## horizontal line

House Bid

## **Project WS 2017 (Milestone 2)**

**Team Number: 20**

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**Date : 16/11/2017**

**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 8/11/2017 | 0.1 | First draft | Farzaneh |
| 15/11/2017 | 0.2 | Update | Farzaneh,Farrukh,Vijay,Saad |
| 16/11/2017 | 0.3 |  | Imam |
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# 1.Use Cases

**Saad wants to buy the house (unregistered user)**

Saad is new in Fulda town and would like to find a suitable house, He searches into our website and then browses for the houses and he gets some interested results but can not see the exact location of house.

**Saad wants to buy the house (registered user)**

Saad completes the registration form and logs in in our website. He searches for house which he wants to buy after some search he finds a house, he just clicks on intrested button and his contact details will be sent to agent, agent will contact him later.

**Farrukh wants to expand real estate business (Registered Agent)**

Farrukh is an real estate agent who is planning to expand his real estate business through internet, He uses our website to achieve that by logging in as a registered Real estate agent who will get requests for potential sellers willing to sell their properties via the agent. He will be able to accept requests from sellers and negotiate with the buyer requests.

**Imam Want to sells his property (Unregister Seller)**

Imam is planning to sell his house, He is not sure about the market value so he approached Mr. Farrukh who is an registered agent with our website. He will post his listing. Buyer will directly contact with agent if he is interested in property and Imam’s property will be sold by agent.

**Imam lets buyers bid for his property (Bidding Option)**

Imam is planning to sell his house, he is not sure about the price so he asks agent who is an registered agent with our website. Agent will post her listing and will give an option to the buyers to bid for the listing. With this feature Mr Farrukh will be able to quote the best selling price for his property among all the bids he received via the website.

# 2.Data Definition

// Imam

1. Data Definitions V2

This should be reasonably consistent with Milestone 1 but should be expanded as needed

and refined as per feedback. Major data items that comprise of sub-data items have to be

defined in full (list all its sub-data items, and for images/video list formats, max size etc.).

You must use all the data definitions and names consistently in all documents,

including UI text, naming for main variables, classes and database elements etc.

Focus on data items unique and important to your application and avoid explaining

obvious things like Internet, Browser, Cloud, etc. Be sure to cover ALL items critical to

your project and especially those providing a competitive advantage. At this stage data

describing user privileges, registration info and main info (raw data, metadata, supporting

data) have to be fully defined (as much as it is possible at this stage)

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# 3. Functional Requirements

**Priority 1**

**REGISTERED AND UNREGISTERED USERS**

1. **Searching/Filtering Listings**

Listings of properties can be filtered by the items like: city, location or area. Buyers can see the specific listings depending the area or city in which they are interested to buy. Registered (Customers) and Unregistered (Visitors) users both can search for the properties or projects published by our agents and can see the listings they are interested in. Of-course, we kept in mind about the other limitations of our unregistered users or visitors, that will be explained below.

* **Registered Users:** As a registered user, our users/customers will have almost every leverage on our site. As our site have some important roles for the users for example:

1. **Contacting Agents To Sell Property:** Registered users can easily contact our agents to sell the property they want, by giving the complete information about the property such as: price, address etc.
2. **Contacting Agents To Buy Property:** They can also contact our specific agents to buy the property they are interested in.
3. **Customer Registration:** Potential users who are willing to do buy properties via the website can become customers by providing some details about themselves: Fullname, email for username, password, photo, etc. Subsequently, they will be able to see more details of listings and contacts agent to buy properties.
4. **Location and Other Information:** The registered users can have the leverage of seeing the exact location and area of the property as well as they also can contact the agents and can have the full detailed information about the running projects and published properties.

* **Un-Registered Users/Visitors:** As normally, the unregistered users or the visitors cannot have everything available for them as mentioned above. Still, the visitors can have the leverage of seeing and searching for the specific properties. But they can’t be able to contact, bid or see the exact location of the property, if they have any interest of buying or selling the property they can write the proposal to our agents and bid after registering on our site.

**AGENTS**

As the name suggest an “Agent” is a person or a company who acts as an intermediary between sellers and buyers of real estate/real property. He can post the ads about property and buyer can contact with him if he is interested in buying the property. Let suppose if buyer is interested in property he will click on interested button and buyer information like Contact details will be sent to agent and he will contact with buyer.

**Priority 2**

1. **Searching/Filtering Listings**

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* **Bidding**

Agents choose some properties for bidding. In a specific period of time the chosen properties can receives bids. At the end, the Agent will choose a bidder to buy the property. Only registered user can take part in bidding. Unregistered user can not have access for bidding.

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**Priority 3**

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* **Rent**

Register user can rent any kind of property depending upon on his interest. It can be a single room,double room,flat etc. register user will decide which property he want to be rented. Agent will contact with him if he is interested in any property.

**AGENTS**

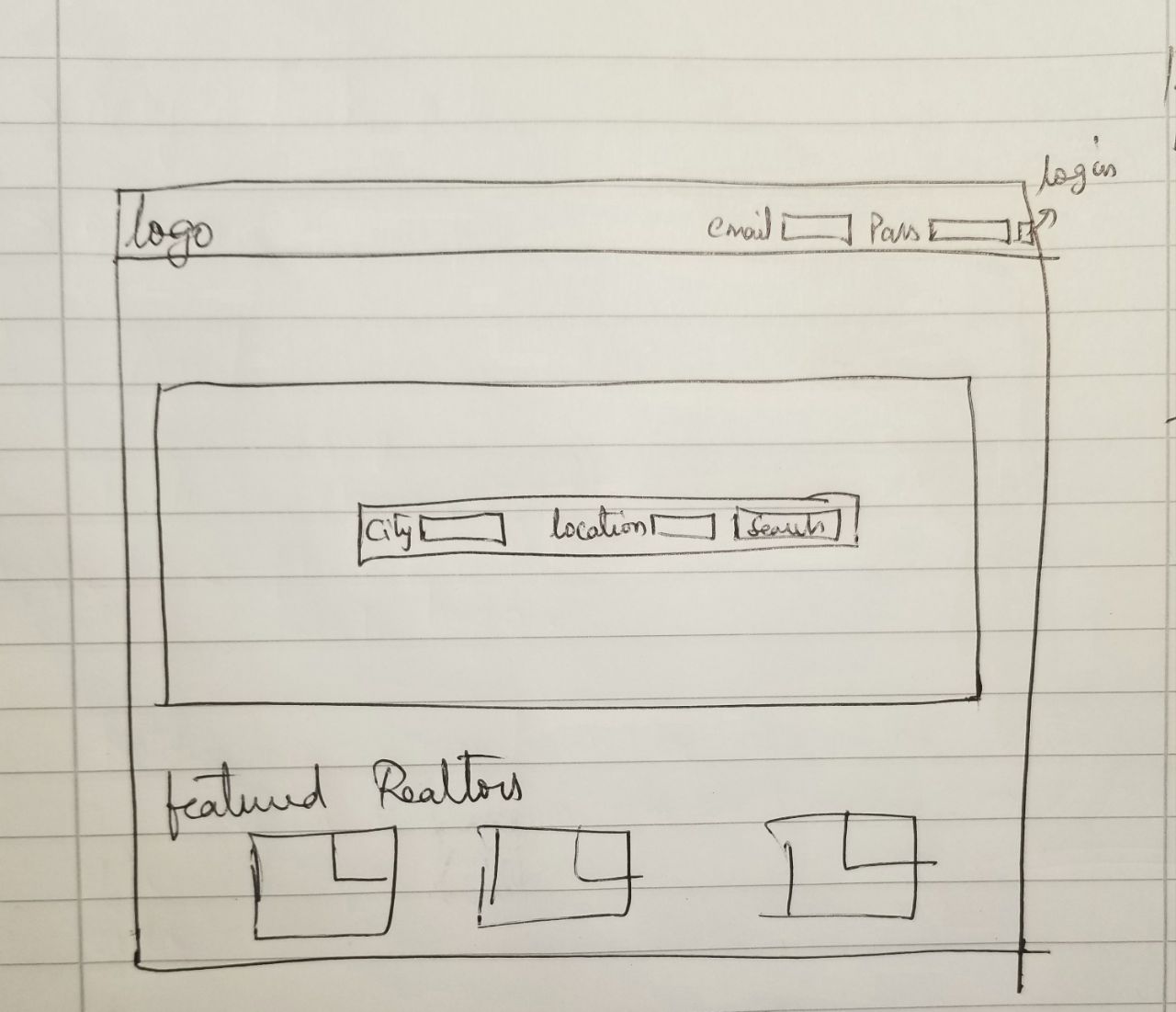
As the name suggest an “Agent” is a person or a company who acts as an intermediary between sellers and buyers of real estate/real property. He can post the ads about property and buyer can contact with him if he is interested in buying the property. Let suppose if buyer is interested in property he will click on interested button and buyer information like Contact details will be sent to agent and he will contact with buyer.

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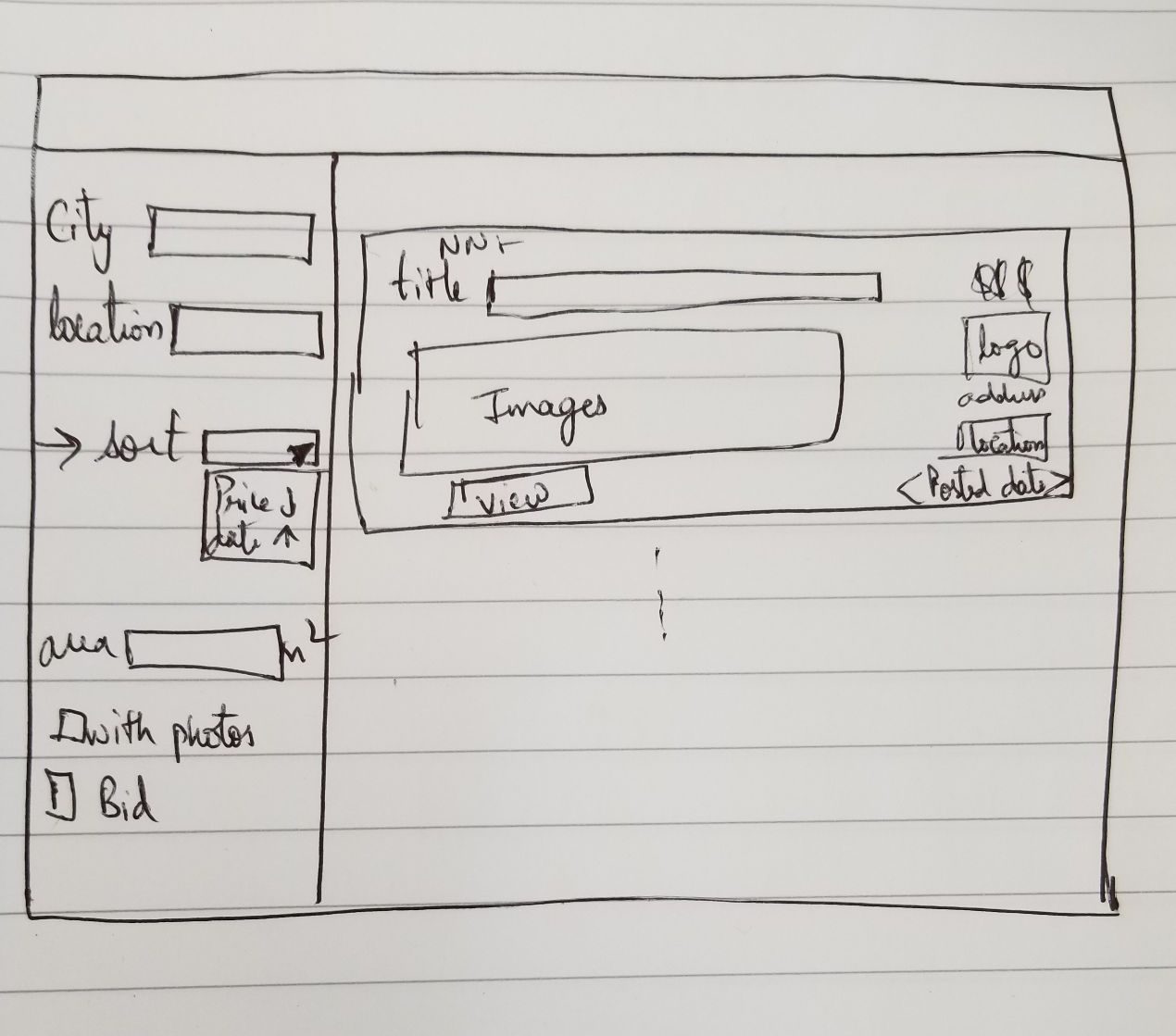
# 4. UI Mockups and Storyboards

**4.1 Unregistered user and Registered user accessing the site**

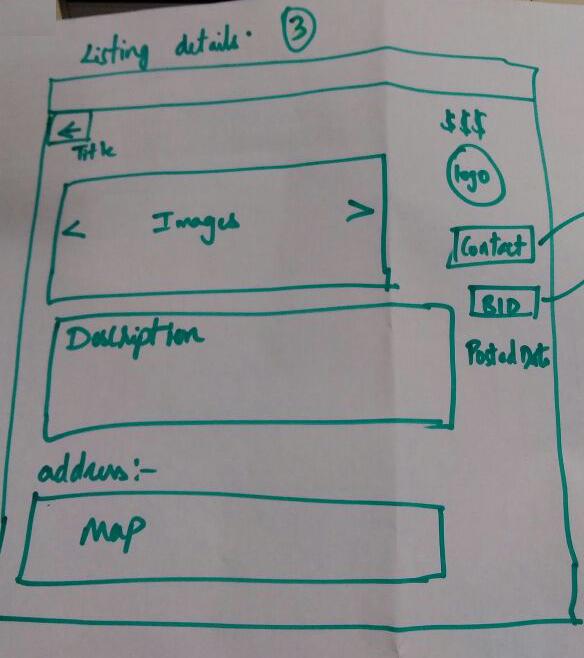
When an Unregistered user or a Registered user visits the website he will be able to search the listings and will also be able to view the details of any listing that he clicks on the results. What separates the registered and unregistered user is that the unregistered user cannot see the location of the listing on map and the full address of the listing. He will be shown only the city and location.



If the user clicks on search button he is presented with the search results matching his requirements. He will be able to browse the listings and click on it.

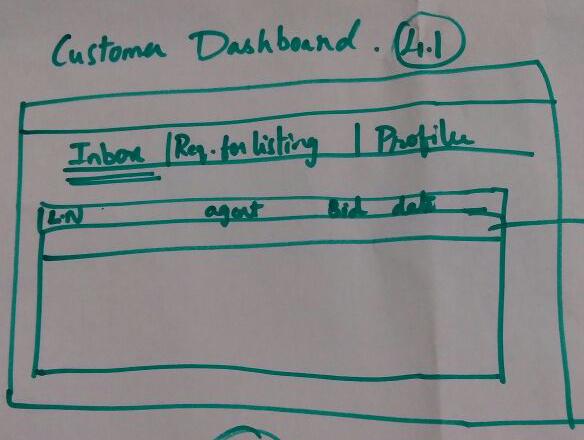
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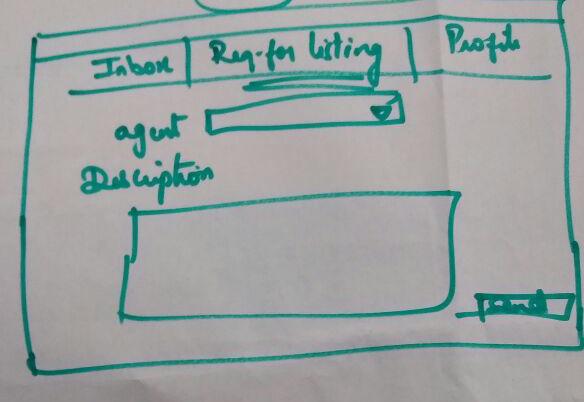
Once the user clicks on a listing he will be directed to the listing details page. Where he can see the price and additional details about the listing like photos, registered user can contact the agent for additional details.

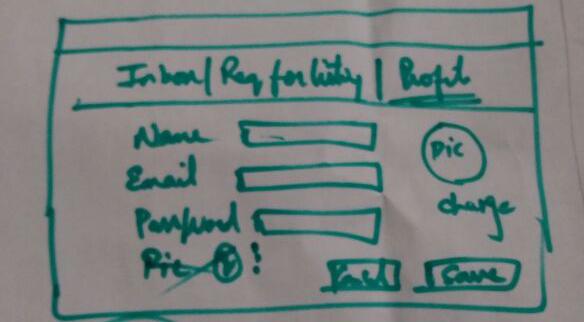


**4.2** **Registered user logins.**

When a registered user logins he will able to view his dashboard. In this dashboard he can manage the conversations he had with the agents. He can request for a posting and he can edit his profile.

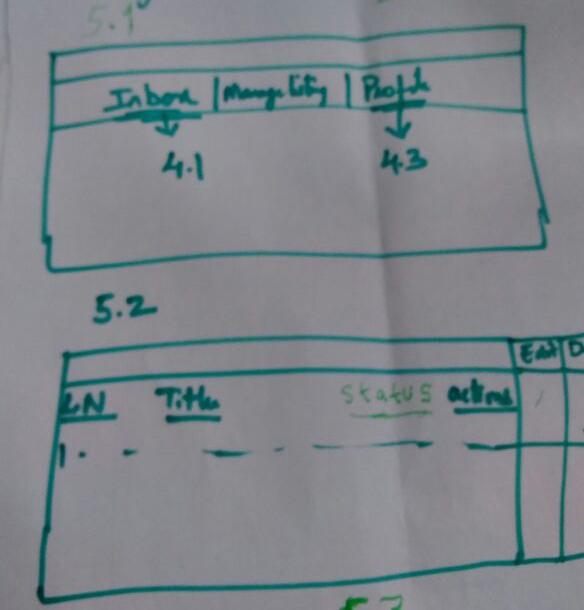




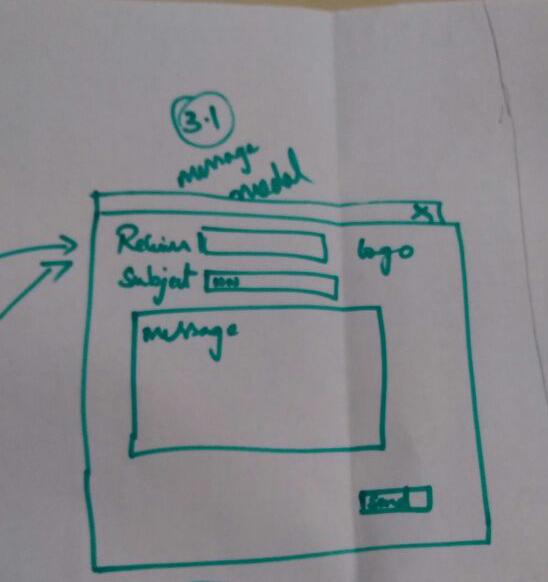


**4.3 Agent logins.**

When Agent logins he will be able to view his dashboard. In this dashboard he can manage the conversations he has with customers, he will be able to post a listing and he can edit his profile and one tab for managing all his listings.

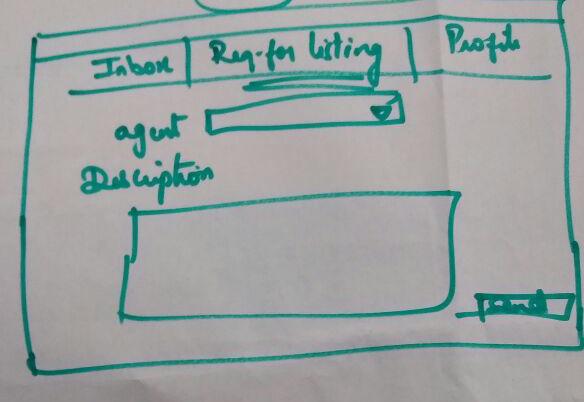


**4.4 Registered user clicks contact agent button.**

When a registered user clicks the bid button a pop up (modal) will show up which will ask the user send a message to agent to initiate the conversation.   
  


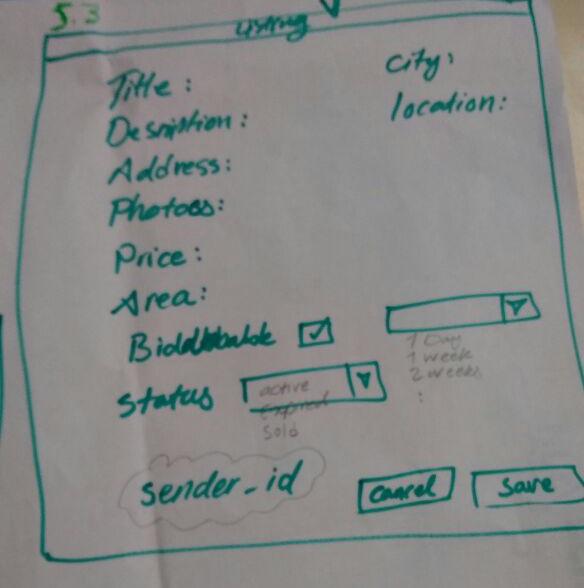
**4.5 Registered user wants to post his listing.**

When a registered user wants to post his listing he logs into the site and goes to his dashboard and then goes to Request for listing tab and then selects the prefered agent from the provided list and enters detailed information regarding the proposed listing.

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**4.6 Agent posts a listing.**

After a user has submitted his request for posting a listing the agent after verification will go to the post listing tab in his dashboard and fills out all the required details



# 4. High level Architecture, Database Organization

//Imam

Dynamic UI - JavaScript / JQuery

* Interactive Front end.
* Dynamic coding scripts.

UI- Bootstrap

* Built in scaling for all sizes of screens.
* Responsive Design.
* Supports popular browsers.

Google API- Google Maps

* Interactive map to show accurate location.

Gulp

* Complies sass to css.
* Bundles all the javascript files to a single javascript file.

Angulartics

//farrukh

• High level Architecture of the code must use MVC framework and be OO and

consistent with UML class diagram below. Outline in no more than ½ a page how

will you structure the code/functions to be MVC compliant (no need to be “purist”

use common sense and good modular design – tell us at very high level what will go

into M, into V and into C components of MVC or provide one chart for this)

• DB organization: Describe the main database schema/organization (high level), e.g.

list main DB tables and items in each DB table (check instructors’ suggestions)

• Media storage: Decide if images and video/audio will be kept in file systems or in

DB BLOBs (decision you must make by the end of M2). Describe any other special

data format requirements like for video/audio/GPS etc.

• Search/filter architecture and implementation: what will be the alg/SW for search;

what DB terms will be searched, how it will be coded and organized in the DB (check

instructors’ suggestions in the class. OK to use SQL and %like). Similarly, say what

DB items will be filtered/sorted

• Your own APIs: Describe and define at high level any major APIs that you will create

• Describe any significant non-trivial algorithm or process (like rating, ranking,

automatic prioritizing of items etc.)

Any external code or framework you will be using has to be approved by CTO in writing

by this time.

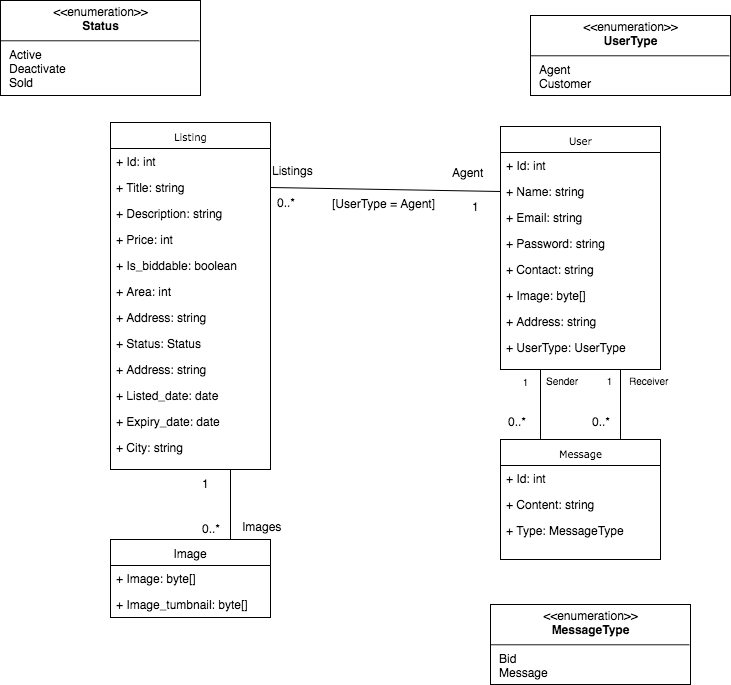
Use data terms and names (class diagrams, table names, variables) consistent with your

Data Dictionary.

# 5. High Level UML Diagrams

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1. **Class Diagram**



1. **Deployment Diagram**

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**6.Identify actual key risks for your project at this time**

|  |  |  |  |
| --- | --- | --- | --- |
| **Risk** | **Probability** | **Impact** | **Description** |
| **Time management** | High | High | All teammates are university students and beside working on this project they have other modules which need proper time. In addition,The workload for every milestone is almost high volume for all team members. |
| **Resource issues** | Medium | High | Number of team members is limited. Furthermore, there will be no external help if some person for any reason is not available. Moreover, The quality of individual task tightly depends on assignee person. It might impact final results specially documenting. |
| **Technical** | High | High | The technology stack was already defined before the team start, as a result the current technology stack might not be very fast and easy to work with. It is also true of The methodology that is chosen for this project brings a tiring and monotonous workload for the team members. |
| **Skills** | Medium | High | There are some skills and technologies that only one team member is familiar with. However some skills are in their skill list they might not be expert at. There is also some cases in which only one team member is familiar with. |
| **External** | Low | Low | As this application is going to be used in Germany, there is possibly that our bidding terms and conditions or even the flow will be needed to change accordingly. |
| **Project team misunderstand requirements** | Medium | High | The requirements and decisions are not always clear. therefore, it needs to be explained many time in different ways. |
| **Under communication** | High | High | Communication misunderstanding is very likely to happen because Team Members come from different cultures and countries. Moreover, some team members prefer to rely on their own thoughts and understanding. |