North South University

Department of Electric and Computer Engineering

Project Report

Development of Web Page

Property Buy and Sell Platform

Internet and Web Technology Lab
CSE482L
Section: 1
Semester: Spring 2022

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Abstract

In today's world. People are obsessed with internet. Using of internet have increased rapidly and hence. A web page can be used efficiently for business purpose. This project idea is similar to an ecommerce type webpage for a shop. Generally, ecommerce web page targets all kinds of products. But our app only focuses on properties only. With the goal of delivering eye catching yet simplistic websites in terms of user interface our "property deck" webpage can solve many problems.

Introduction

The current covid situation has caged us for a long time. And it was the time when people tend to use the internet platforms at an alarming rate. There a very good number of companies that provide the service of buying and selling properties. Most of them serve on the field and cannot reach many consumers. So, basically to reach many customers internet is the best platform. A web page can help in many ways. Organizing all information, getting various kind of information in one place, safe data. It is easy to sell items online rather than in market and the cost of seller gets a huge reduction. One of the best parts about it is that you can sell online beyond the borders of your city, your country, or even continent without ever leaving your work desk! Once you get started, virtually anyone from anywhere in the world can become your customer. One question may arise. There are other platforms as well as websites also. The difference from other platforms and webpages is that about the location. Here in the era of internet finding a location is a piece of cake. Motivating other offline property sellers to come forward to use the internet to reach more consumer is the main goal of our web page.

Solution Description
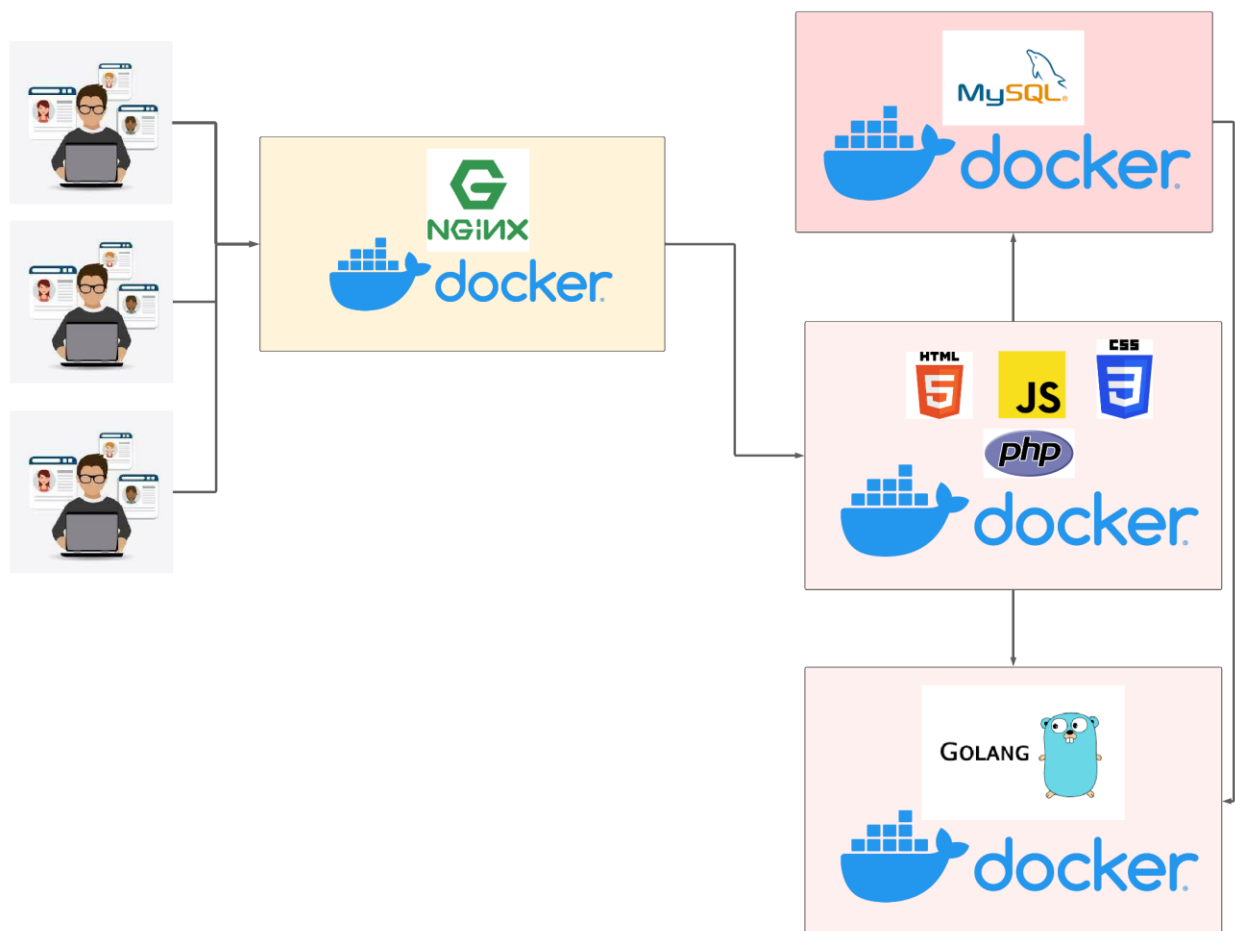
Docker: Docker is a set of the platform as service products that use OS-level virtualization to deliver software in packages called containers. The service has both free and premium tiers. The software that hosts the containers is called Docker Engine.

Nginx: Nginx, stylized as NGINX, Nginx, or NginX, is a web server that can also be used as a reverse proxy, load balancer, mail proxy, and HTTP cache. The software was created by Igor Sysoev and publicly released in 2004. Nginx is free and open-source software, released under the terms of the 2-clause BSD license.

Mysql: MySQL is an open-source relational database management system. Its name is a combination of "My", the name of co-founder Michael Widenius's daughter, and "SQL", the abbreviation for Structured Query Language.

Our Mysql DB will receive requests from your backend PHP client. Our backend client has only access to our MySQL database image.

As you can see in the figure: 8.1 User will request to 8080 port of our docker image and our docker image will redirect the request to our Nginx server. Then Nginx will process the request and route it to our PHP docker image. This image is responsible for both the backend and frontend. This image will talk to the database and Nginx server

Golang: We are using Golang for our chat system in order to use the web socket. It also supports concurrent executions. We are taking the advantage of concurrent programming for our countless users.
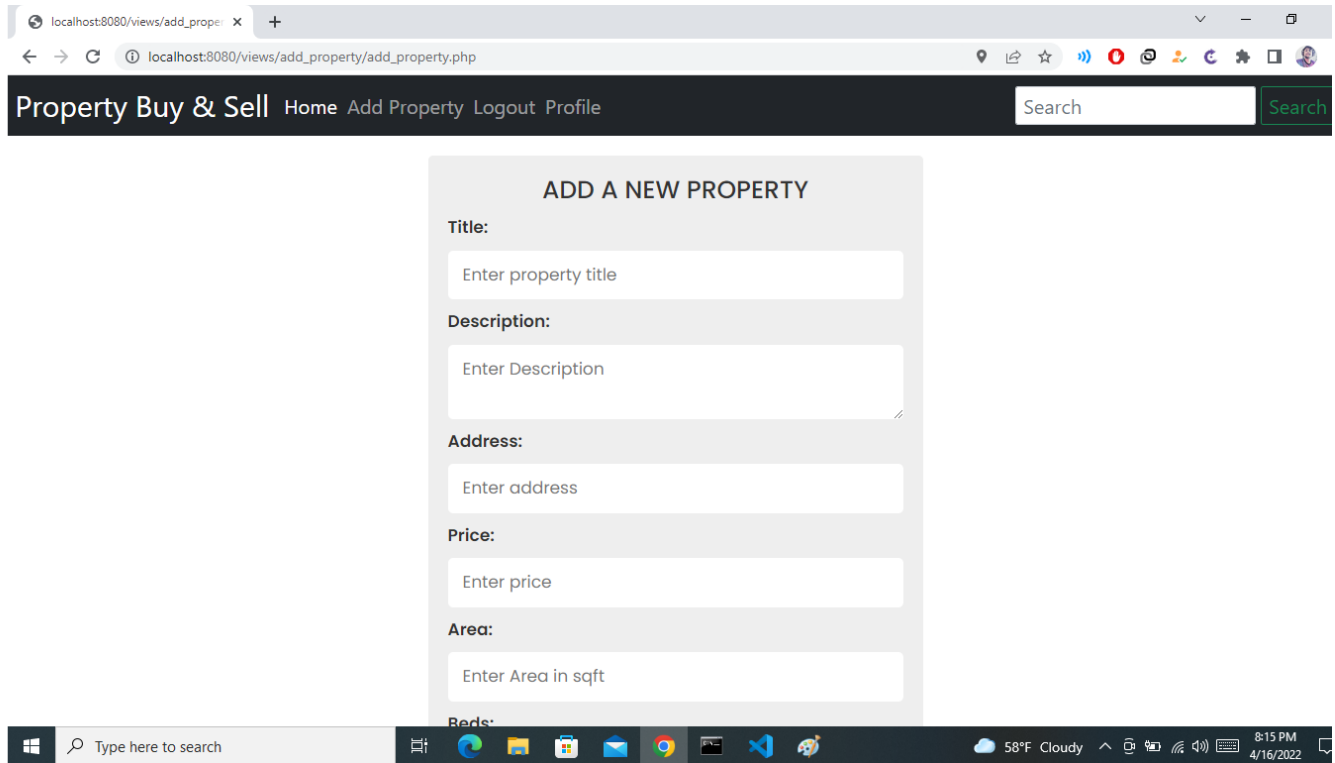
Features

1. **Authentication:** This feature used by the user to login into the system. They are required to enter user name, email and password before they are allowed to enter the system. The user id and password will be verified, in login and if invalid id, the user is not allowed to enter the system.
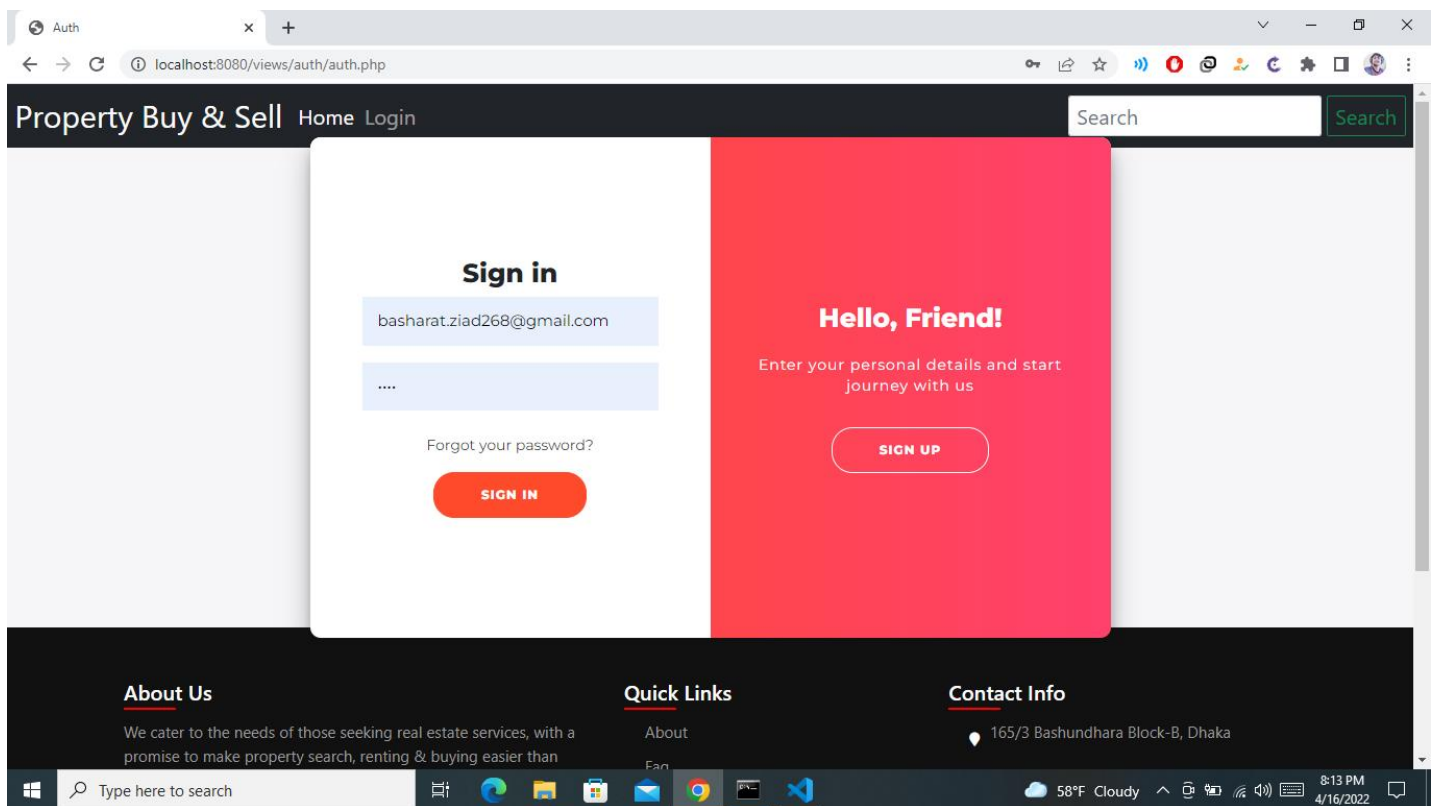
2. Add property: With fulfilling the fields a user can add a property. Here user can also add location with the help of google API

3. **View Product Details:** And user can click on any added property and get a detailed view of the property.
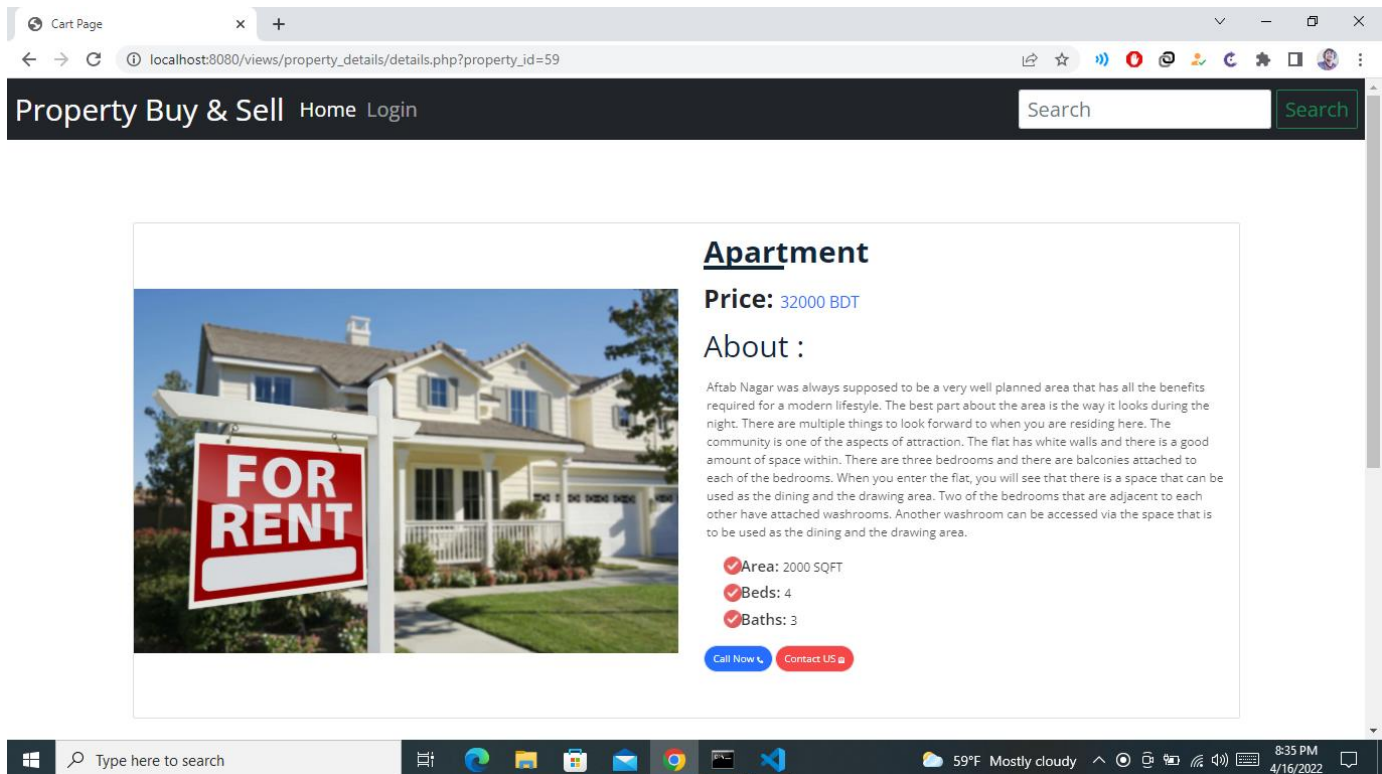
4. **Property location on home page:** When user add a property information, from that information we have used the location to show it on our home page.
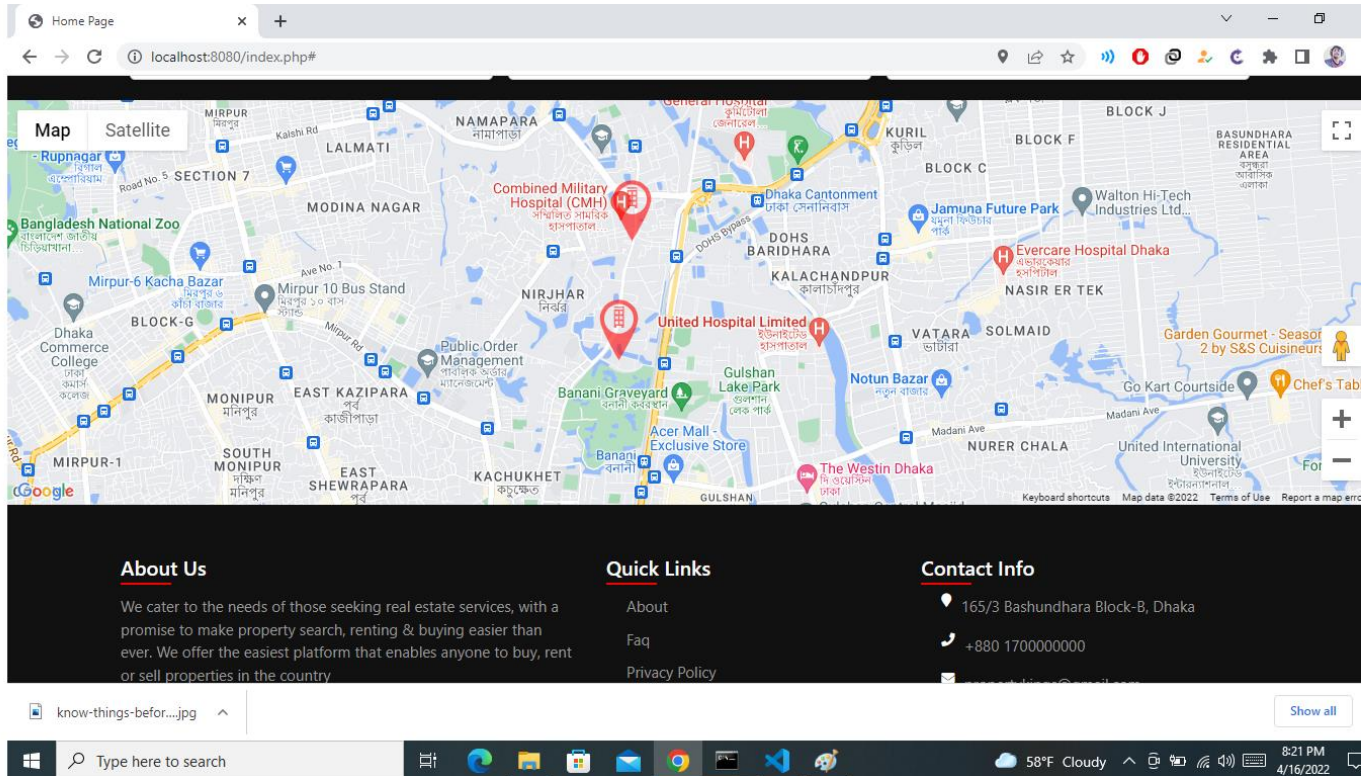
5. Chatting: An online chatting system is implemented from where user queries can be solved.
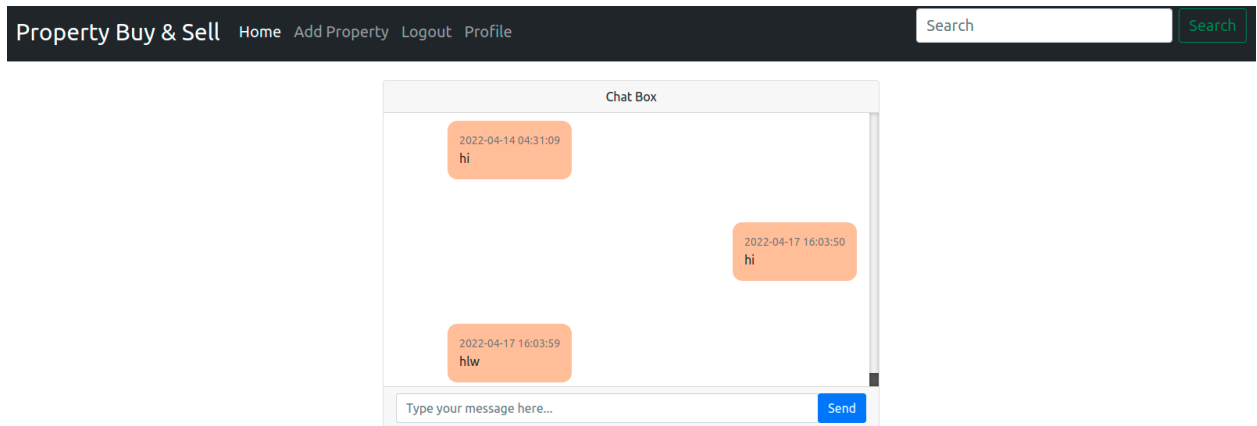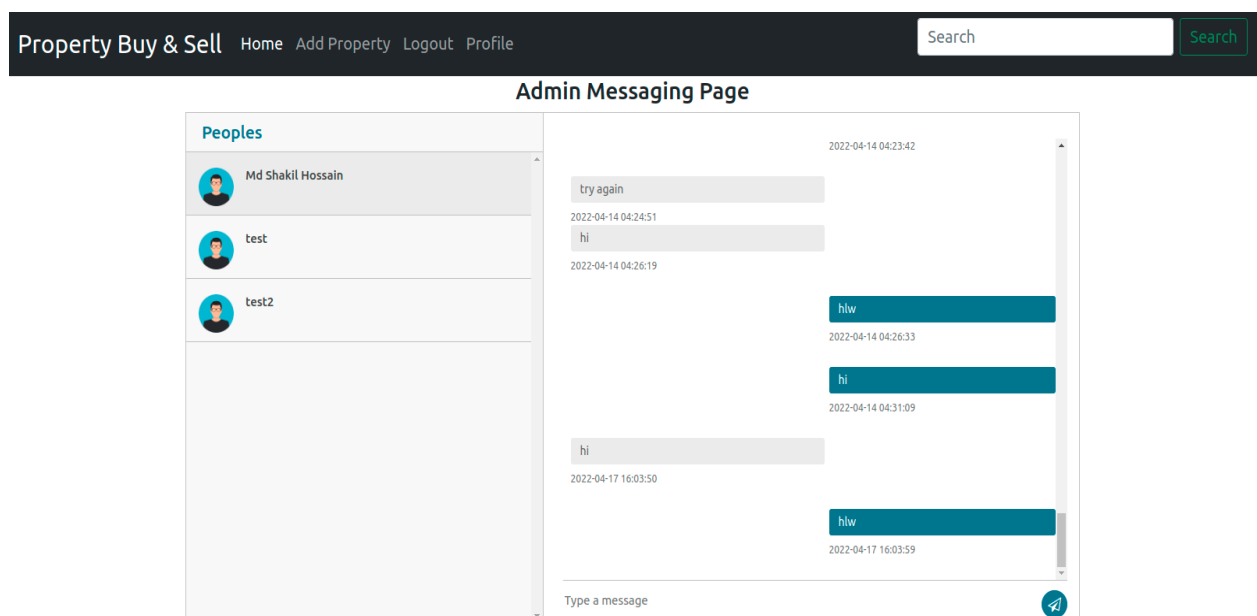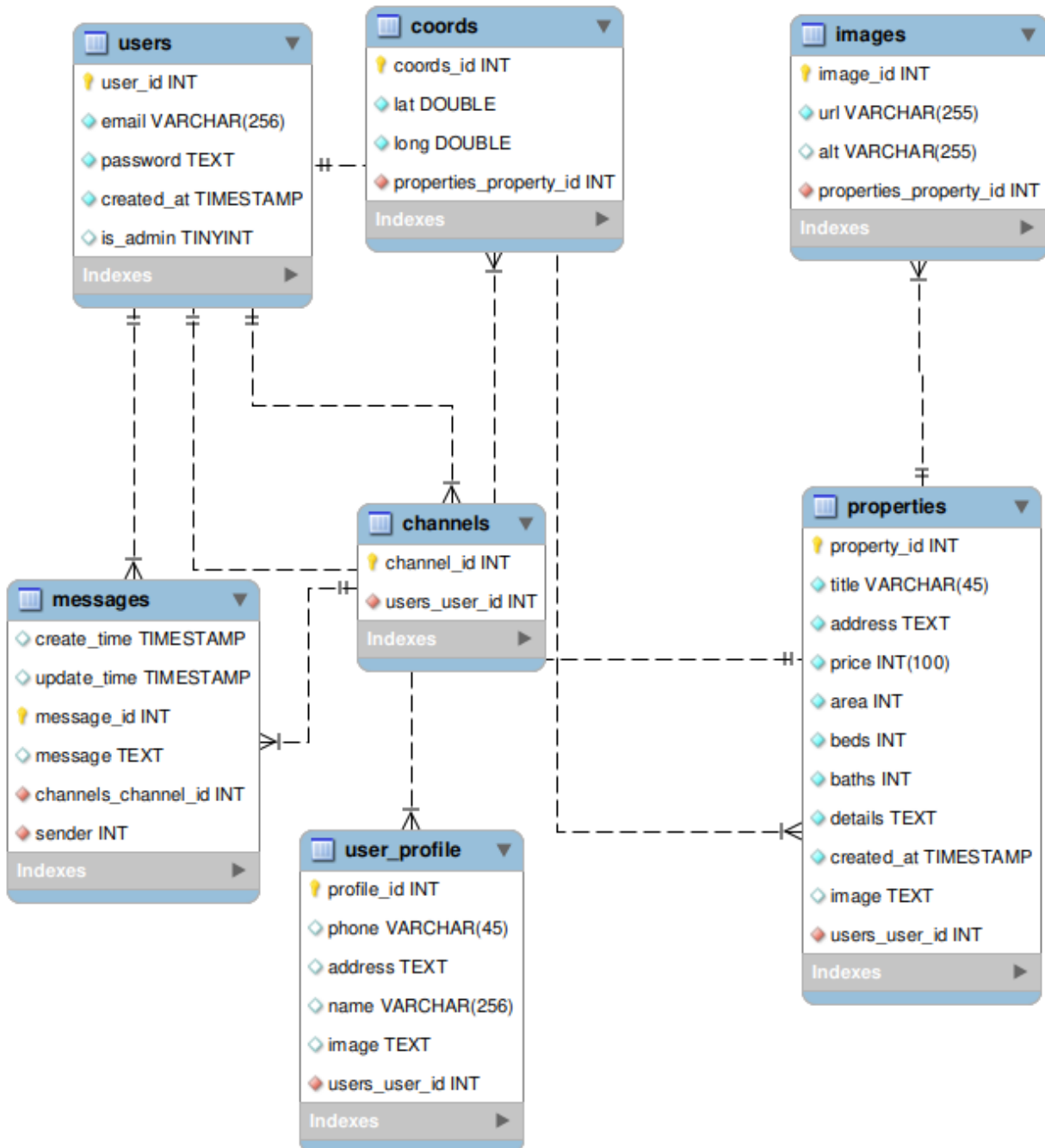
User side:

Admin side:

Er Diagram

users
- user_id INT
- email VARCHAR(256)
- password TEXT
- created_at TIMESTAMP
- is_admin TINYINT
- Indexes

coords
- coords_id INT
- lat DOUBLE
- long DOUBLE
- properties_property_id INT
- Indexes

images
- image_id INT
- url VARCHAR(255)
- alt VARCHAR(255)
- properties_property_id INT
- Indexes

channels
- channel_id INT
- users_user_id INT
- Indexes

properties
- property_id INT
- title VARCHAR(45)
- address TEXT
- price INT(100)
- area INT
- beds INT
- baths INT
- details TEXT
- created_at TIMESTAMP
- image TEXT
- users_user_id INT
- Indexes

messages
- create_time TIMESTAMP
- update_time TIMESTAMP
- message_id INT
- message TEXT
- channels_channel_id INT
- sender INT
- Indexes

user_profile
- profile_id INT
- phone VARCHAR(45)
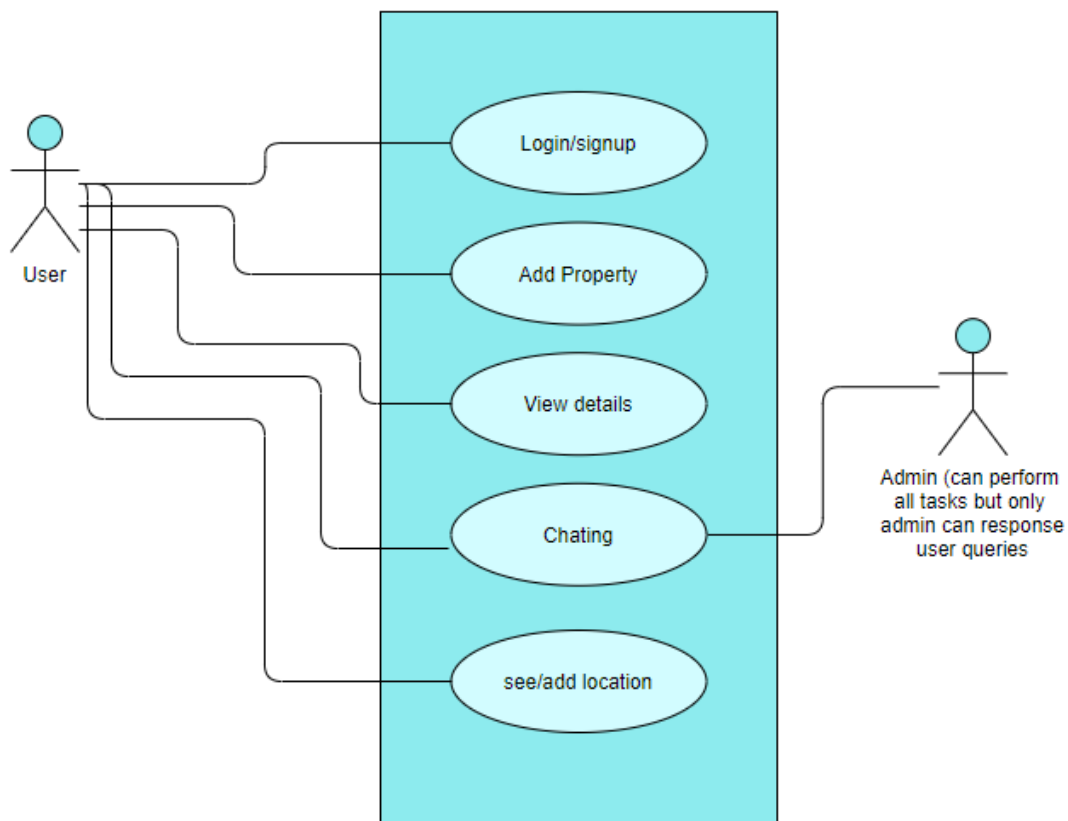- address TEXT
- name VARCHAR(256)
- image TEXT
- users_user_id INT
- Indexes

Use Case Diagram

Timeline

The project was divided into some checkpoints and was developed in such a way. The checkpoints go by:

Checkpoint No.	Updates
1.	Proposal submitted and project planning.
2.	Front end design, database architecture design
3.	Database connection, Log in sign up forming
4.	User add property, properties on home page
5.	Map API, test, live chat system applied and debugging

Conclusion

The Universe Is Moving Too Fast and Nobody Knows Why. Keeping the pace and style of living should be maintained. Old ways can be good but updated ones can be better. Being present in the market and talking with people takes time. It can be shortened; it can be updated and we have to step forward. Time is money. To a small entrepreneur to a successful one can be obtained with a small change. Now it's up to oneself.