VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"JNANA SANGAMA", BELAGAVI - 590 018

A MINI PROJECT REPORT

on

"REAL ESTATE MANAGEMENT SYSTEM"

Submitted by

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In partial fulfillment of the requirements for the V semester

DBMS LABORATORY WITH MINI PROJECT

of

BACHELOR OF ENGINEERING

in

COMPUTER SCIENCE & ENGINEERING(DATA SCIENCE)

Under the Guidance of

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at

SAHYADRI

College of Engineering & Management

An Autonomous Institution

MANGALURU

2022 - 23

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MANGALURU

Department of Computer Science & Engineering(Data Science)

CERTIFICATE

This is to certify that the **Mini Project** entitled **"Real Estate Database Management System"** has been carried out by **Tamim Muhammed Mushtak (4SF20CD052)** and **Nadheef Ahmed (4SF20CD063)**, the bonafide students of Sahyadri College of Engineering & Management in partial fulfillment of the requirements for the V semester **DBMS Laboratory with Mini Project (18CSL58)** of **Bachelor of Engineering in Computer Science & Engineering(Data Science)** of Visvesvaraya Technological University, Belagavi during the year 2022 - 23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The mini project report has been approved as it satisfies the academic requirements in respect of mini project work.

Mr. Ganaraj K	**Dr. Mustafa Basthikodi**
Assistant Professor	Professor & Head
Dept. of ISE, SCEM	Dept. of ISE & CSE(DS), SCEM

External Practical Examination:

Examiner's Name	Signature with Date
1.	.....
2.	.....

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Department of Computer Science & Engineering(Data Science)

DECLARATION

We hereby declare that the entire work embodied in this Mini Project Report titled **"Real Estate Database Management System"** has been carried out by us at Sahyadri College of Engineering and Management, Mangaluru under the supervision of **Mr. Ganaraj K** as the part of the V semester **DBMS Laboratory with Mini Project (18CSL58)** of **Bachelor of Engineering** in **Computer Science & Engineering(Data Science)**. This report has not been submitted to this or any other University.

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Abstract

Hadoop is an open source software project that enables the distributed processing of large data sets across clusters of commodity servers. It is designed to scale up from a single server to thousands of machines, with a very high degree of fault tolerance. In this project, Hadoop will be deployed in virtual machine which can be obtained from Kernel-based Virtual Machine (KVM) virtualization infrastructure. And in this a new MapReduce cloud service model is proposed for data analytics in the cloud. Existing services require users to select a number of complex cluster and job parameters while simultaneously forcing the cloud provider to use those potentially sub-optimal configurations resulting in poor resource utilization and higher cost. So avoid this create different clusters initial state, Instead of customers to decide the resources to be used for the jobs, this model leverages MapReduce profiling to automatically select appropriate cluster configuration for the job. In this project resource(memory) utilization efficient compare to other existing one.

Acknowledgement

It is with great satisfaction and euphoria that we are submitting the Mini Project Report on **"Real Estate Database Management System"**. We have completed it as a part of the V semester **DBMS Laboratory with Mini Project (18CSL58)** of **Bachelor of Engineering** in **Computer Science & Engineering(Data Science)** of Visvesvaraya Technological University, Belagavi.

We are profoundly indebted to our guide, **Mr. Ganaraj K**, Assistant Professor, Department of Information Science & Engineering for innumerable acts of timely advice, encouragement and We sincerely express our gratitude.

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Chapter 1

Introduction

Real Estate is defined as the land and any permanent structures, like a home, or improvements attached to the land, whether natural or man-made. It can be differentiated from other personal properties like Vehicles, Cattle and other items due to their independence from a piece of land. In today's day and age they continue to be sold like the hottest cakes in the market. Residential real estate may contain either a single family or multifamily structure that is available for occupation or for non-business purposes.

A real estate database system is a computer program or set of programs that are used to store, manage, and retrieve information related to real estate properties and transactions. These systems can be used by real estate agents, brokers, property managers, and other professionals in the industry to track and analyze property listings, sales and rental data, client information, and other relevant information. They can also be used to generate reports and visualizations, automate tasks, and streamline the process of buying, selling, or renting properties. Some real estate database systems are web-based and can be accessed remotely, while others are installed on local computers. They can be customized to meet the specific needs of the user or organization.

There is a huge demand in the market for web services based on Real Estate. The services provided in a traditional Real Estate Market like the ability to sell off, buy and scour for properties can all be replaced by web applications. The Web Application provides the scope to list properties, find properties based on a selective criteria, and also to find relevant and credible information about the listings.

1.1 Purpose

The main purpose of this project is to present a new alternative to the currently established local Real Estate Marker, in the form of a web application. We can argue that currently established market for Real Estate is unreliable and inefficient for the average client. The client has to procure information from a variety of agents or brokers, dealing with commissions, inaccessibility of the specific agents and factors like unreliable or outdated information.

This project will also make is significantly easier to manage properites for a Real Estate tycoon with the web application and its associated company staff taking over the process of assigning agents, and getting the real estate sold. Agents will also be able to find a stable influx of potential properties to deal for in the market.

1.2 Scope

A web application created just for real estate management. The primary goal of this system or organisation is to transform the manual trading of properties / apartments into a higher-quality service that clients want. This system's capability includes handling the properties or managing the properties, in addition to handling the primary purpose indicated above.

The customer must obtain information from a range of agents or brokers while negotiating commissions, overcoming obstacles to reaching certain agents, and taking into account variables like inaccurate or out-of-date information. This allows the clients and owners the ease of access of systemization of information of their market. The project features Creation, Reading, Updation and Deletion operations on the listings provided by the Traders. This technology will provide credible and direct information on the all the properties listed, as well as the agents dealing with the properties.

1.3 Overview

A real estate database management system (DBMS) is a software program that is used to organize and store information related to real estate properties, transactions, and clients. The scope of a real estate DBMS can include:

- Storing and organizing property information, such as location, size, price, and fea-

tures

- Managing client information, including contact details, transaction history, and preferences
- Tracking property listings and availability
- Managing property transactions, including offers, contracts, and closing documents
- Generating reports and analytics on property sales, market trends, and agent performance

Overall, the scope of a real estate DBMS is to provide real estate professionals with the tools they need to manage and analyze their property portfolio, transactions and clients effectively and efficiently. Since the need for a renaissance in the Real Estate market was due, it became very important to create this web application, that both innovates and also retains important parts of the current landscape. This allows for a smooth transition for already active stakeholders of the domain, the clients, ownership and the agents involved.

The suggested system's first benefit is that it gives the user clear and simple information to engage with the system, making task completion quicker. The next benefit of the current technology is that it can access databases more quickly. Even the database has its own built-in tools to keep the entries up to date. Additionally, it offers protection for the database's and the system's own records. Consequently, it stops the database conjunction. The suggested system's speedier ability to search the database's records is another advantage over the current system, which offers better record filtering.

Chapter 2

Requirements Specification

2.1 Hardware Specification

- Processor : AMD Ryzen™ 5 5600G Processor (6-core/12-thread, 19MB Cache, up to 4.4 GHz max Boost)
- RAM : 8GB
- Hard Disk : 500GB SSD
- Input Device : Standard keyboard and Mouse
- Output Device : Monitor

2.2 Software Specification

- Database : MySQL 5.6.17
- Markup Language : HTML
- Programming Language: Python 3.10
- IDE : Pycharm 2022.3.1

Chapter 3

System Design

3.1 ER Diagram

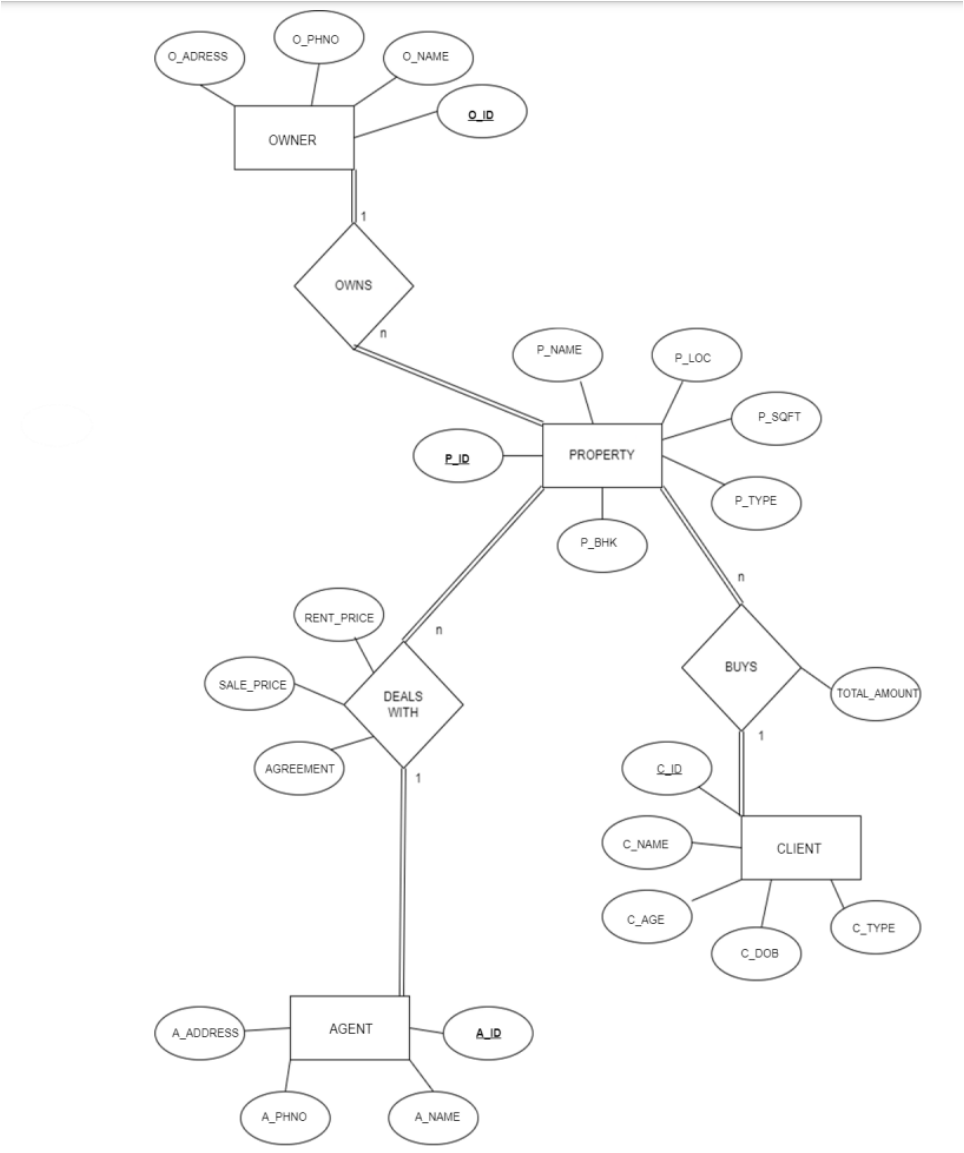

Figure 3.1: ER Diagram for Real Estate Database Management System

Owners own property that they can list on the website. Agents deal with the property, and try to sell or rent out the property based on a price the owner suggested. Client will interact with the data-base in terms of the action of buying the property. Once a client is interested in a property, he can obtain the associated agents information from the database and contact him.

3.2 Mapping From ER Diagram to Schema Diagram

Figure 3.2 represent the relational schema of the proposed system. The customer will be submitting job with deadline. Then admin will request for client information. According to what ever information acquired calculating minimum requirement of resources.After this step do the configuration with number of selected nodes and perform the mapreduce job.

3.3 Assumptions

- One property may be managed by only one agent
- One client can purchase multiple properties
- All agents must deal with some property

3.4 Schema Diagram

A data flow diagram (DFD) visualises the "flow" of data across an information system. DFDs may also be used to visualise data processing. On a DFD, data items flow from an external data source or an internal data store to an internal data store or an external data sink, via an internal process. A schema diagram is a graphical representation of a database schema, which is the overall structure of a database. It shows the relationships and organization of the tables, fields, and constraints that make up the database.

It is therefore quite different from a flowchart , which shows the flow of control through an algorithm, allowing users to determine what operations will be performed, in what order, and under what circumstances, but not what kinds of data will be input to and output from the system, nor where the data will come from and go to, nor where the data will be stored.

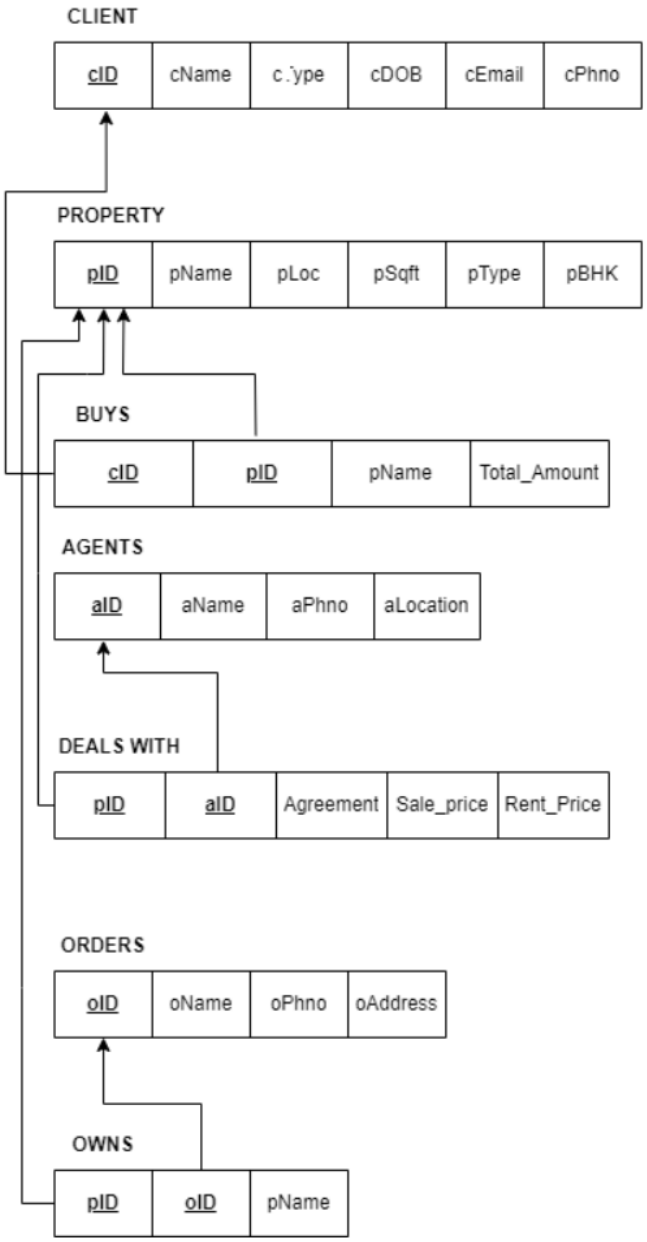

Figure 3.2: Schema Diagram for Real Estate Database Management System

Chapter 4

Implementation

In a Real Estate Database Management System (DBMS), there are several modules that may be included to provide specific functionality and features. Some examples of modules that may be included in a real estate DBMS include:

- Property management: This module is responsible for managing and storing information related to properties, such as location, size, price, and features. It may also include functionality for managing property listings, tracking availability, and generating reports on property sales and market trends.

- Client management: This module is responsible for managing and storing information related to clients, such as contact details, transaction history, and preferences. It may also include functionality for managing client communications and generating reports on client activity and engagement.

- Agent management: This module is responsible for managing and storing information related to agents, such as contact details, performance metrics, and commission. It may also include functionality for managing agent communications and generating reports on agent performance.

- Authentication system: This module is responsible for managing user authentication and authorization, as well as controlling access to the data and features of the DBMS. Each agents, client and owner has an account on the web-application.

- Search query processing: This module is responsible for processing search queries from users, such as selecting listings from the database based on features like area of the property, location and so on.

Sl. No.	Work	Duration(in Weeks)
1	Information Collection on DFB & VNC	1
2	Information collection on development tools	2
3	Integrating DirectFB & VNC	8
4	Cross Compiling & Porting	2
5	Building JPEG libraries	2
6	Testing	2

Table 4.1: Work Flow

TC#	Description	Expected Result	Actual Result	Status
TC-1	Drag	Drag	Drag	Pass
TC-2	Drag	Display	Node	Pass
TC-3	Select	Removal	Selected	Pass

Table 4.2: Test cases

4.1 Tables Used

Chapter 5

Results and Disscussion

Snapshots with explanation

Chapter 6

Conclusion and Future work

Add your conclusion here

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