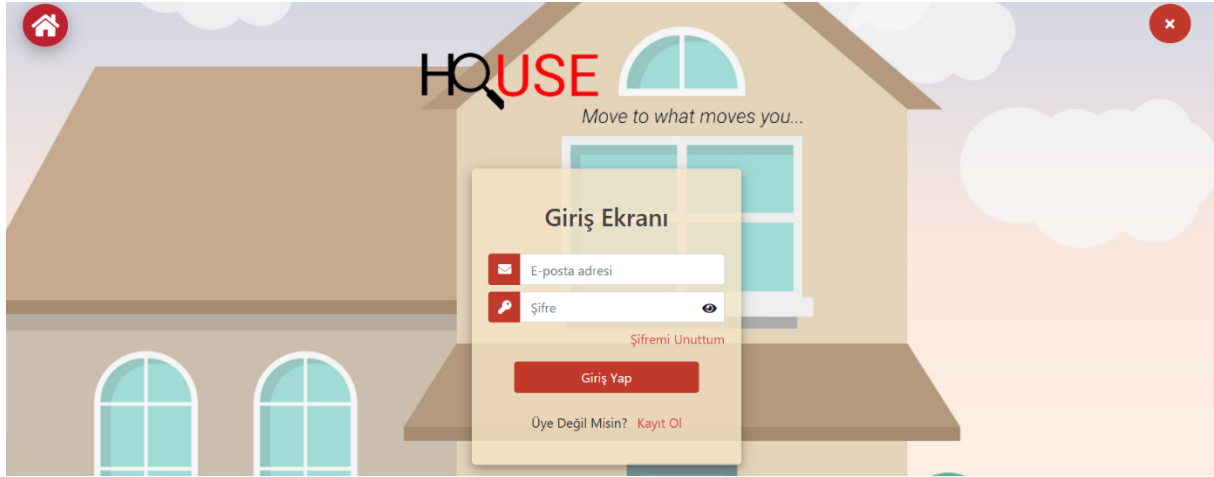
İZMİR KEMALPAŞA HÜRRİYET 30 Sokak

Nalan Ak

1

2

→



7. Future Work

One additional services can be added like SMS service that sends users to SMS when a new advertisement added that matched his/her interest. That can be very useful to inform people.