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# Acknowledgement

### Project House Mate has been developed thanks to all these people:

We are mainly grateful to our all mighty Lord Father for the gift life and giving us so many abilities and knowledge that allows us to stand out in our work, useful tools to accomplish our proposed goals; and specially, grateful to the people who guide us in our daily growth as people and as professionals.

We thank and treasure the sacrifice and effort from our parents. Thanks to them, through the development of our aptitudes and our process of personal and professional growth, we had reached the end of an important part of our formation.

Thanks to the support given by them, we can strengthen our family bonds, like that, also the experience acquired in their workplaces allows them to transmit to us their knowledge and these are what allows to focus our thoughts and objectives towards a future work environment.

Then, we thank our teachers; whom take the task, almost personally, of demanding us a level of performance and fomenting us human principles that will make us critical and solidary persons on society and in our workplace. At the same time, they deposit on us personal competitively, with the objective of reaching higher and make a difference, not just in our learning environment but also in different areas that are important to know nowadays.

Lastly, we thank our Project group who with a lot of effort disposed of its time and individual abilities to make House Mate.

# Presentation

House Mate it's a web platform that allows the advertising and promotion of real estate properties for sale or for rent between the users who interact inside the webpage. To do that, visitors have the choice to sign in for free to the platform to enjoy our services.

This manual will guide you as administrator to have a basic orientation on how to manipulate the web platform, this service will be used to the liking of the admin, but it requires certain conditions to have all the privileges of its use. By the other hand, the manual will provide a detailed form of the work environment, our services and the functionality of the platform, as well as the different modules that make up the platform and correct instructions of each section for its correct use.

# Introduction

The presented document it's an administrator manual created for the purpose of giving the managers of the page a better understanding of the platform.

It contains acknowledgments of the people crucial to the development of the project. Next, there's a small presentation for the document.

The terms definition is a glossary of the technical words used in the project. The system description is a detailed explanation of all the components and functionality of the project.

Then, there's a module description to show the administrator all the types of users used in the platform. The system requirements it's the minimum requirements for the development of the platform and the use for the webpage.

The System analysis contains all the diagrams behinds the logic of the program such as entity relations, database and table diagrams.

Finally the manual describes all the screenshots from all the forms and pages of House Mate.

# **Term Definition**

**Real Estate:** It's "property consisting of land and the buildings on it, along with its natural resources such as crops, minerals, or water; immovable property of this nature; an interest vested in this (also) an item of real property; more generally buildings or housing in general.

**Real estate appraisal (property valuation or land valuation):** It's the process of developing an opinion of value for real property (usually market value). Real estate transactions often require appraisals because they occur infrequently and every property is unique.

**Appraiser:** It's one who sets a value upon property, real or personal. A person specially appointed by a judicial or quasi-judicial authority to put a valuation on property.

**Buyer Brokerage (or buyer agency):** It's the practice of real estate brokers and their agents representing a buyer in a real estate transaction rather than, by default, representing the seller either directly or as a sub-agent.

**Real estate broker (or real estate agent):** It's a person who acts as an intermediary between sellers and buyers of real estate/real property and attempts to find sellers who wish to sell and buyers who wish to buy.

**Market value:** The estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm's length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion.

# System Description

The Website is designed so that companies or salesman interested in promote themselves create an account in which you are requested your personal information or company details. When a salesman or company has finished processing their account, this is enabled access and with it the ability to enter information about their properties that they wish to sell, the properties are visible to all users.

The Salesman create an account by filling in personal information fields. Once the personal fields are fill, access is granted and with this the ability to insert information of properties. The properties are tagged depending on the user. The Salesman is capable of contacting other user that upload properties to the Website with the goal of advertising; only, if the seller gets with an agreement with another salesman for the sale of the house. Salesman will get the chance to get qualify and rated, making the user look as better option for sales of houses.

The Company module start when user desires for the creation of company this subject fill in the company information as well the personal information of the contributor. The companies at difference of the users, are capable of adding members to a group. The companies are part of the tag system in which the sum of rating of the users gives the rating of the company, by doing so, the company looks for better workers to upgrade the rating.

The Website has module for Visitors. Visitors are those who are not part of the Website; these have the ability to search for properties where they choose their willingness to pay for a property, either if it is for rent or purchase, inside the section of the properties they view the contact details of a seller. If they desire to purchase online create an account and manage and give their personal information. Once the account is made it becomes a Client account which is allowed to find out the contact details of contributor.

The Client module capable of showing information about the house and making search of them. This module is the basic user, his only focus is gaining access to the Website but it can change to the other user types by fill in certain information fields.

The Mate module grant access to buying and selling as well being part of company group. To do so, the user must give a bank account such a PayPal. When this user takes personal interest in a property it have the choice to buy it with a button that will alert the seller that a possible buyer has arrive.

The Appraiser module. Most of the users only fill the personal information fields, but the appraiser is more complex than, to start with, it must fill a personal experience information and labor experience detailing that it has certain titles in the subject of apprising to be

credible for the other user. It depends on the clients and agents to work. Appraiser is capable of appraising properties, when a user and appraiser come to agreement.

The virtual purchase will be manage inside the Website with the buyer and the seller agreement of course, the main idea is that various types of users can add a property and be capable of buy it and sell it. Two users come to agreement after the message was send, when they are both ready they add there confidential information to make the transaction.

# Module Description

#### Administrator

The administrator user is the most important of the system. This module has access to all the functions of the program and there are two types of administrators. One is the "o" type user which is an administrator that cannor be eliminated from the program and its use it's recommended to create other administrator users in the case that no other admin has been registered to the program. Also, this user can't be modified, because the account doesn't belong to any user.

The "1" type user is also an administrator but It DOES belong a user of the webpage that is asigned to perform all the maintenances of the users such as changing their information, resetting their passwords in case of being forgotten, besides deleting a user or creating a new one. It can also modify information from the users that want something changed from their real estate properties or authorize an appraisal for a property. All the other functions are common with all other users, such as customizing a profile or see the properties that have been published, or see the messages that he has sent or have been sent to him from the other users.

### Real Estate Agent

An agent it's a user that facilitates the sale of a property to other user. The users can look for an enterprise to help them him sale a property, and a real estate agent that works for that enterprise works promoting the property for the user. The advantage that the agent has to sale a property is that he belongs to an enterprise and enterprises can be rated based

on the users that have bought houses from the enterprise or the users that have requested advice from them.

Depending on that rating the page promotes more those companies with the highest ratings, then hiring a trusted company garantees that the property can be seen by more people and that it will be sold as soon as possible.

The generates deals for the enterprise and it can also sell properties independently as a normal user.

#### **Appraiser**

When a user publishes a real estate property to be sold, first his property must be evaluated by an appraiser. This is the only function of this type of user. The appraiser type of user works as a legal support for the house to be evaluated in an objective way.

The appraiser user only recieves requests from users or enterprises that need the value of a real estate before being published by the page. The program offers him the corresponding form that he muts fill in according to the type of property he is appraising and according to the conditions that the programs allows him for appraising.

Due to the complexity and number of the request and forms that must be completed by an appraiser user, its use has been limited to the use of the platform to the technical area at first, but later on the appraiser module also got the same options as a client. The appraiser user can search properties inside the platform since it's a user; but foremost he is an expert dedicated to the correct implementation of real estate website.

#### Client

The client is most basic user of the platform. It can't do any maintenance more than his own profile and the properties he has published. It can create his account on the home page and choose his username with which he can log into the platform.

Once inside, he can see the houses that has been published on his homepage, recomendations of houses that are being sold by companies with high ratings, use the quick finder to search with different types of filters (maximum price that he is willing to pay, if the property is for sale or for rent, type of property, etc.).

# System Requirements

### Use Requirements

### Hardware Requirements

- Pentium IV Processor or above.
- 512MB RAM memory.

### Software Requirements

- Windows XP SP2 or above.
- Browser with HTML5 support.
- Browser with JavaScript support
- Browser with CSS3 support.

### Development requirements

### Hardware Requirements

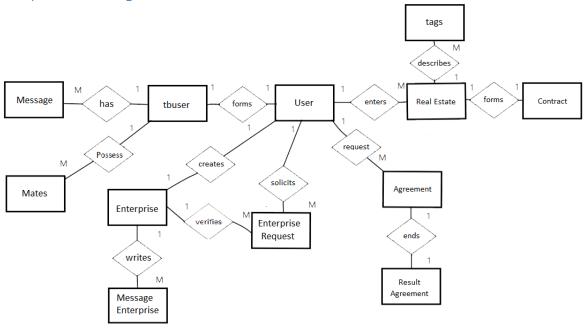
- Core2 Duo Processor or above.
- 1GB RAM memory.
- 25MB of available storage.

### Software Requirements

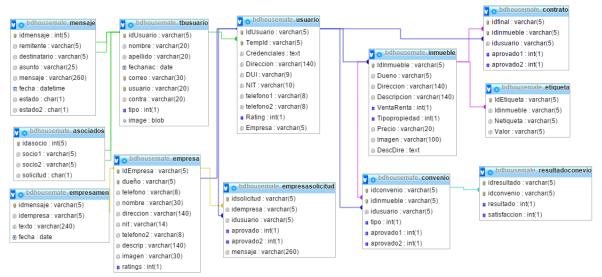
- Windows XP SP3 or above.
- Browser with HTML5 support.
- XAMPP or WAMPP. (Apache Server and MySQL Engine)
- Text Editor (Brackets, Notepad++, Sublime, GEdit, etc.)

# System Analysis

### **Entity Relation Diagram**



### Database



### **Table Description**

- Tbuser: It's a table that's known as temporary users, inside this table, the created users signs up with the information provided at the beginning being these users lowest class users.
- User: Inside this table the different type of users are managed and it's a fundamental step to insert a real estate; all the must "upgrade their accounts" to manage different functions, since in the case they make an action it's registered with the personal information of the subject.
- Agreement: On this table, all the information requested by the user is storaged for assistance, where the table saves two types of advice. This table it's the work center for the appraisers since they based on accessories to work with others, as well as the agents. Based on the answers of this, a rating system is handled for each one.
- Enterprise: As time passes by, the user can join an enterprise. On this table the real information of the enterprise, and the combined rating of its employees.
- Enterprise Request: On this table other users are solicited to join an enterprise.
- Enterprise message: Inside the platform enterprises are capable of delivering messages for all the members of it to read them.
- Real Estate: On this table the user provides all the information. Inside this table the
  user is required to upgrade his account, in case he doesn't has an upgraded the
  information can't be managed since we use the ld from the user table instead of
  the temporary user.
- Tag: All the real estate possesses a tag at minimum, this tags are joined to the real
  estate with which it was managed by a user. It describe the houses and it's saved
  as a type of tag as selected by the user.
- Mates: On this table the information referring the possible partners who the user can communicate with of the users is saved.
- Messages: Inside the message user can exchange information between users and their mates.

# Screenshots Description

#### **NAVIGATION BARS**

## Navigation Bar 0



The first navigation bar is when the user has not logged into the platform and it allows navigating on the informative webpage of House Mate. The first button is to return home, after that, the button to display the login modal, the page to create a new account, the About House Mate and finally the option to change the idiom.

## Navigation Bar 1



The second navigation bar of the platform and the most basic one for a user that has already logged in is the client module, which has the option to join an enterprise or manage his own, send and receive messages, and look notifications as new messages or mate requests.

Lastly, there is the option for changing the language and a button with the name of the user, which can redirect him to his profile, his mates, his real estate properties and the option to log out.

## Navigation Bar 2



The appraiser navigation bar contains the same function as the client navigation bar, as enterprise, messages, notifications, the language dropdown and the profile options. Which differentiates it is the addition of the appraiser module where he receives request from real estate properties pending of evaluation and there is the respective for evaluate those properties.

## Navigation Bar 3



The administrator user has Access to the full maintenances of all the tables on the database such as users, real estate, appraising, enterprises, etc. In addition, he has the options of normal user and his own profile.

#### BEFORE LOGGING IN

### Home page



The first page of the program is the section of the homepage. This page contains the "0" navigation bar same as all the pages of the platform when the users has not logged in. The page contains a latest news section with the latest houses published on the platform.

When hovering the mouse on a House, a short description of the property is displayed in case the user is interested in it. When the user clicks on the property, he is redirected to a link with all the information of the property that was not previously shown. Under the latest news section, some general information about House Mate is displayed.

#### What is House Mate?

House Mate it's a web platform that allows the advertising and promotion of real estate properties for sale or for rent between the users who interact inside the webpage.
To do that, visitors have the choice to sign in for free to the platform to enjoy our services.

# Login House Mate Log in Register About ★ If you register you Log in get these advantages Username Quality properties. Username Truthful information. Password Transaction security. Password ✓ Completely free! Yes please, register now!

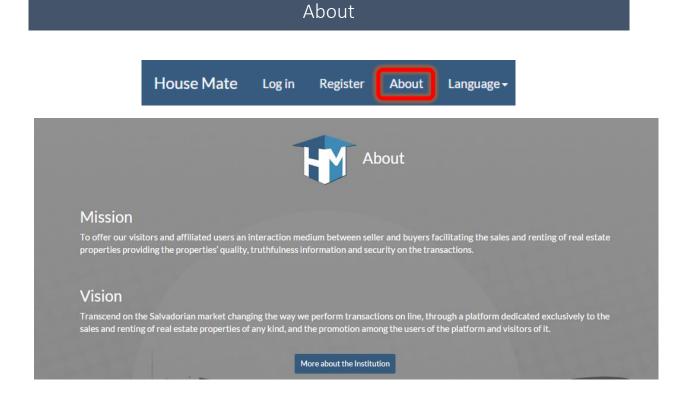
When clicking the log in button in the navigation bar a modal is displayed with the log in form in it. To the left there are two text boxes where the user types his username and the password to enter to his account. To the right, there is a list of all the advantages of creating an account in House Mate. The link Read more leads to the About House Mate and the button below is to create a new account and it redirects to the register form.



Create Account		
Username:		E-mail:
Username		@
Password:		Confirm password:
Password		Confirm password
Name:		Last Name:
Name		Last Name
Birth Day:		
	dd/mm/aaaa	
Create Account		

In the register form, the user fills in the requested information to create an account in House Mate. Later on, the user is required to provide information that is more personal, but to create an account this is the only necessary information that the user must give.

The form request the user to choose a unique username (that he will use to log into the platform) and to type his personal information like email, a password to access his account, his surnames and given names, and his birth date.



On the informative page there is the section called "About". Besides the "What is House Mate?" section at the beginning of the home page, this page has additional information as the mission and vision of House Mate as a group and information about its developers.

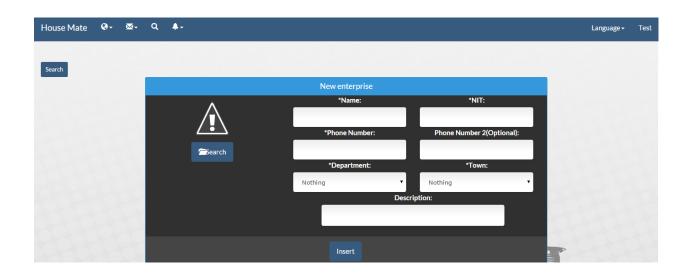
Below, there is a button "More about the institution" which is to promote the school website and is just a link that redirects to it.

# Enterprise Module

A user can join an Enterprise to get a job as real estate agent for an enterprise affiliated to House Mate; or also create his or her own enterprise and other user to join as real estate agents.

#### **OUTSIDE AN ENTERPRISE**

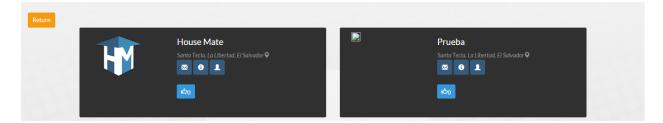
### New Enterprise



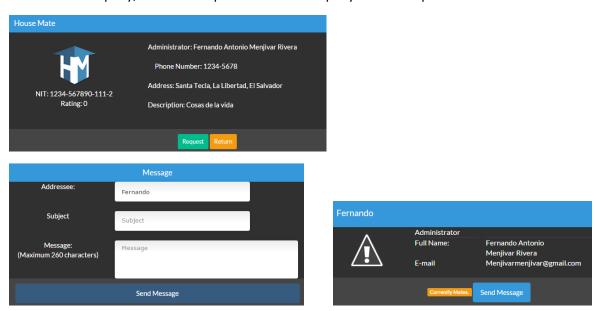
A user can create his own Enterprise on the form above. To be capable of adding an enterprise to the platform the must fill in the following information: Name of the company, the NIT used officially, the company phone number, an optional second number, the location (Department and Town) and the enterprise description.

## Search Enterprise

To the left of create an Enterprise there is a button that redirects to search for an Enterprise. Here, the user, based on the description given by the enterprise, can choose an enterprise to affiliate to.



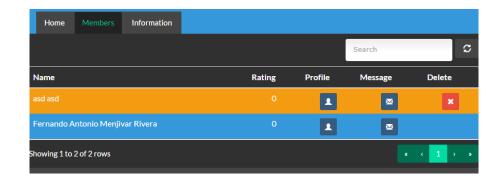
When a user is looking for an Enterprise, he has the option of sending a message to the owner or boss of the company, look a small profile for the company or see the profile of the boss.



#### INSIDE AN ENTERPRISE

After affiliating to an Enterprise and being approved by the enterprise; or receiving a request from the company because of the user's high rating, when clicking the enterprise the users is redirected to a page with different options.



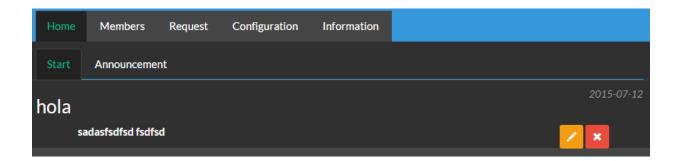


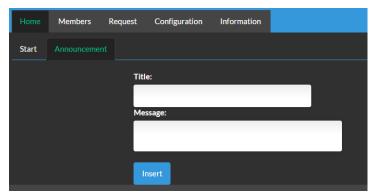


On the Home the can see all the messages that have been published by the boss of the company. On the members section there's a list of all the users affiliated to the enterprise. On information a small description of the enterprise.

### **ENTERPRISE BOSS**

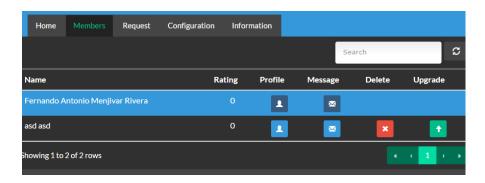
## Home





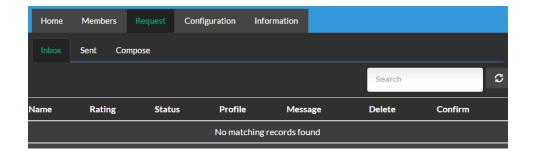
On home, the users that are members of an Enterprise can see the announcements that the boss of the same enterprise has published. On other tab, the boss can create his announcement with only a title and a message.

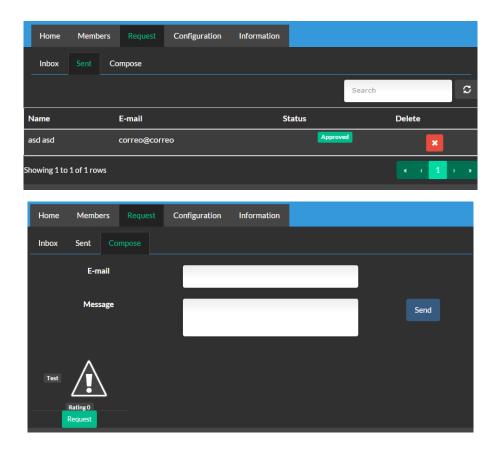
## Members



On members, the boss of the company can see all the users and his own user marked on light blue. If the boss retires from the enterprise, he can "improve" another user into the new boss. And he can see the profile of each employee or sending a message to each one.

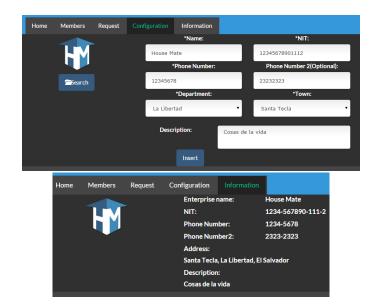
# Request





On the first screenshot, the boss of the Enterprise can see the members that have sent a request to affiliate the enterprise. On the second one, the members to which the enterprise has invited to join. And the third screenshot is the form to add users to an enterprise; bellow it, there are the users with the highest ratings as recommendations a join an enterprise.

# Configuration and Information



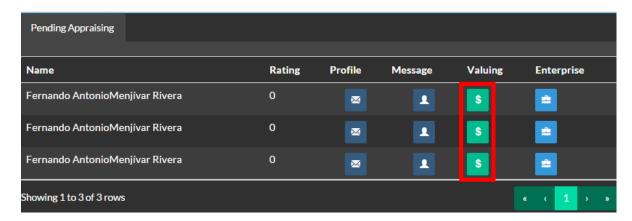
On the configuration the boss changes the information of the enterprise as the name, the description, etc.; and on information it can be seen the current information of the enterprise.

## Appraiser module

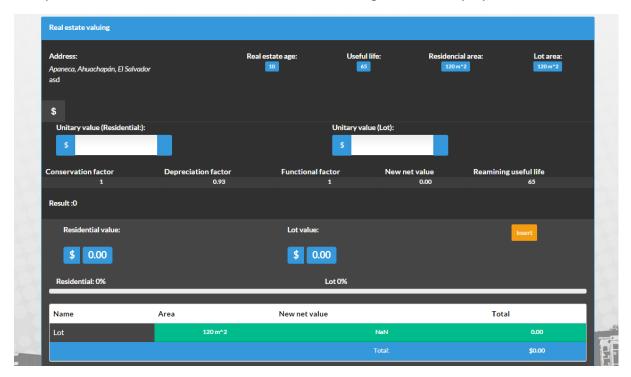
# **Apraissals**

The appraisal it's the module designated and created for all the appraiser evaluators of the system, to have access to this site, authorization from an admin is required. The appraisal system uses the "Costs" method to value the properties and the area to get the price of a property according to its size and useful life years, when a user enters the module a table will be displayed, this table contains information referring to the new real estate properties added to the database. The table display possesses different uses: the rating of the user, communication with the use, see the profile of the user who uploaded the property, value the property and see the enterprise to whom the user belongs.

The next step to value a property is simply pressing the dollar sign button, once it's done the page will change to the appraisal form.



One presses the button mentioned before the following form will display.



The next form: On the upper part there's the basic information about the property supplied by the uploader user, it contains the address of the real estate with a short description, the construction age, the useful life that comes from the system and used to perform the appraisal, the construction area on square meters and the field area in square yards. Based on this information, the appraiser can get the unitary value of each object.



The appraisal system for the real estate uses the empiric method, based on the experience of the appraisers, where is calculated with the conservation status value that is the estate in which the real estate has been preserved, the depreciation of the property, with the

functionality factor (in this case it can't be depreciated) and lastly the useful life remaining of the real estate is calculated.



Once the values are inserted, the next block will display information of the calculated value, and with the other sections included.



And simultaneously a percentage bar is filled each time this values are calculated. The percentage bar provides a visual aid to the appraiser to estimate how much the construction is worth in comparison with field value.



Lastly, the table section changes based on the information inserted on the platform of the unitary values, where the total value of the real estate and its sections is calculated.



Once the appraisal it's finished, the appraiser has the power to approve it with the insert button.



### Administrator module

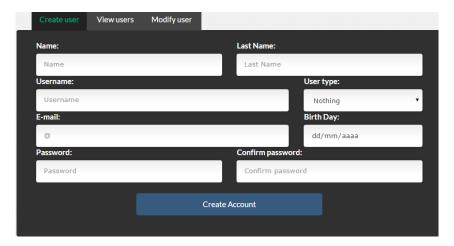
#### **MAINTENANCES**

The administrator module has the same options as the client uses with the exception that in the navigation there's a golden colored icon with a tool and it contains a list of all maintenances on the program. In there, the admin can change information of the users, real estate, appraising, etc.



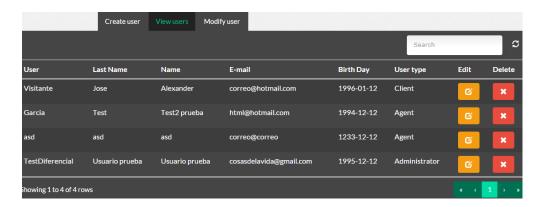
#### **USER MAINTENANCES:**

### Create user

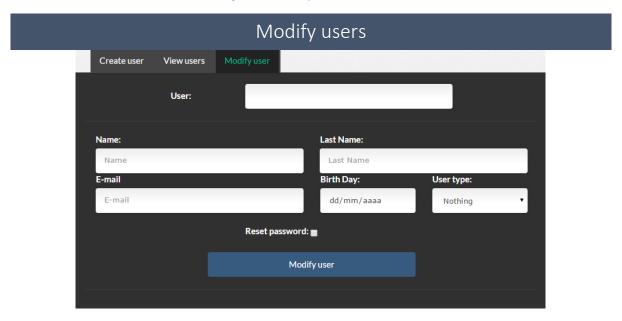


The administrator can create new users for the platform from here, it's the same as the create account form; with the only difference that in this form the administrator can choose the type of user that he wants to create. On the create account form it cannot be chosen and is predefined as a client user.

### View users

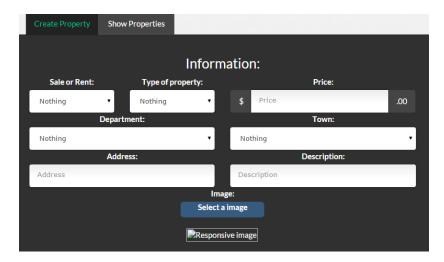


On second tab of the user maintenances, there's the section to see the users previously created in the platform, with the exception of the "0" user whose information cannot be altered or eliminated because the user always must be on the platform in case there's no other admins. On each row of the table, there is the most important information of each user as his username, surname, given name, email, birth date and type of user. Next to each row there's also two buttons at the end, one to delete the user and when pressed it displays a dialog box to confirm that you really want to delete the user; and the other button is to go the modify user form with the chosen username.



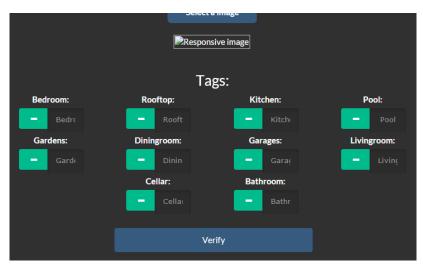
On the modify user tab the administrator can type the name the username of the user that he wants to modify or select one from the view users section, and in both ways the platform autocompletes the user's information that appears on the view user's table with the exception of the password. Regarding the password, the only thing the administrator can do I reset the pass to "0000" in case the user has forgotten and he will be notified via email of the password change

### Create real estate



The first real estate form is the create property form where an administrator can create a real estate but only for his own user. Before creating a property the user profile must be upgraded, which consist of filling in a form with more personal information to make the transaction, which is necessary to put a real estate property for sale or for rent.

The fields that need to be filled in are: if the house is for sale or for rent, if the property is urbane (in the city) or rustic (outside the city), the "initial or estimated" price of the property, the department, town, a more specific address (residence, alley, street, etc.), a short description of the property and finally the tags which quantify what the real estate possess. (Rooms, bathrooms, living rooms, kitchens, etc.).



view real estate



A table, which contains a list of all Houses that have been uploaded to the platform on chronological order. As in view user next to each row there are two buttons, one to modify the selected property and other to delete it. On each property, the image and the tags are not shown to do not over saturate the table with content.

## Modify real estate

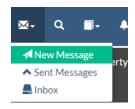
After selecting a property on the view real estate table the admin can change all the information that has been added to the House on the create property form.

## Delete property

After selecting a property on the view real estate table the admin can delete all the information that has been added to the House on the create property form.

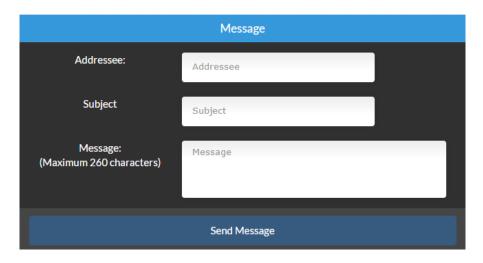
## Common options for all users

#### **MESSAGES**

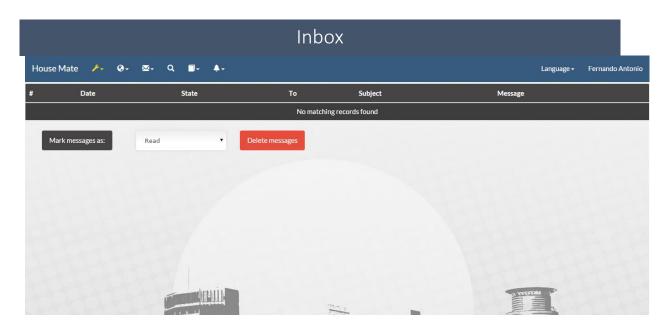


On the navigation bar of all users, there is a message option. The platform counts with this short messages system, with the purpose that the users can exchange information or discuss terms before establishing a final deal about the property one of them is selling.

# Send message



The link for sending a message redirects to a small form for writing one. The fields that need to be type are the addressee (name of the other user), the subject of the message (a short title) and the message itself. When the message has been written, you just have to press the send message button and if there is no problem a success message will be shown.



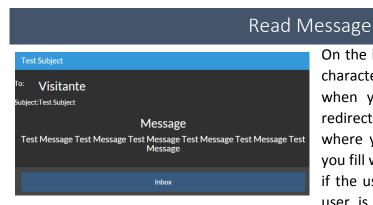
On the inbox, there are all the messages that the user has received. On the table, it appears the sent date, the state (pending or read), the sender (who sent the message), the subject and the first 50 characters of the message. Below there's an option to mark one or more messages as read or again as pending and the option to delete messages.

When you click on the sender of each message you can see the profile of that user or click the subject to read the entire message.



En la bandeja de entrada están todos los mensajes que el usuario ha recibido. En la tabla aparece la fecha de envío, el destinatario (a quien se envió el mensaje), el asunto y los primeros 50 caracteres del mensaje. Abajo hay una opción para eliminar los mensajes enviados.

Al hacer clic en el remitente de cada mensaje se puede ver el perfil de dicho usuario y al hacer clic en el asunto te redirige al mensaje completo.



On the inbox or sent messages the first 50 characters of a message are shown but when you click on the subject you get redirected to the full message on this form where you can see the same information you fill when sending a message (addressee if the user is the sender and sender if the user is the addressee) Below there is a

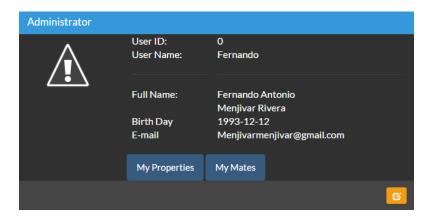
button to go back to the inbox.

#### **PROFILE**



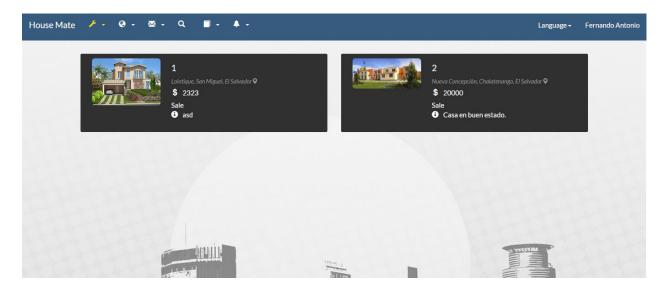
When you click your name, a list is displayed with all the information regarding the user: his profile, his properties, his mates and the button to log out of the platform.

# My profile



On this section, the user can see all his personal information and it works to have access to his properties and mates although the options are also on the navigation bar. Below there's an option to upgrade profile (add information as DUI, NIT, phone number) and after upgrading the profile, the button works to change your profile information.

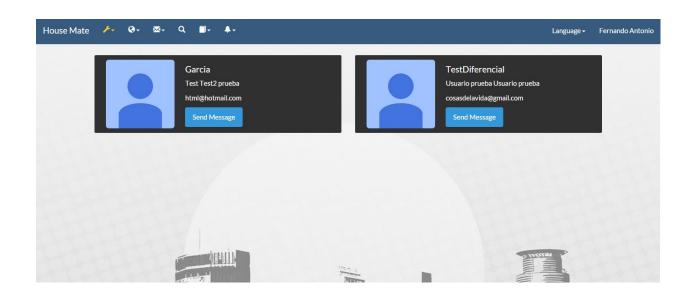
# My real estate



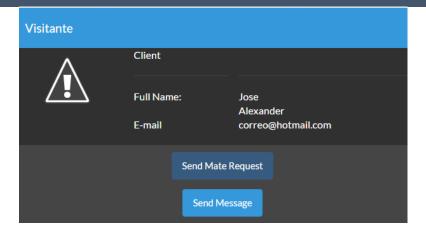
The user can see a list of all his properties and the most important information of each one.

## My mates

The user can see a list of all his mates and the most important information of each one.



## User Profile



When the user is on a message, or is watching a real estate for sale or rent, he can see the profile of the person who sent the message o has published on the platform.

# Notifications

On the notification section, the user can see how many pending messages he has or how many users had sent him a mate request, or the companies that have sent him a request.