



# Senior Design Project

**Project Title- Vhu-Shompotti**

**CSE 499 A & B**

**(Group-07; Section - 11)**

**Spring'2022**

**Faculty Advisor: Dr. Mohammad Ashrafuzzaman Khan**

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## ***Members***

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*Khaja Sabik Ahmed: 1812968042(Sec:10)*

# LETTER OF TRANSMITTAL

September 2021

To,

Dr. Mohammad Rezaul Bari

Associate Professor and Chairman,

Department of Electrical and Computer Engineering, North South University,  
Dhaka.

Subject: Submission of “**Capstone Project**” on “Vhu-Shompotti – A WEB application”

Dear Sir,

With due respect, we would like to submit our Capstone Project Report on “Vhu-Shompotti” as a part of our BSc program. The report deals with a WEB based application.

We will be highly obliged if you are kind enough to receive this report and provide your valuable judgment. It would be our immense pleasure if you find this report useful and informative to have an apparent perspective on the issue.

Your sincere,

Md. Mohiminur Rahman – 1731268042

Ruhul Amin – 1721948042

Khaja Sabik Ahmed - 1812968042

# APPROVAL

The capstone project entitled “**Vhu-Sompotti**” by Md. Mohiminur Rahman (1731268642), Ruhul Amin (1721948042) and Khaja Sabik Ahmed (1812968042), is approved in partial fulfillment of the requirement of the Degree of Bachelor of Science in Computer Science and Engineering on June, 2021 and has been accepted as satisfactory.

**Supervisor:**

.....

**Dr. Mohammad Ashrafuzzaman Khan**

**Assistant Professor**

Department of Electrical and Computer Engineering

North South University

Dhaka, Bangladesh.

**Department Chair:**

.....

**Dr. Mohammad Rezaul Bari**

**Associate Professor**

Chairman, Department of Electrical and Computer Engineering

North South University

Dhaka, Bangladesh.

## DECLARATION

This is our truthful declaration that the “**Capstone Project Report**” we have prepared is not a collected of any “**Capstone Project Report**” previously made by any other group. We also express our honest confirmation in support of the fact that the said “**Capstone Project Report**” has neither been used before to fulfill any other course related purpose nor it will be submitted to any other group or authority in future.

.....

Md. Mohiminur Rahman  
Department of Electrical and Computer Engineering,  
North South University, Bangladesh.

.....

Ruhul Amin  
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North South University, Bangladesh.

.....

Khaja Sabik Ahmed  
Department of Electrical and Computer Engineering,  
North South University, Bangladesh.

## ACKNOWLEDGEMENT

First of all, we wish to express our gratitude to the Almighty for giving us the strength to perform our responsibilities and complete the report.

We would like to express our deep and sincere gratitude to our faculty advisor, **DR. Mohammad Ashrafuzzaman Khan** Assistant Professor at Department of Electrical and Computer Engineering, North South University, for giving us the opportunity to allow and provide invaluable guidance throughout this course. His dynamism, vision, sincerity and motivation have deeply inspired us. He has taught us the methodology to carry out the project report and to present the project report works as clearly as possible. It was a great privilege and honor to study under his guidance. We are extremely grateful to do this course under his supervision.

Thank you very much, Sir.

## **ABSTRACT**

Vhu-Shompotti is a Web Application for those who are tracking their property and also storing their important data into it and asking question to Ex-part for further help for getting their job done. It helps both of Experts and Clients to find out their expected property problem solve with Independently. In our Vhu-Shompotti there are an option to help of its user to connected with each other. Actually, it delivers a profile of each and individual client and expert which they fulfill their job done like solving problem and make revenue. They can chat with themselves. They can share the solution for their needs through File sharing capability.

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## Introduction

Our goal is to make a suitable application where anyone who can easily track their own property area, tracking place, uploading related document and getting help of an expert to solve their individual problem. For their each and every client or we could say that individual users make themselves profitable from this project.

### **Here we talk about most important feature of this Application:**

- Google Map Tracking implementation for track client's property area.
- The problem our project solves which is reaching Client and Property ex-part with an easiest approach. (Which is called Poramorsho)
- Property Selling Post sharing
- Announcement
- Notification
- Rules Regulation
- Property Measure Calculator

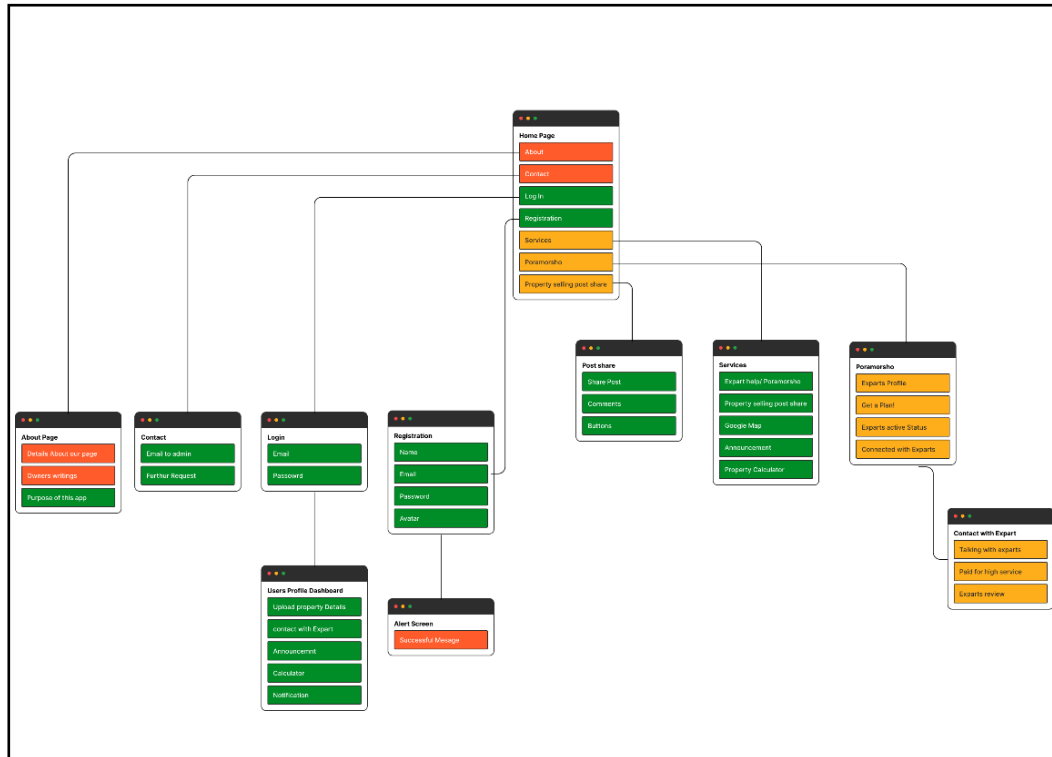
## **Related Work or Project Background**

We found only one inspiration which is our land. gov. bd website. Where they just use credential to found out one's property with the owner's name. So, from there we try our best to increase the feature of tracking the property inside our **Vhu-Shompotti. People** can easily handle their paid and unpaid requirement from here. The integration of various kind of feature makes this application more reliable and futuristic. In the Marketplace, it is estimated that this project will make significant progress as it will have client's demand. We were only successful in locating a single website that may perhaps function as a possible source of inspiration, and that website was for our own nation. The only thing that is required to do in order to determine who the owner of a piece of property is, is to produce the appropriate credentials to the relevant authorities. As a direct consequence of this, commencing right then and there, we will do all in our ability to enhance the function of tracking the property within our Vhu-Shompotti system. When people utilize our website, it will be easy and quick for them to take care of their many obligations and responsibilities, whether they are paid or unpaid. As a consequence of the enormous number of features that have been incorporated into this program, it is now more dependable and more forward-looking as a result of these additions. It is projected that there will be a significant level of demand for this project in the market, which will make it possible for substantial progress to be made on the project. [Case in point]

## **Literature Review**

There is a web app called e-porcha where people can just find out the property transform flow; they just use some data to show few details. So, in our app we add more realistic feature in our project for nowadays necessary. Like property post selling, Ask Expert and many more. So, we found none works like 'Vhu- Shompotti' features. Using a web app called e-porcha, individuals can quickly evaluate the flow of property transformation; the application does nothing more than utilize some data to provide some information. As a direct result of this, as time goes on, we are including aspects into both our program and the overall project that are more realistically based. Such as the property post sale and Ask Expert and a huge number of other websites that are very comparable to these two in function and appearance. This led us to conclude that not a single characteristic of 'Vhu- Shompotti' operates in an acceptable manner, which we arrived at as a direct result of what we found.

# Methodology



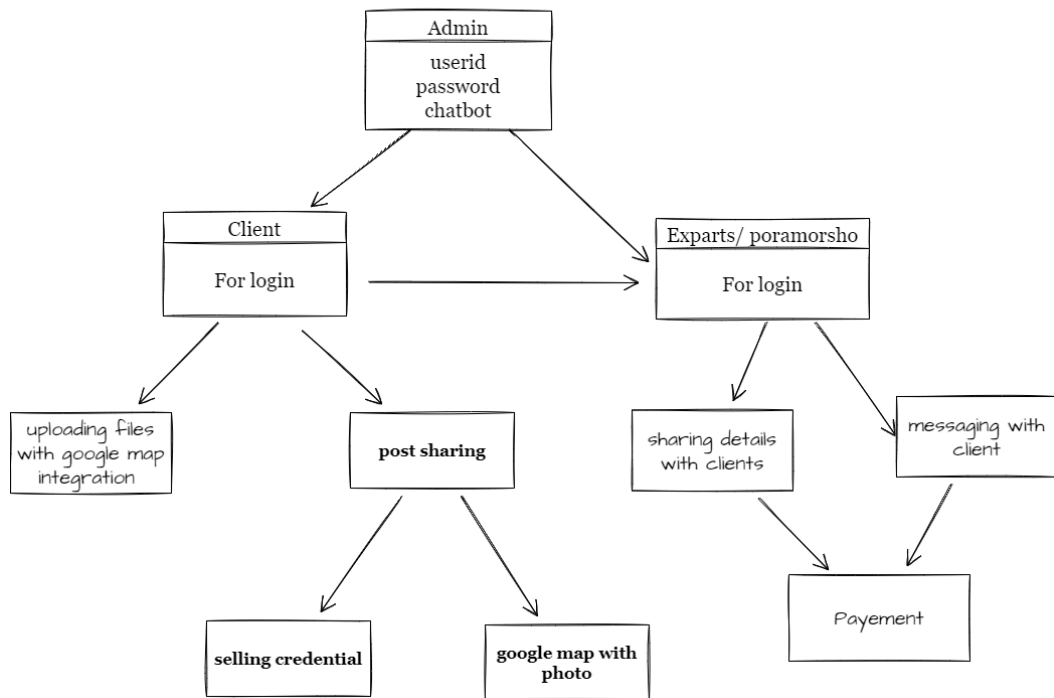
## Main Features

- **Property Selling post:**
  - Here, if a user needs to selling their property from existing document, they can just share the project to others for selling the property with photo, map and area amount.
- **Document storing:**
  - Document upload with proper credential because this upload handles the other features say for example, with this document a user can share a property selling post.
- **Google Map integration Tracking:**
  - We actually use google map integration for tracking the property area of the specific property.
- **Poramorsho:**
  - User can directly connect with the expert for further details and more high-fidelity work for don

# App Analysis and Diagram

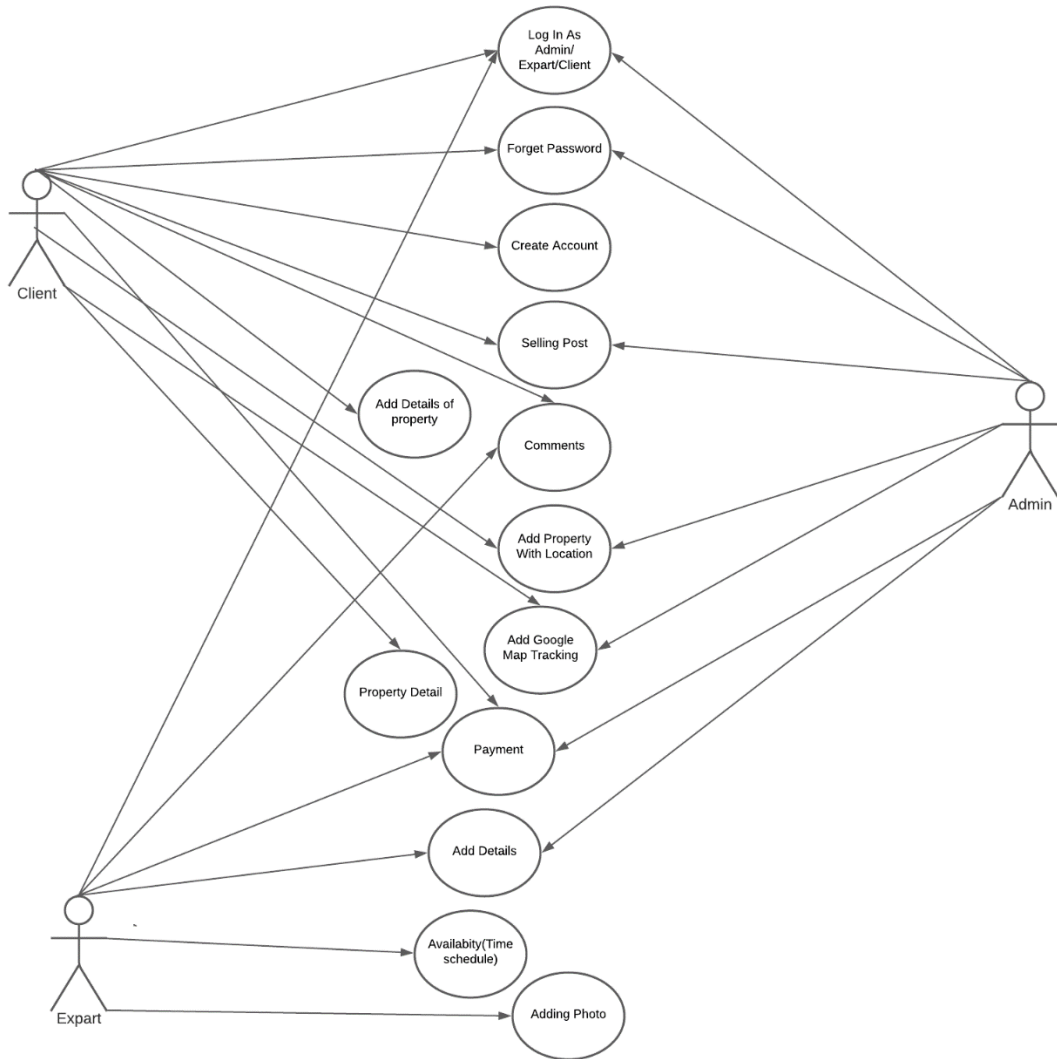
## Class Diagram

Class diagram



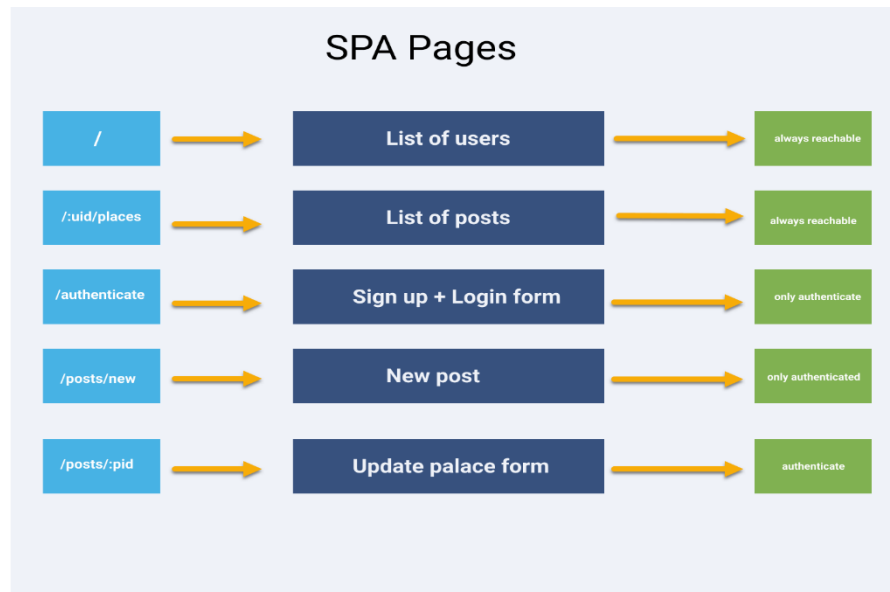
## Use Case Diagram

### *Vhu-sompotti* Use Case Diagram



## API end points & SPA Pages

Api end points		
api/users/	api/post/	
GET .../	GET .../user/:uid	PATCH ../
Rertrive list of all users	Rertrive list of all post	update a place by id
POST .../	GET .../:pid	DELETE ../:pid
Create new user and login	Get a specific post by post id(pid)	Delete a place or post by id
POST .../	POST .../	
Login user	Create a new post	



## Use cases for Features

- Adding details:

### ***As a client***

I wanted to create my profile to uploading property credentials.

- Acceptance:
  1. Add name of property owner, area need to be selected.
  2. Add google map integration for tracking.
  3. Add amount.

- Connected with experts:

### ***As a client***

I wanted to connected with experts for more details about property.

- Acceptance:
  1. Can send a message.
  2. Can sharing their details.
  3. Can make a payment for high fidelity.

- Post sharing for sell:

### ***As a client***

I wanted to sell my post so that I can share my expected property details to others.

- Acceptance:
  1. share the selling post
  2. comment section.
  3. interested button.

- Experts profile:

*As an Expert*

I wanted to give some extra idea and document to solve their problems.

- Acceptance:
  1. Adding photo.
  2. Availability.
  3. Messages.

- Experts Dashboard:

*As an Expert*

I wanted to change my active status and sending message.

- Acceptance:
  1. Exchanging Messages
  2. sharing important files with client.

# Work flow and UI

## Landing Page



### Property Handler App

Arranging your details with Proper data insertion with easy access.  
Best solution for the property. Make your propertey details gather.

Sign In / Register



## Login Page



### Login Form

admin@gmail.com

.....

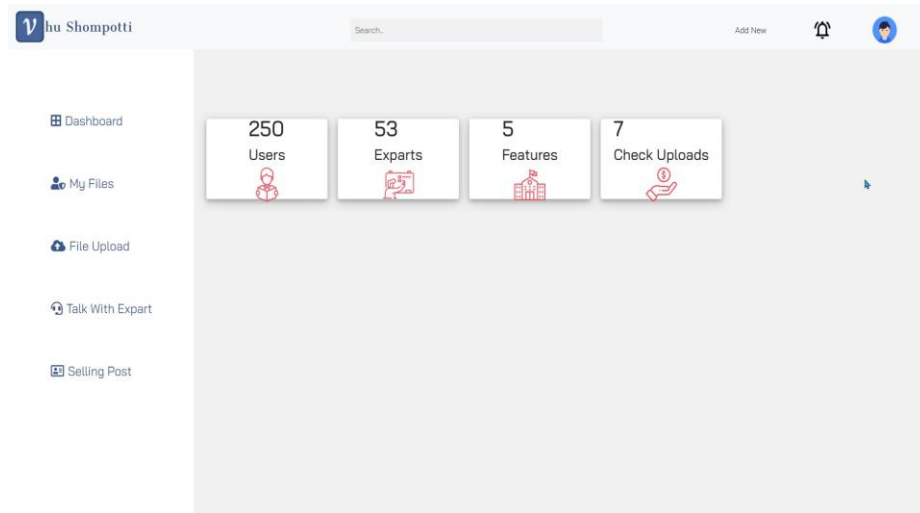


LOGIN

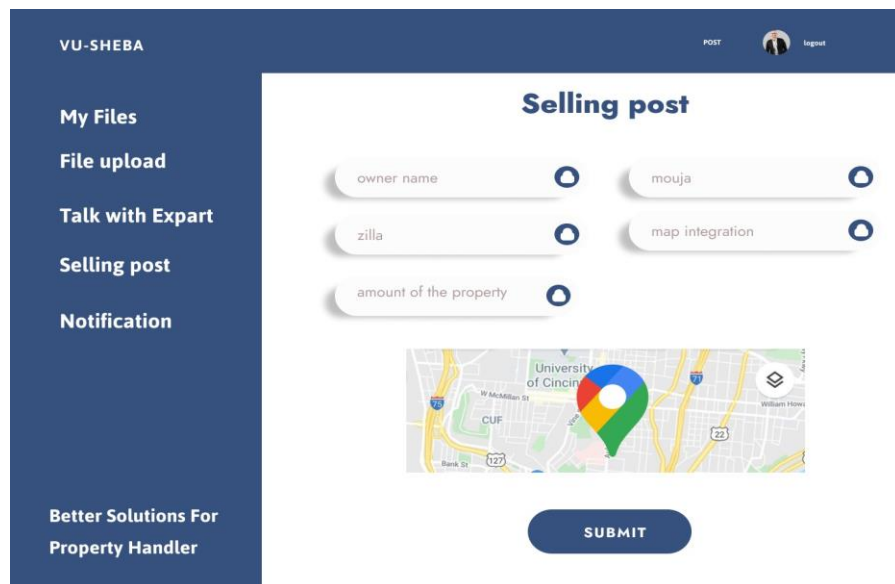
Don't have an account? Sign Up

Better Solutions For Property Handler

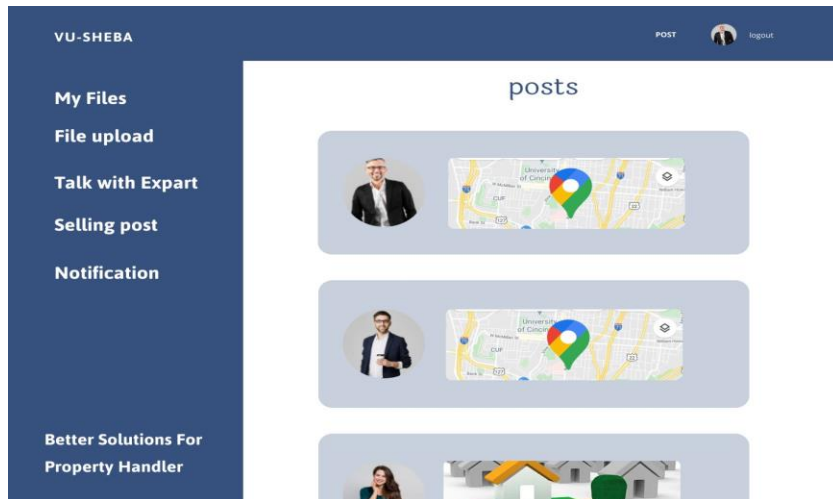
## Dashboard Page



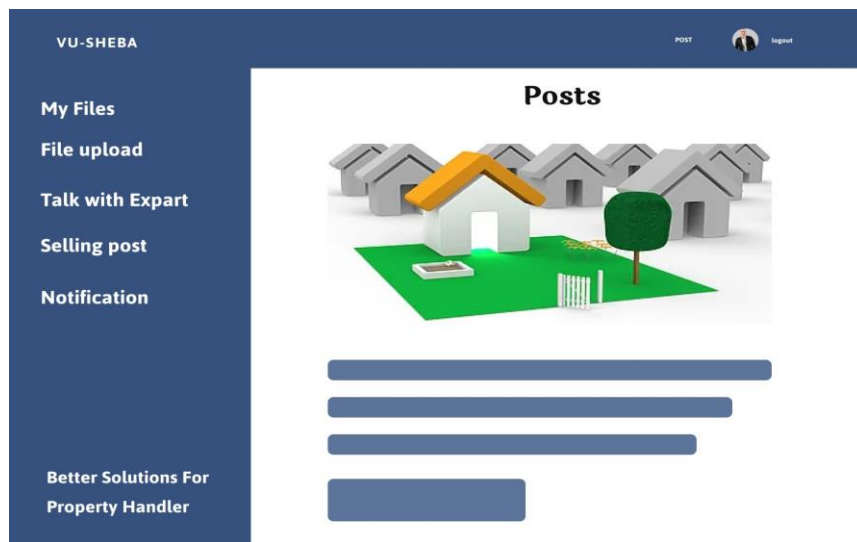
## Selling Post




**Post page**



**Single Post Page**



## My uploaded File



### my file


id	Owner Name	Amount	Details		
62429dad177553e9e681770c	md shakwat hossain	10	<a href="#">Share</a>	<a href="#">View</a>	<a href="#">Delete</a>
62429e4e177553e9e681770e	Md.Indahul haque	20	<a href="#">Share</a>	<a href="#">View</a>	<a href="#">Delete</a>
6242b9e90cf610a1da58e74c	Md. Shihab	30	<a href="#">Share</a>	<a href="#">View</a>	<a href="#">Delete</a>
62431dad2ed9897f4eb802a8	md.kajol	30	<a href="#">Share</a>	<a href="#">View</a>	<a href="#">Delete</a>
62431d52ed9897f4eb802aa	md.atjal	30	<a href="#">Share</a>	<a href="#">View</a>	<a href="#">Delete</a>
62431feb865d392ca9f7f1f2	shuvo	30	<a href="#">Share</a>	<a href="#">View</a>	<a href="#">Delete</a>

- [Dashboard](#)
- [My Files](#)
- [File Upload](#)
- [Talk With Expart](#)
- [Selling Post](#)

## Expert section


### PORAMORSHO / ASK EXPART

Magnam dolores commodi suscipit. Necessitatibus eius consequatur ex aliquid fuga eum quidem. Sit sint consectetur velit. Quisquam quos quisquam cupiditate. Et nemo qui impedit suscipit alias ea. Quia fugiat sit in iste officii commodi quidem hic quas.




**Walter White**  
Chief Executive Officer

Explicabo voluptatum mollitia et repellat qui aliquam quia




**Walter White**  
Chief Executive Officer

Explicabo voluptatum mollitia et repellat qui



**William Anderson**  
CTO

Quisquam nulla cum velit laborum consequat fuga nemo quia



**Walter White**  
Chief Executive Officer

Officiis Explicabo voluptatum mollitia et repellat qui

## Payment section

### PRICING

Magnam dolores commodi suscipit. Necessitatibus eius consequatur ex aliquid fuga eum quidem. Sit sint consectetur velit. Quisquam quos quisquam cupiditate. Et nemo qui impedit suscipit alias ea. Quia fugiat sit in iste officii commodi quidem hic quas.

The pricing section features three blue cards, each representing a different service tier. Each card includes the text 'Talk time' at the top, followed by the price '\$0', '\$5', or '\$10' in a large font, and 'per month' below it. Underneath the price, there are five lines of placeholder text: 'Quam adipiscing vitae proin'. At the bottom of each card is a white 'Get Started' button with a dark border.

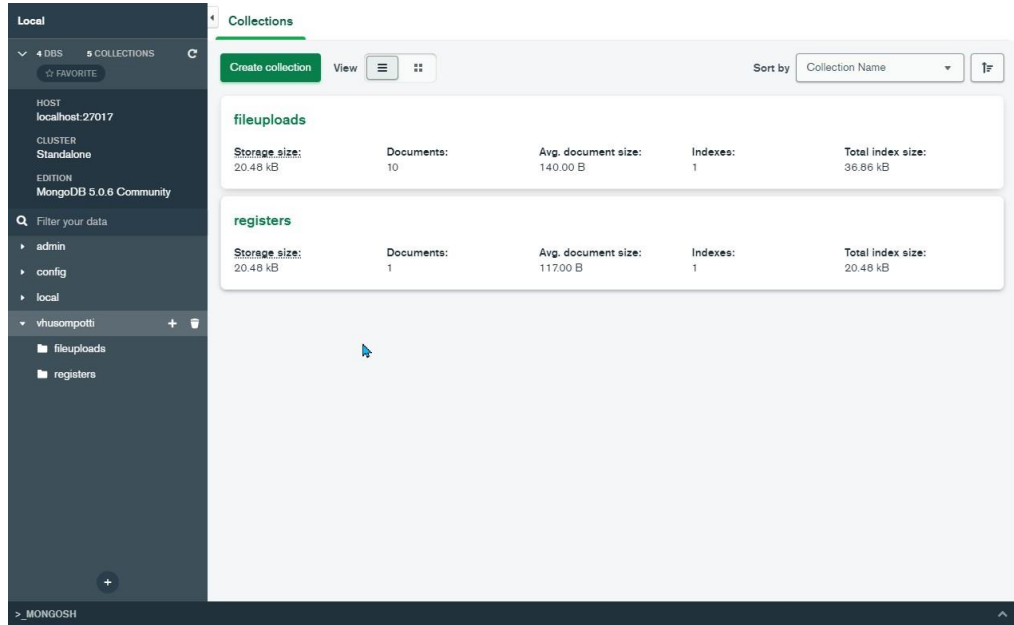
Price	Per Month
\$0	per month
\$5	per month
\$10	per month

## Database section

The screenshot shows the MongoDB Compass interface. On the left, a sidebar displays the 'Local' database instance with details: 'localhost:27017', 'Standalone' cluster, and 'MongoDB 5.0.6 Community' edition. The main area is titled 'Databases' and shows a list of databases with their storage sizes, collection counts, and index counts. A 'Create database' button is visible at the top left of the main area. The databases listed are 'admin', 'config', 'local', and 'vhusompotti'. A mouse cursor is pointing at the 'vhusompotti' database entry.

Database Name	Storage size	Collections	Indexes
admin	20.48 kB	1	1
config	12.29 kB	1	2
local	36.86 kB	1	1
vhusompotti	57.34 kB	2	2

## Database Collection

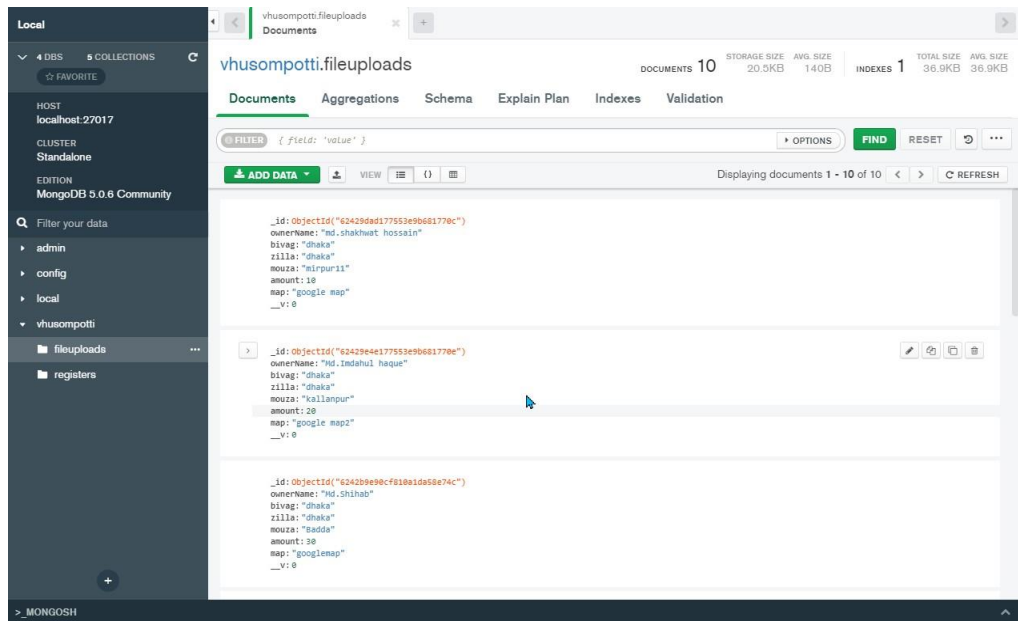


The screenshot shows the MongoDB Compass interface. On the left, a sidebar displays the database structure: Local > 4 DBS > 5 COLLECTIONS > vhusompotti > fileuploads and registers. The main area is titled 'Collections' and shows a table of collections:

Collection Name	Storage size	Documents	Avg. document size	Indexes	Total index size
fileuploads	20.48 kB	10	140.00 B	1	36.86 kB
registers	20.48 kB	1	117.00 B	1	20.48 kB

Buttons for 'Create collection', 'View', and 'Sort by' (set to 'Collection Name') are visible at the top of the main area.

## Database Individuals



The screenshot shows the MongoDB Compass interface for the 'fileuploads' collection. The top bar indicates 'Documents' and provides summary statistics: DOCUMENTS 10, STORAGE SIZE 20.5KB, AVG. SIZE 140B, INDEXES 1, TOTAL SIZE 36.9KB, AVG. SIZE 36.9KB. The 'Documents' tab is active, showing a list of documents with a filter bar and 'FIND' button. The first three documents are displayed:

```
{ "_id": ObjectId("62429dad17553e9b681778c"),  
  "ownerName": "Md. shakawat hossain",  
  "divag": "dhaka",  
  "zilla": "dhaka",  
  "mouza": "mirpur11",  
  "amount": 18,  
  "map": "google map",  
  "__v": 0 }  
  
{ "_id": ObjectId("62429e4e17553e9b681778e"),  
  "ownerName": "Md. tadahul haque",  
  "divag": "dhaka",  
  "zilla": "dhaka",  
  "mouza": "kallianpur",  
  "amount": 28,  
  "map": "google map2",  
  "__v": 0 }  
  
{ "_id": ObjectId("62429e8ecf618a1da58e74c"),  
  "ownerName": "Md. Shihab",  
  "divag": "dhaka",  
  "zilla": "dhaka",  
  "mouza": "sadda",  
  "amount": 38,  
  "map": "googlemap",  
  "__v": 0 }
```

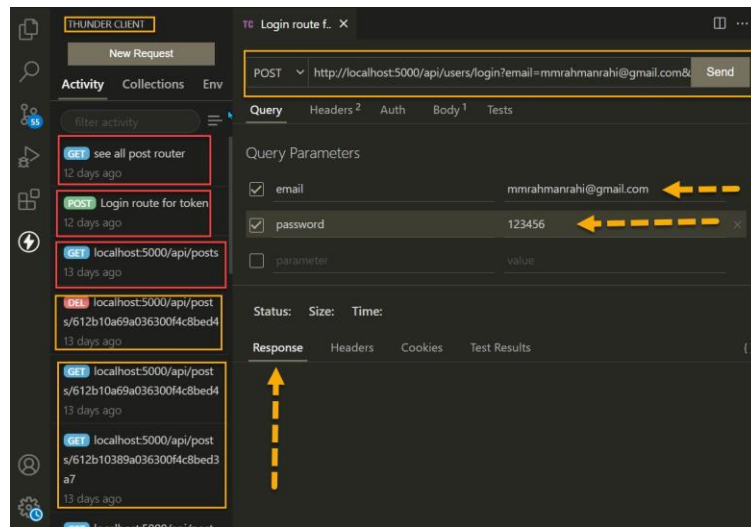
## Tools And Software We Use

- *Tools are:*
  1. Entire App build on NPM System.
  2. Front-End with React.
  3. Back-End with Node.
  4. Database with Mongo DB.
  5. And many more libraries.
  
- *Software's are:*
  1. For IDE: VS Code.
  2. For version control: Git Bash and Vs code Git extension.
  
  3. For Back-end API testing: Post Man API tester and Thunder Client API Tester.
  4. For Database:
  5. Cloud Based: MongoDB Atlas.
  6. local Based: MongoDB Compass and Robo 3T.
  7. Browser: Google Chrome.

## Result

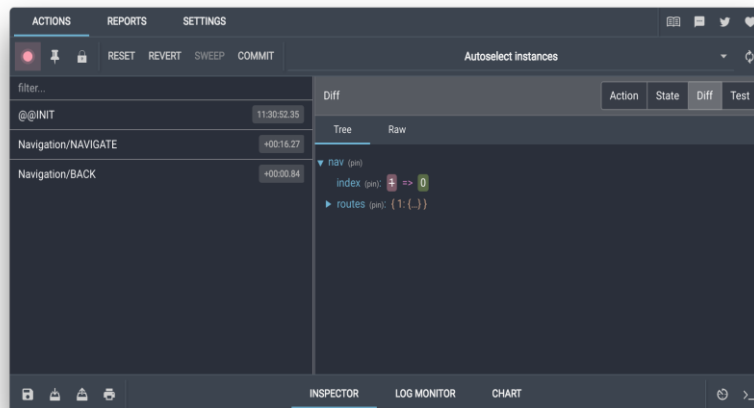
We starting our work with Backend API, so our Backend API are working successfully.

*Here we provide our visual representation of backend API testing tool:*



## With Redux Dev Tool Extension:

Checking the states are Working or not.



## Conclusion

### Discussion

In the end, we could say it solves the problem not only with pages and documents, but also provides us with the best tracking system, which is Google Map integration, and also sells their property in the easiest way. It has a totally user-friendly interface which makes clients more comfortable and gives them a good user flow when they use it. The expertise section is also provided for not only the clients but also for admins and experts, which helps everyone to make them profitable.

Here is our GitHub Project Repository Link:

<https://github.com/mohaimenur1/vhusompotti>

### Future Work

In Future, we work on our Interface to make it more user friendly and implement all our features with proper workable capability. Making Dashboard section more

Power full and use our own hosting.

## Appendix

### ***Md. Mohimenur words:***

Working with Mern stack development, the part backend is very much interesting for me because for the first time I working with NodeJS framework called express. Express JS provides us with powerful Authentication and validation to make our backend more powerful than before. Also use Brycpt JS for Hashing the password to make our password encrypted.

### ***Ruhul Amin words:***

Working with React JS for frond-end development I learnt how react working with dom manipulation system and also learn how to implement bootstrap with react for better making UI with responsiveness.

### ***Khaja Sabik words:***

Before that i know the Relational Database only and working with that as well but working with Node I learn about Mongo DB which is a NoSQL Database system and it give us more flexibility than SQL database system.

## References

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13. Passport Module, <https://www.npmjs.com/package/passport>.