# **UV SQUARE – Property Group**

#### A PROJECT REPORT

Submitted by

Vasuraj Yadav (201500777) Vishal Dixit (201500792) Umang Sharma (201500753)

in partial fulfilment for the award of the degree of

# BACHELOR OF TECHNOLOGY

IN

Computer Engineering and Application



GLA University, Mathura NOVEMBER 2022

## **BONAFIDE CERTIFICATE**

Certified that this project report "UV SQUARE – Property Group" is the bonafide work of "Vasuraj Yadav, Vishal Dixit, Umang Sharma," who carried out the project work under my/our supervision.

SIGNATURE SIGNATURE

Dr. Rohit Agrawal Mr. Mayank Saxena

HEAD OF THE DEPARTMENT SUPERVISOR

Submitted for the project viva-voce examination held on

INTERNAL EXAMINER EXTERNAL EXAMINER

# **TABLE OF CONTENTS**

Bonafide CertificateAbstract	
Chapter 1. INTRODUCTION:	5-7
Introduction to HTML, CSS, JavaScript Pre-requisties	
Chapter 2. Technologies Used:	8-9
VS Code	
Chapter 3. Introduction of the Project	
Chapter 4. Literature Review/ Background Study	
Chapter 5. Design Flow/ Process	
Activity Diagram	
Use Case	
Chapter 6. Proposed System	
Advantages of the Proposed System	
Chapter 7. Scope of the Project	19-20
Chapter 8. Snapshots of the Project	21-26
Chapter 9. Conclusion	27
Chapter 10. References	28

#### **ABSTRACT**

This project entitled "Real Estate Property System" aimed to simplify the entire process of real estate property business operation. The project was designed and developed in HTML, CSS and JavaScript with the core features of property posting, financial transactions and communication channel between the agents and clients. Rapid Application Development was used as the software development life cycle. Furthermore, the features of the project were presented to the IT experts for evaluation and checking purposes. Revisions were made for the improvement of the system before presenting it to the clients. Results showed that the system was rated overall as good by both the experts and the end-user, it simply means that there are still a lot of improvement to be done but the clients were still impressed overall by the output of the project. Thus, further improvement and testing needs to be done to fully meet the requirements of the business process before implementing the project online. In general, the system is a very good alternative to the manual process of conducting business in real estate.

## Introduction

#### 1.HTML-

HTML stands for <u>Hypertext Markup Language</u>, and it is the most widely used language to write Web Pages.

**Hypertext** refers to the way in which Web pages (HTML documents) are linked together. Thus, the link available on a webpage is called Hypertext.

As its name suggests, HTML is a **Markup Language** which means you use HTML to simply "mark-up" a text document with tags that tell a Web browser how to structure it to display.

Originally, HTML was developed with the intent of defining the structure of documents like headings, paragraphs, lists, and so forth to facilitate the sharing of scientific information between researchers.

Now, HTML is being widely used to format web pages with the help of different tags available in HTML language.

HTML is the *language* for publishing web pages on the WWW (World-Wide Web).

HTML is a *Document Description Language* (aka *Document Markup Language*). HTML is NOT a programming language like C/C++/C#/Java, which is used to implement programming algorithm.

You need a web browser to view the HTML pages. The web browsers do not display the HTML tags, but uses the tags to interpret the content of the web pages.

An HTML document is a text document, and it is human-readable.

HTML was originally developed by **Tim Berners-Lee in 1990.** He is also known as the father of the web. In 1996, the World Wide Web Consortium (W3C) became the authority to maintain the HTML specifications. HTML also became an international standard (ISO) in 2000.

#### 2.CSS-

CSS is short for **C**ascading **S**tyle **S**heets, and is the preferred way for setting the look and feel of a website. Cascading Style Sheets (CSS) is a markup language responsible for how your web pages will look like. It controls the colors, fonts, and layouts of your website elements

This style sheet language also allows you to add effects or animations to your website. You can use it to display some CSS animations like click button effects, spinners or loaders, and animated backgrounds. Without CSS, your website will appear as a plain HTML page.

The cascading means that a style applied to a parent element will also apply to all children elements within the parent. For example, setting the color of body text will mean all headings and paragraphs within the body will also be the same color.

#### 3.JAVASCRIPT-

JavaScript is a client-side scripting language of web developed by Netscape in 1995 with the name LiveScript. JavaScript is used to build interactive websites with dynamic features and to validate form data. JavaScript is high-level, dynamic and browser interpreted programming language, supported by all modern web browsers. Apart from web browser, JavaScript is also used to build scalable web applications using Node JS. JavaScript is also being used widely in game development and Mobile application development.

JavaScript is also known as the Programming Language of web as it is the only programming language for Web browsers. JavaScript is an object- based scripting language which is lightweight and cross-platform. The programs in this language are called scripts. They can be written right in a web page's HTML and run automatically as the page loads. Scripts are provided and executed as plain text. They don't need special preparation or compilation to run. The browser has an embedded engine sometimes called a "JavaScript virtual machine"

JavaScript is the widely used programming language, all over the world. It has the largest open-source package repository in the world (npm). Every type of software uses JavaScript, including the server code (Node.js), productivity apps, 3D games, robots, IoT devices. JavaScript has achieved the goal, set by Java a long time ago: write once, run anywhere. There are various JavaScript uses in different segments.

## 3.1 JavaScript History

WWW was formed in 1990. Initially, it was a bunch of web-pages linked together. But soon people want more interactive websites. So on-demand of Netscape, Brenden Eich, (*inventor of JavaScript*) in 1995 invented a prototype based (*Classless*) language for their Navigator Browser. Initially, it was called "Live Script", but later on renamed as "JavaScript".

In today's world, JavaScript is the Topmost demanding technology as it can handle both front end and Back-end.

#### 3.2 Pre-requisite

Hands-on knowledge of JavaScript, HTML and CSS is essential before working on the concepts for making of webpages. Make sure that you have the browser or chrome installed and running before opening website.

#### **Technologies Used**

#### 1. VS CODE:-

Visual Studio Code is a source-code editor that can be used with a variety of programming languages,

including Java, JavaScript, Go, Node.js, Python and C++. It is based on the Electron framework, which is used to develop Node.js Web applications that run on the Blink layout engine. Visual Studio Code employs the same editor component (codenamed "Monaco") used in AzureDevOps (formerly called Visual Studio Online and Visual Studio Team Services).

Instead of a project system, it allows users to open one or more directories, which can then be saved in workspaces for future reuse. This allows it to operate as a language-agnostic code editor for any language. It supports anumber of programming languages and a set of features that differs per language. Unwanted files and folders can be excluded from the project treevia the settings. Many Visual Studio Code features are not exposed through menus or the user interface but can be accessed via the commandpalette.

Visual Studio Code can be extended via extensions, available through acentral repository. This includes additions to the editor and language support. A notable feature is the ability to create extensions that add support for new languages, themes, and debuggers, perform static codeanalysis, and add code linters using the Language Server Protocol.

Visual Studio Code includes multiple extensions for FTP, allowing the software to be used as a free alternative for web development. Code canbe synced between the editor and the server, without downloading any extra software.

Visual Studio Code allows users to set the code page in which the active document is saved, the newline character, and the programming language of the active document. This allows it to be used on any platform, in any locale, and for any given programming language.

#### 2. Firebase:-

Firebase is a platform developed by Google for creating mobile and web applications. It was originally an independent company founded in 2011. In 2014, Google acquired the platform and it is now their flagship offering for app development.

In May 2016, at Google I/O, the company's annual developer conference, Firebase introduced Firebase Analytics and announced that it was expanding its services to become a unified backend-as-a-service (BaaS) platform for mobile developers. Firebase now integrates with various other Google services, including Google Cloud Platform, AdMob, and Google Ads to offer broader products and scale for developers. Google Cloud Messaging, the Google service to send push notifications to Android devices, was superseded by a Firebase product, Firebase Cloud Messaging, which added the functionality to deliver push notifications to both iOS and web devices.

In July 2016, Google announced that it was acquiring the mobile developer platform Launch Kit, which specialized in app developer marketing, and would be folding it into the Firebase Growth Tools team. In January 2017, Google acquired Fabric and Catalytic from Twitter to add those services to Firebase.

In October 2017, Firebase launched Cloud Fire store, a real-time document database as the successor product to the original Firebase Realtime Database.

#### **INTRODUCTION**

# 1.1. Client Identification/Need Identification/Identification of relevant Contemporary issue

- To offer the same level of functionality that the real state website has,
- it's a problem that needs resolution.
- To provide a greater user experience while using the real state website

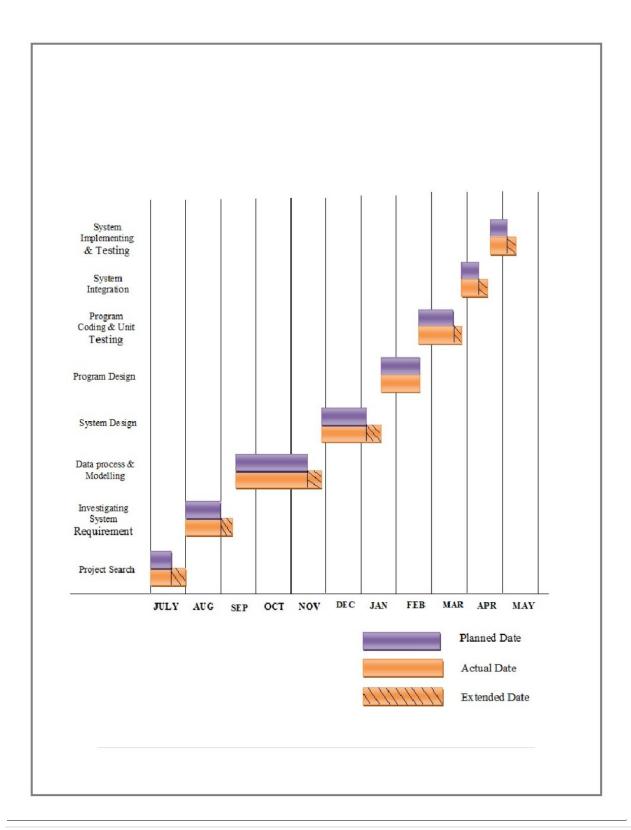
#### 1.2. Identification of Problem

Identify the broad problem that needs resolution and to present a new Real State Website Project in HTML, CSS and JavaScript which includes a client-side that contains all the essential features to see or check and a knowledgeable resource for buying and renting properties

#### 1.3. Identification of Tasks

Define and differentiate the tasks required to identify, build and test the Real State Website.

# 1.4.Timeline (Gantt chart)



#### LITERATURE REVIEW/BACKGROUND STUDY

## 2.1. Timeline of the reported problem

Properties of the real state website/application and offering to buying or renting purposes.

#### 2.2. Proposed solutions

A fully functional project based on Real State service "Real State-Property Group" which uses HTML, CSS and JavaScript

## 2.3. Bibliometric analysis

Analysis based on (key features, effectiveness and drawback)

# 2.4. Review Summary

Link findings with the project at hand.

#### 2.5. Problem Definition

Define the problem at hand including what is to be done, how it is to be done and what not to be done

# 2.6. Goals/Objectives

Statements setting the milestones during the course of project work.

Keeping in mind

- Narrow, specific statements about what is to be learned and performed
- Precise intentions

#### **DESIGN FLOW/PROCESS**

### 3.1. Evaluation & Selection of Specifications/Features

A number of features that will allow users to interact to sell or buy their properties in a easiest manner.

## 3.2. Analysis and Feature finalization subject to constraints

Remove, modify and add features in light of the constraints.

# 3.3. Design Flow

At least 2 alternative designs/processes/flow to make the solution/complete the project.

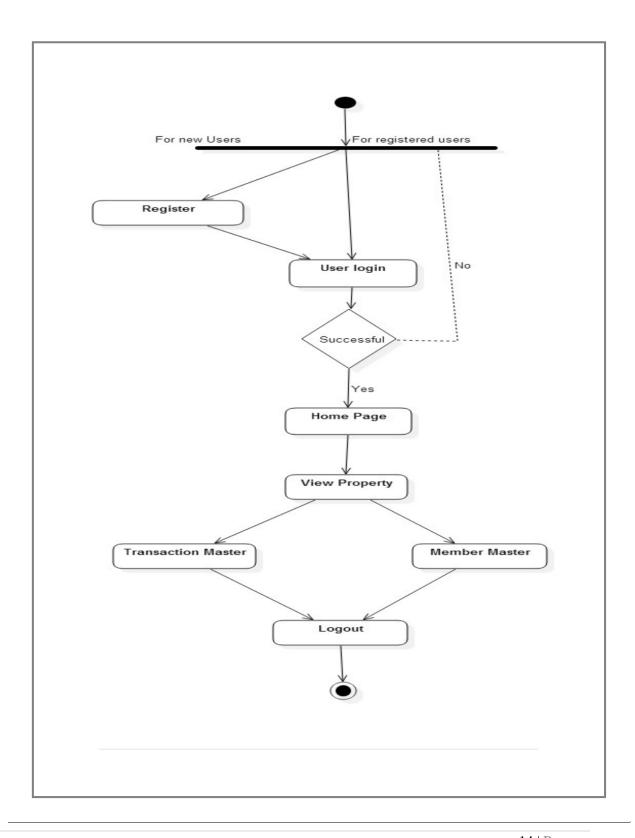
#### 3.4. Design selection

Analyze the above designs and select the best design based supported with comparison and reason.

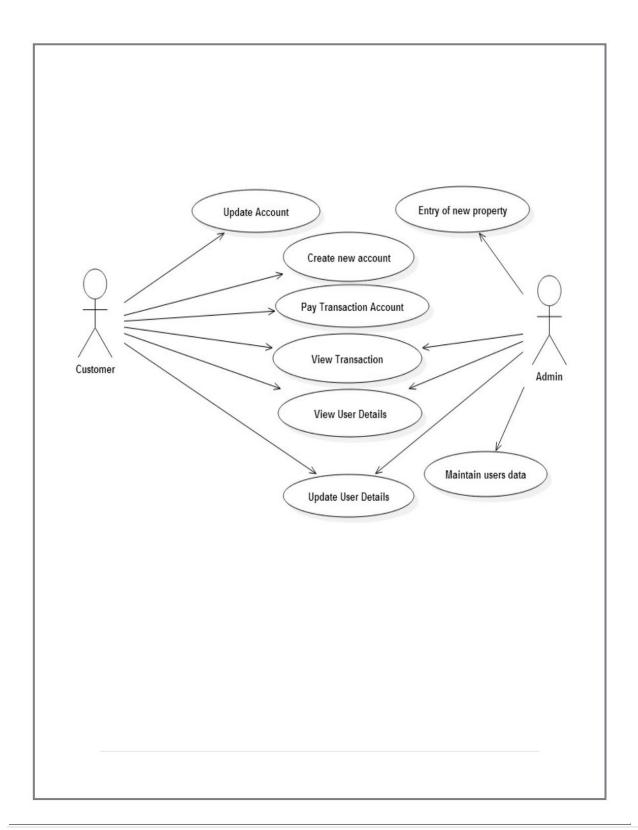
# **3.5.** Implementation plan/methodology

Flowchart/algorithm/ detailed block diagram

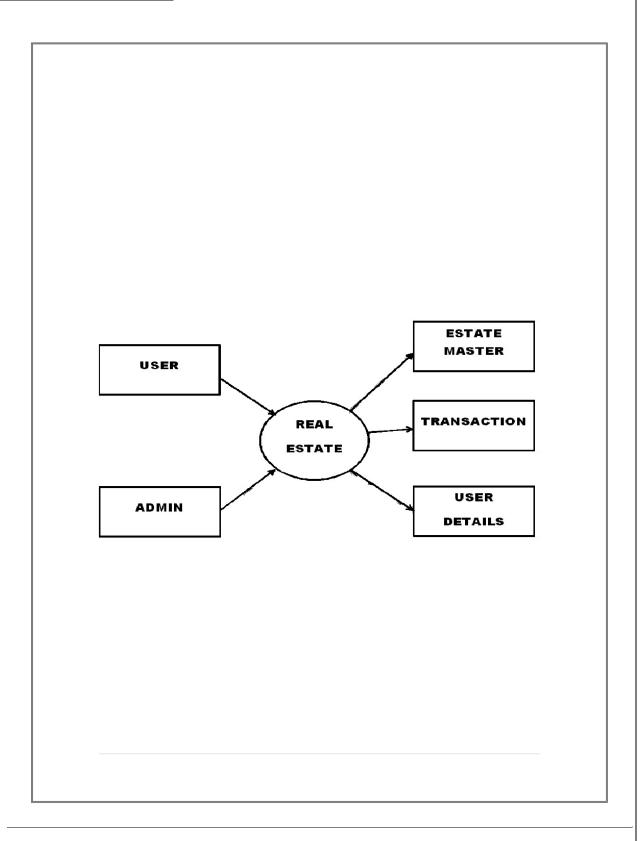
# 3.6 Activity Diagram:-



# **3.7 Use Case:-**



# 3.8 Context Level Diagram



# **PROPOSED SYSTEM**

## **Proposed System Feature**

- 1. The proposed system is developed using VISUAL STUDIO, ASP.Net with C#, and Microsoft SQL Server 2008 as a back end database. The proposed system deals with very popular World Wide Web (www) i.e. Internet.
- 2. The database is used i.e. Microsoft SQL Server 2008 is very faster well designed tool to the user for quick manipulation with it.
- 3. The proposed system has better both Input/output capabilities of each the user activities while interacting with the system.
- 4. The search/retrieval of the properties/flats is much faster than the present system. Hence it cause to saving time for the further work.
- 5. The user can have fast interaction with the system by inserting keywords at the respective places, by clicking on the buttons or links etc. Because not only the front end provides the faster interaction with the records but with back end also provides the proper interaction with the records and gives or prompts the information to the end user if he is making error during work.
- 6. Searching feature is quite faster than current system. Because it searches directly from system that is from the front end.
- 7. The most important feature of this system is online exhibiting the properties, Thissaves time to visit at the actual place where the property is located.

## **ADVANTAGES OF THE PROPOSED SYSTEM**

- The first advantage of the proposed system is that its front end provide easy and précised information to the user to interact with the system and hence it is faster to complete the work.
- The next advantage of the present system is that its faster capability with the database.
- The next advantage of the present system is that its faster capability with the database.
- Even the database also provides its inbuilt features to maintain the records. It also provides security to the records from the system itself and also from the database itself. Hence it prevents the database conjunction.
- The present system provides the better screening of the record, another advantage of the proposed system is its faster capability to search the records from the database

## RESULTS ANALYSIS AND VALIDATION

## **Implementation of solution**

Use modern tools in:

- analysis,
- report preparation,
- project management, and communication,
- Testing/characterization/interpretation/data validation.

## **SCOPE OF THE PROJECT**

The Online Real Estate is a Website design to handle the basic tasks of the Real

Estate.

Hence the main function of this system or company is to convert the manual trading service of properties / flats in the better quality service that customers want.

The functionality of this system is as like handling the properties or property management and handles the main function that mentioned above.

The functionality of this system is described as follows:

Allows the customers to view or get details of various properties/flats available.

. Add the properties/flats to the stock.

Allow admin to checks the availability of properties/flats. Customer can view all properties/flats online.

Displays the details like customers details, rates of flats, locations, remarks details etc.

This is all the functionality of the Online Real Estate Website.

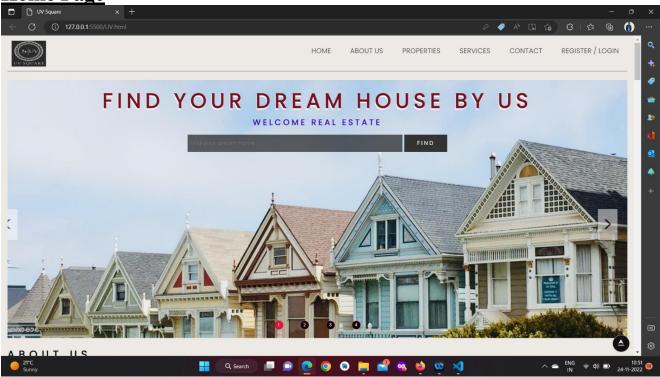
# **Functionality Extensions**

If we are going to develop commercial real estate web application based on this project, we can add some more feature as the following:

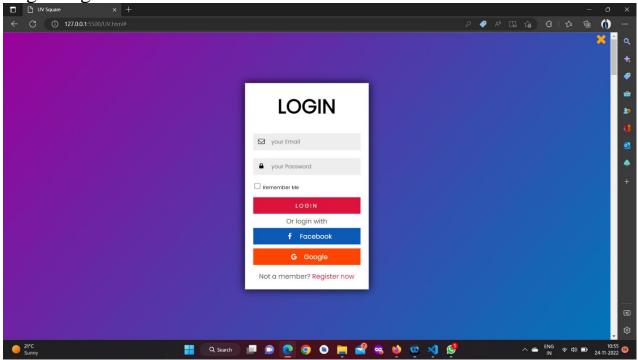
- 1. We can provide a login page for buyers and store their username and password in the database and can save the search criteria for the buyers. This will help the buyers to use the same search criteria rather than creating a new criterion every time the buyer performs the search.
- 2. By using the AdRotator web control we could add more advertisement on the web site or links to other web site.
- 3. Add agent and company search functionality.
- 4. Displaying the search results on Google Maps locating the area where the property listing is located.
- 5. Refine this web site and make it friendly and pretty.

# **SNAPSHOTS OF THE PROJECT**

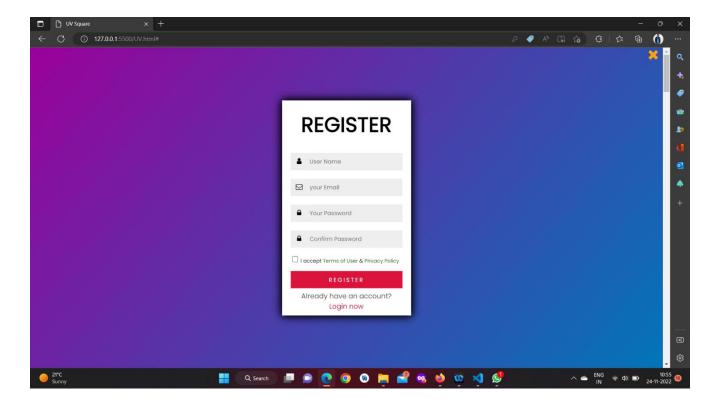
**Home Page** 



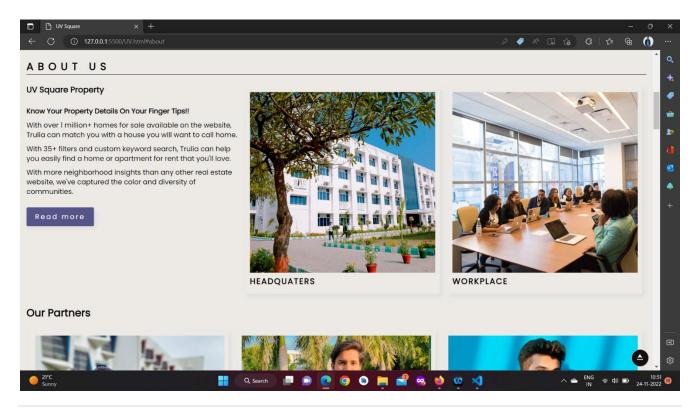
Login Page



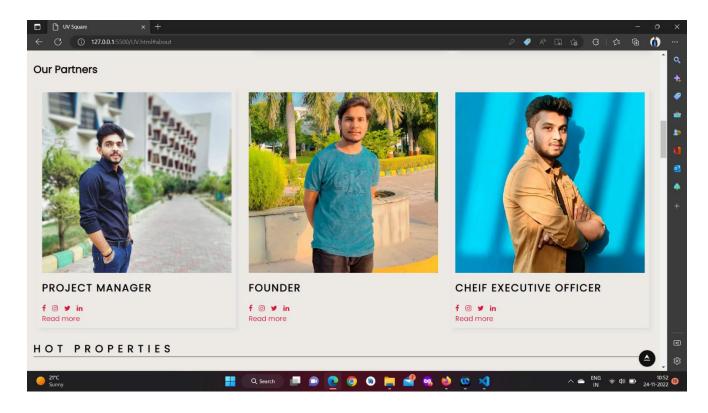
# Registration Page



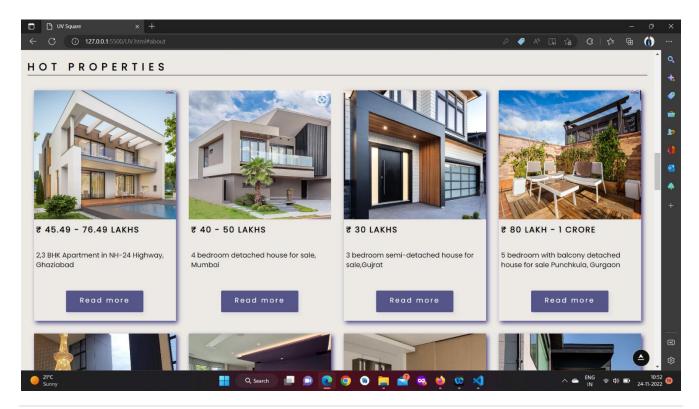
## About Us

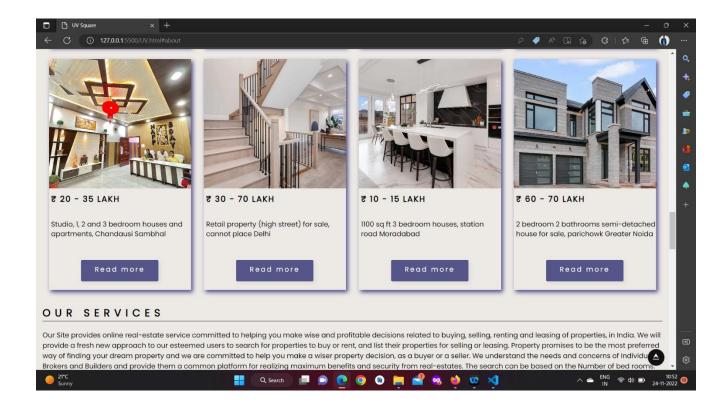


# Our partners

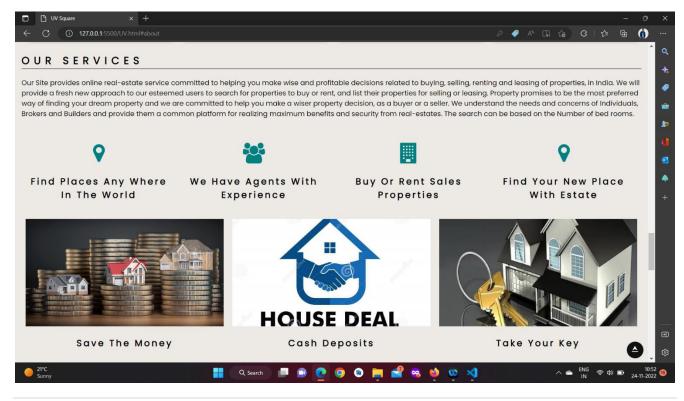


# **Properties**

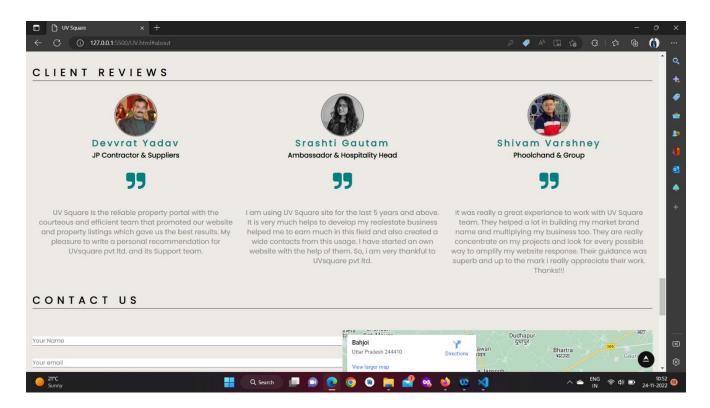




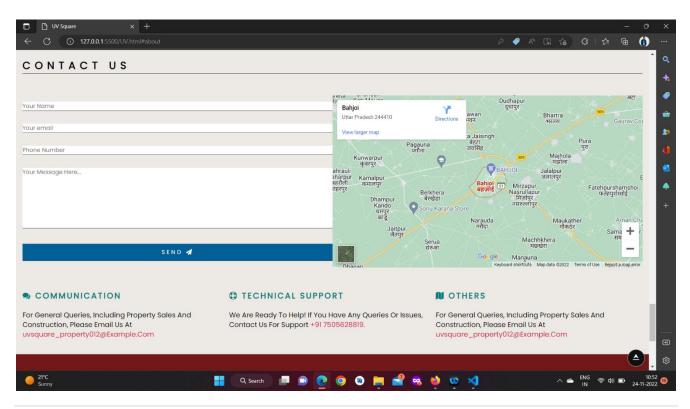
## **Services**



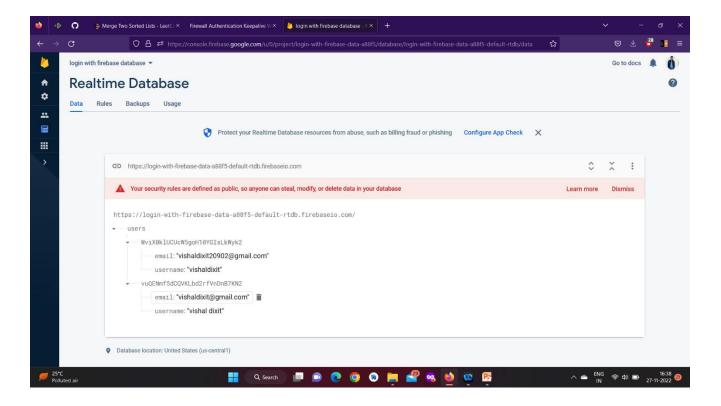
## Client Review

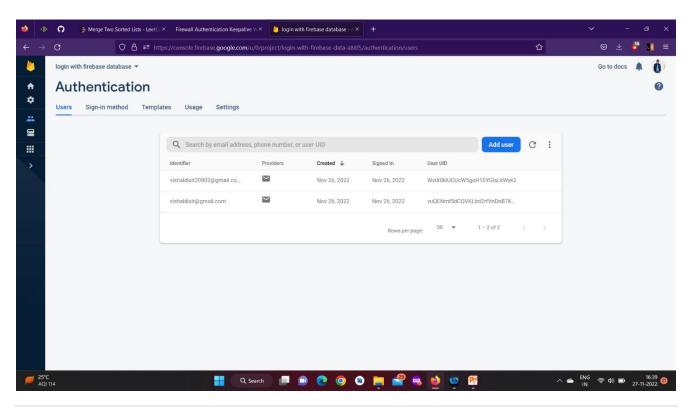


#### Contact Us



# **Firebase**





# **CONCLUSION**

The project has given lot of practice in a very wide subject like Web Design. This project has given us a great opportunity to explore our skills, to think towards problem, To accept them and solved them efficiently. It made us implement everything in practice that we had learned and also other more useful parts.

The project has given a professional touch towards our learning. It has made us implements not only WEB DESIGNING but also our knowledge on different subject and others, It also increases our communication skill, made us handle different types of client. It has played a major role in our academic career. In technical term to say it has acted as an "interface" between our academic and industry. It has made us more productive, respecting a need of user, understanding the problems and making them understand the project, and it has acted as "gateway" towards the corporate world. It made us understand different factors which are required to build fully fledged project.

On personal level it has flourished our skills made us more courage to tackle the problems, made us given the best in us. After completing this project we felt, we could be called as "True I.T professionals".

# **References**

[1] ASP.NET and Web Development Overview, <a href="http://msdn.microsoft.com/en-us/library/4w3ex9c2.aspx">http://msdn.microsoft.com/en-us/library/4w3ex9c2.aspx</a>

[2] Microsoft Visual Studio Overview, <a href="http://en.wikipedia.org/wiki/Microsoft Visual Studio#Visual Studio 20">http://en.wikipedia.org/wiki/Microsoft Visual Studio#Visual Studio 20</a>
<a href="mailto:05">05</a>

[3] Microsoft SQL Server 2005, http://en.wikipedia.org/wiki/Microsoft SQL Server

[4] 3-Tier System Architecture, <a href="http://en.wikipedia.org/wiki/Multitier">http://en.wikipedia.org/wiki/Multitier</a> architecture

- [5] Introduction to ADO.NET, <a href="http://en.wikipedia.org/wiki/ADO.NET">http://en.wikipedia.org/wiki/ADO.NET</a>
  - [6] Load Testing using Apache JMeter Testing Tool, <a href="http://jakarta.apache.org/jmeter/">http://jakarta.apache.org/jmeter/</a>
- [7] Introduction to .NET Architecture, <a href="http://www.devtopics.com/what-is-net/">http://www.devtopics.com/what-is-net/</a>
  - [8] Common Language Infrastructure Definition, <a href="http://en.wikipedia.org/wiki/Common Language Infrastructure">http://en.wikipedia.org/wiki/Common Language Infrastructure</a>

[9] AJAX – Bridging the Thin-Client Performance Gap, <a href="http://www.ironspeed.com/articles/ajax-">http://www.ironspeed.com/articles/ajax-</a> bridging%20the%20thinclient%20performance%20gap/article.aspx