

REAL ESTATE MANAGEMENT SYSTEM

A MINI-PROJECT REPORT

Submitted by

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IN

COMPUTER SCIENCE AND ENGINEERING



**RAJALAKSHMI
ENGINEERING COLLEGE**

An AUTONOMOUS Institution
Affiliated to ANNA UNIVERSITY, Chennai

RAJALAKSHMI ENGINEERING COLLEGE

AUTONOMOUS, CHENNAI

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BONAFIDE CERTIFICATE

Certified that this mini project “**REAL ESTATE MANAGEMENT SYSTEM**” is the bonafide work of “**ABHINANDHAN S (2116220701005)**” who carried out the project work under my supervision.

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INTERNAL EXAMINER

EXTERNAL EXAMINER

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ABSTRACT

The Real Estate Management System (REMS) is a digital platform designed to streamline and optimize the management of real estate assets. This system enables real estate professionals, property managers, and landlords to manage properties, tenants, leases, and financial transactions effectively. REMS centralizes essential data and automates key processes, such as property listing, tenant screening, rent collection, and maintenance requests, thus improving operational efficiency and accuracy. Additionally, the system integrates with accounting and reporting tools to provide a comprehensive overview of financial health and property performance. By leveraging modern technologies like cloud computing, data analytics, and user-friendly interfaces, REMS empowers stakeholders to make informed decisions, enhance tenant satisfaction, and increase the overall profitability of real estate investments. This abstract outlines the key features, functionalities, and advantages of implementing a Real Estate Management System to simplify and enhance property management in today's dynamic real estate industry.

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CHAPTER 1

1.1 INTRODUCTION

A Real Estate Management System is a digital tool that helps streamline property management by centralizing tasks like tenant management, rent collection, and maintenance tracking. It enhances efficiency, improves tenant relations, and provides insights into property performance. This system simplifies daily operations for property managers and landlords, making real estate management more effective and organized.

1.2 SCOPE OF THE WORK

The scope of work for a Real Estate Management System includes managing property listings, tenant records, lease agreements, and financial transactions to ensure streamlined operations. It automates rent collection, tracks maintenance requests, and provides reporting tools to enhance financial transparency and decision-making. Additionally, the system facilitates communication with tenants, stores essential documents securely, and ensures compliance with legal and regulatory standards. Overall, it enhances efficiency, tenant satisfaction, and financial control in property management..

1.3 PROBLEM STATEMENT

The primary problem in real estate management is the inefficiency and complexity involved in handling multiple properties, tenant relationships, lease agreements, financial transactions, and maintenance tasks manually or through fragmented systems. This lack of centralization leads to time-consuming processes, data inaccuracies, delayed responses to tenant requests, and challenges in financial tracking and reporting. Property managers and landlords need a unified, automated solution that can centralize property data, streamline operations, enhance communication, ensure compliance, and provide real-time insights into property performance to improve overall operational efficiency and tenant satisfaction.

1.4 AIM AND OBJECTIVES OF THE PROJECT

The aim of this project is to develop a comprehensive Real Estate Management System that streamlines property management processes, centralizes data, and enhances communication to improve operational efficiency, tenant satisfaction, and financial oversight.

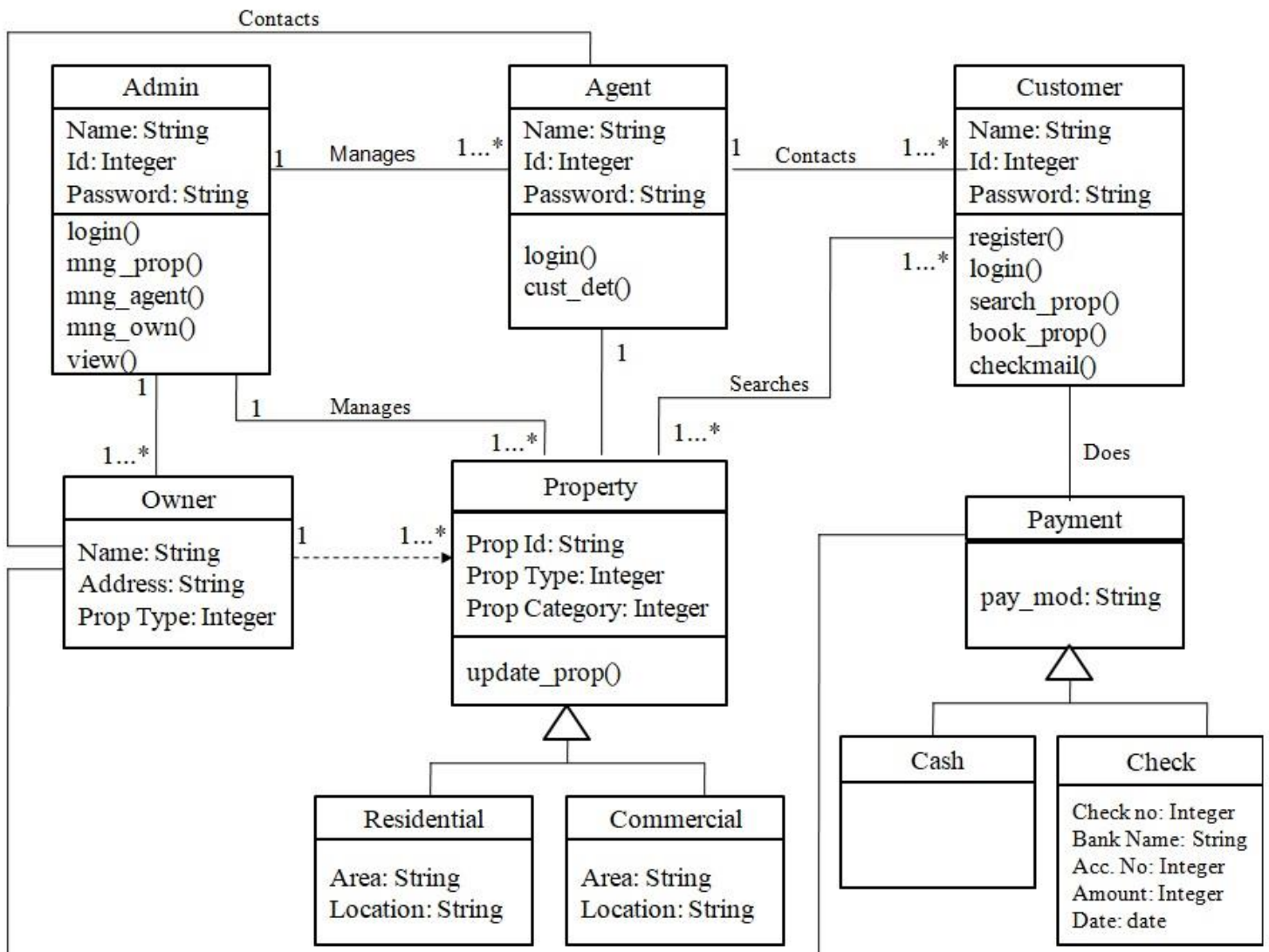
Objectives

1. To create a centralized platform for managing property listings, tenant records, lease agreements, and financial transactions.
2. To automate routine tasks such as rent collection, maintenance tracking, and tenant notifications to reduce manual workload and improve response times.
3. To provide reporting and analytics tools for financial transparency and data-driven decision-making.
4. To enhance tenant and landlord communication through real-time updates and notifications.
5. To ensure data security and compliance with legal and regulatory standards in property management.

CHAPTER 3

ARCHITECTURE DIAGRAM

Real Estate Management System - Class Diagram



<https://programmer2programmer.net>

CHAPTER 4

MODULE DESCRIPTION

1. Property Management Module

- Enables property categorization (e.g., residential, commercial) and customization for unique property attributes.
- Supports multimedia uploads like photos and videos for enhanced property listings.
- Tracks occupancy history and generates alerts for upcoming lease expirations and vacancies.

2. Tenant and Lease Management Module

- Includes tenant screening tools such as credit checks and background verifications.
- Automates lease creation with customizable templates, e-signature support, and reminders for renewals.
- Provides tenant profile management with contact details, payment history, and communication records.

3. Financial and Rent Management Module

- Supports various payment methods (credit card, bank transfer, mobile payment) for tenant convenience.
- Provides dashboards with insights on monthly revenue, outstanding payments, and cash flow.
- Manages security deposits, refunds, and expense categorization for tax and accounting purposes.

4. Maintenance and Service Request Module

- Enables tenants to upload photos or videos of issues for more accurate reporting.
- Assigns and tracks maintenance tasks to specific contractors or in-house staff with scheduling capabilities.
- Tracks maintenance costs and generates preventive maintenance schedules to reduce costly repairs.

5. Communication and Notification Module

- Includes templates for automated messaging (e.g., welcome emails, lease expiration reminders).
- Provides a chat or messaging system for direct communication with tenants.
- Tracks message history for record-keeping and future reference.

6. Document Management Module

- Stores files with organized folders and search functionality for quick retrieval.
- Supports document sharing and permissions to restrict access to sensitive files.
- Includes backup and recovery options to prevent data loss.

7. Reporting and Analytics Module

- Provides visual dashboards with KPIs, such as occupancy rate, tenant retention, and ROI.
- Offers customizable report generation for financials, maintenance costs, and tenant trends.
- Integrates with other software (like accounting tools) for seamless data flow and in-depth analysis.

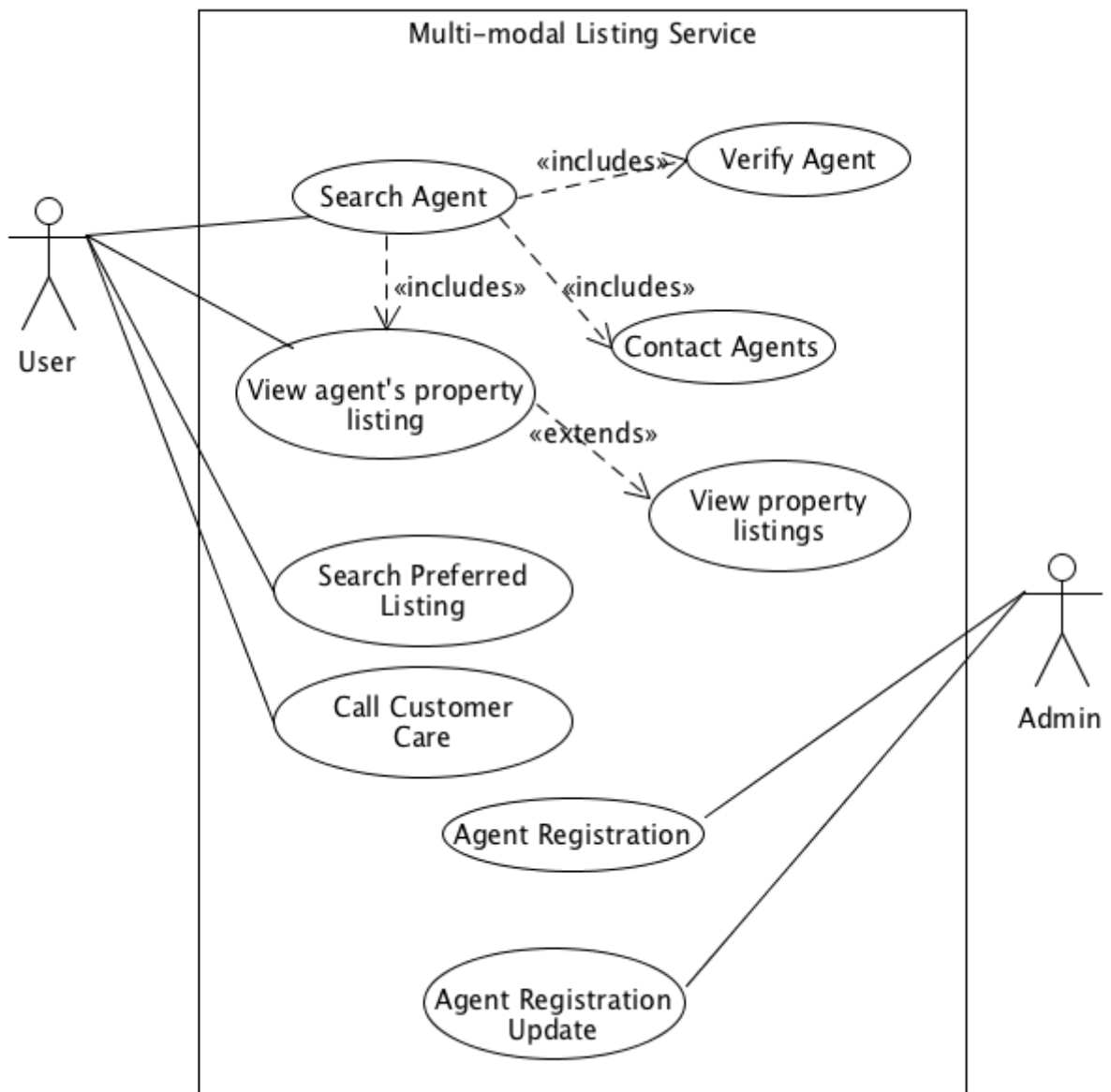
8. Compliance and Security Module

- Ensures compliance with local property regulations, including safety and accessibility standards.
- Encrypts sensitive data and provides role-based access controls to safeguard information.
- Offers audit trails to track changes in critical data for accountability.

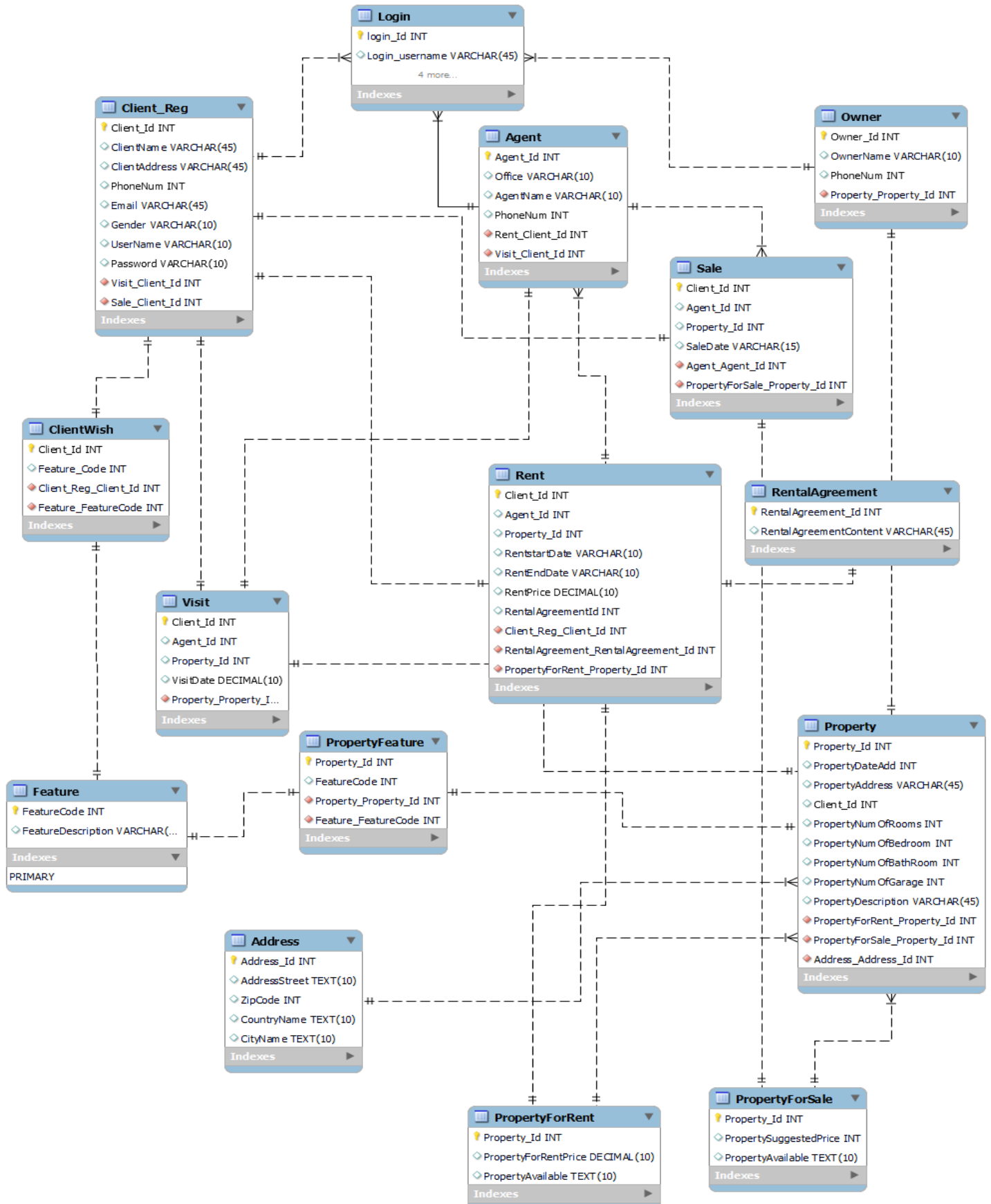
CHAPTER 5

SYSTEM DESIGN

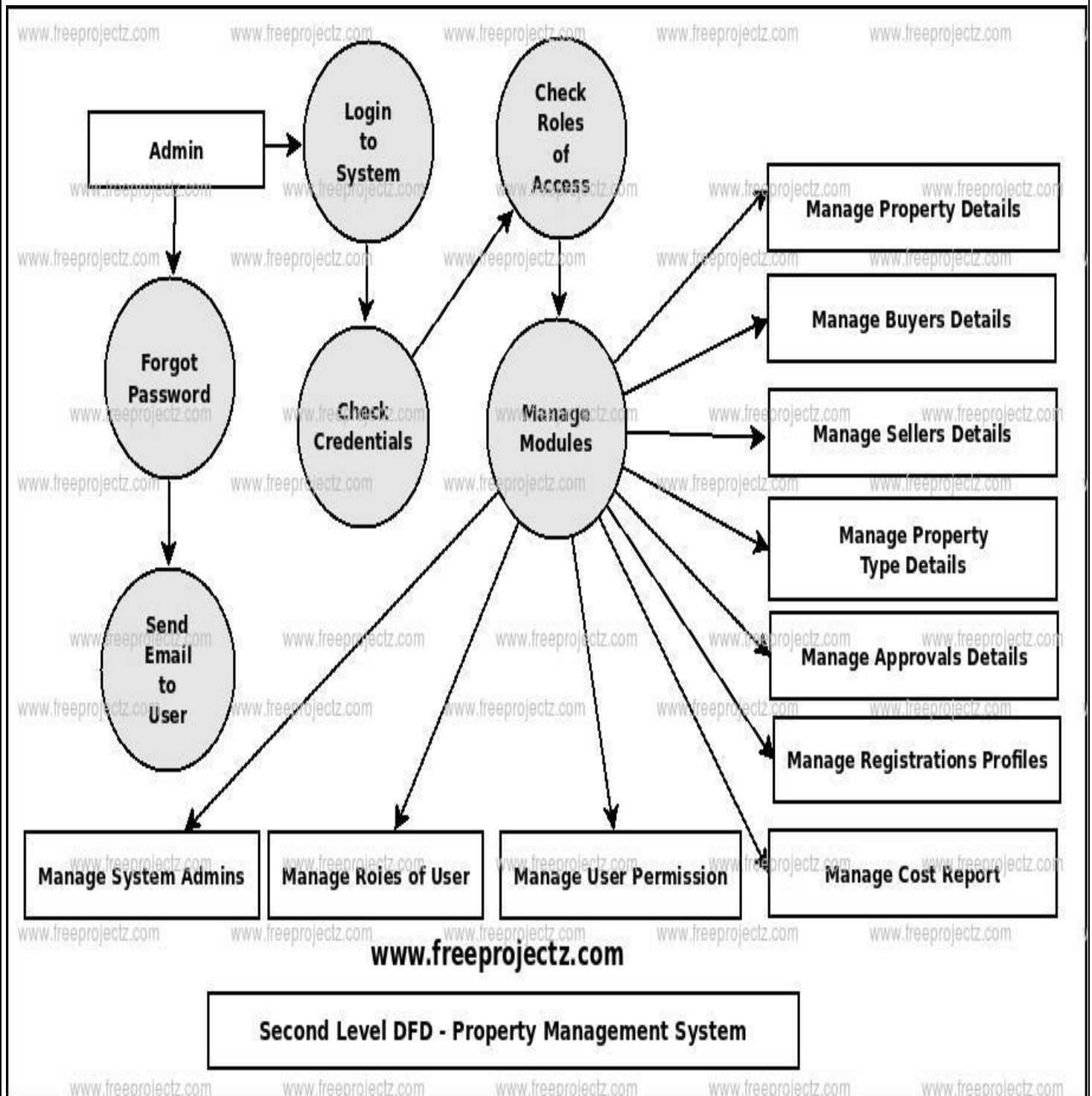
5.1 USE CASE DIAGRAM



5.2 ER DIAGRAM

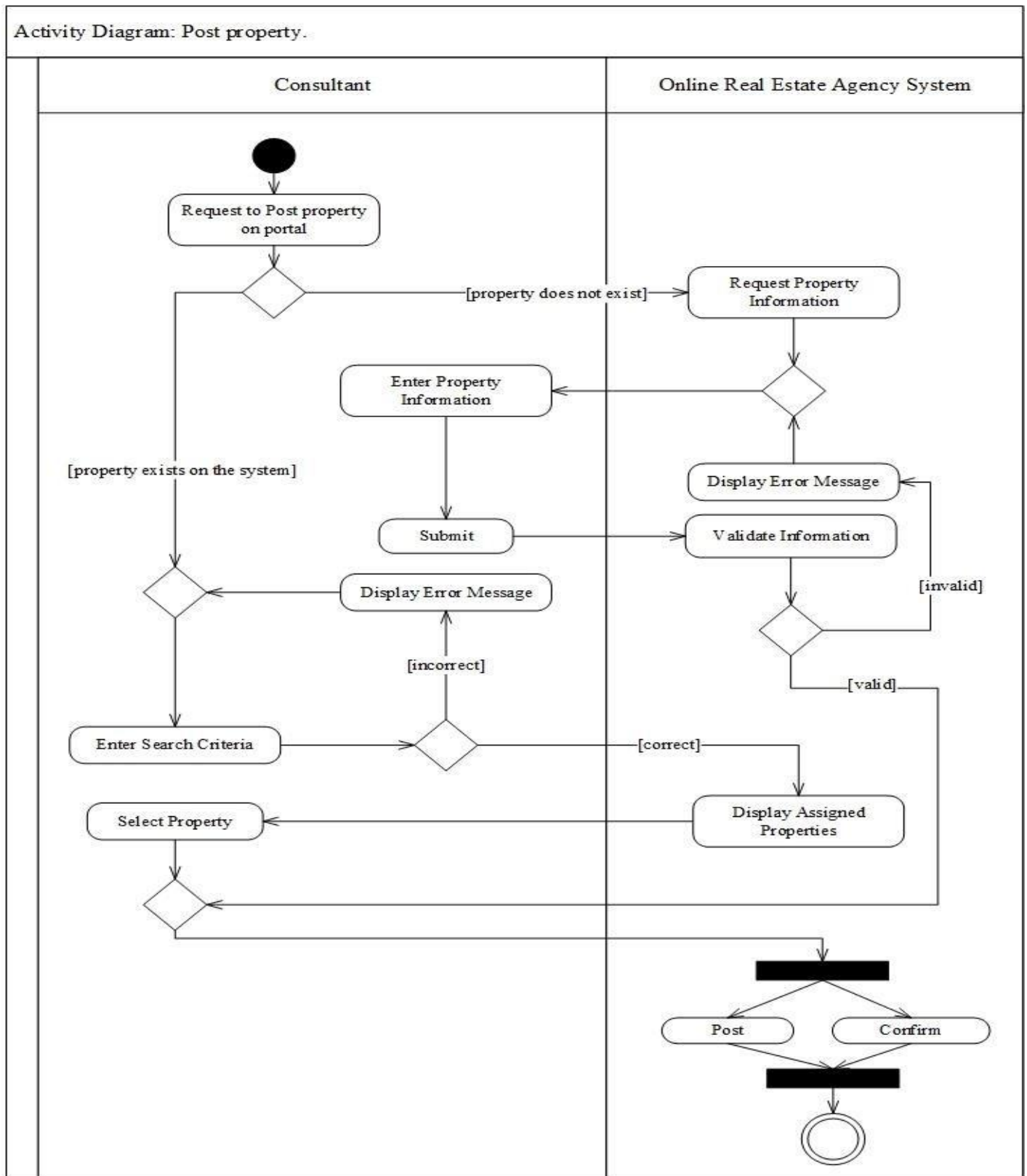


5.3 DFD DIAGRAM



5.4 ACTIVITY DIAGRAM

Activity Diagram: Post property.



CHAPTER 6

SAMPLE CODING

Index.php:

```
<?php $page='dashboard';
include("php/dbconnect.php");
include("php/checklogin.php");
?>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta charset="utf-8" />
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
<title> College Fees Management System</title>
<!-- BOOTSTRAP STYLES-->
<link href="css/bootstrap.css" rel="stylesheet" />
<!-- FONTAWESOME STYLES-->
<link href="css/font-awesome.css" rel="stylesheet" />
<!--CUSTOM BASIC STYLES-->
<link href="css/basic.css" rel="stylesheet" />
<!--CUSTOM MAIN STYLES-->
<link href="css/custom.css" rel="stylesheet" />
<!-- GOOGLE FONTS-->
<link href='http://fonts.googleapis.com/css?family=Open+Sans' rel='stylesheet' type='text/css' />
</head>
<?php
include("php/header.php");
?>
<div id="page-wrapper">
<div id="page-inner">
<div class="row">
<div class="col-md-12">
<h1 class="page-head-line">Dashboard</h1>
</div>
</div>
```

```
<!-- /. ROW -->
<div class="row">
<div class="col-md-4">
<div class="main-box mb-purple">
<a href="student.php">
<i class="fa fa-users fa-5x"></i>
<h4>Total Students: <?php include 'counter/stucount.php'?></h4>
<h5>Manage Students</h5>
</a>
</div>
</div>
<div class="col-md-4">
<div class="main-box mb-green">
<a href="fees.php">
<i class="fa fa-money fa-5x"></i>
<h4>Total Earnings: <?php include 'counter/totalearncount.php'?></h4>
<h5>Collect Fees</h5>
</a>
</div>
</div>
<div class="col-md-4">
<div class="main-box mb-secondary">
<a href="report.php">
<i class="fa fa-th-large fa-5x"></i>
<h4>Available Grades: <?php include 'counter/totalgrade.php'?></h4>
<h5>College Grade Levels</h5>
</a>
</div>
</div>
</div>
<div class="row">
<div class="col-md-4">
<div class="main-box mb-dull">
<a>
<i class="fa fa-toggle-on fa-5x"></i>
```

```
<h5>Active Students: <?php include 'counter/activecount.php'?></h5>
</a>
</div>
</div>
<div class="col-md-4">
<div class="main-box mb-maroon">
<a href="report.php">
<i class="fa fa-file-pdf-o fa-5x"></i>
<h5>View Reports</h5>
</a>
</div>
</div>
<div class="col-md-4">
<div class="main-box mb-yell">
<a href="inactivestd.php">
<i class="fa fa-toggle-off fa-5x"></i>
<h5>In-Active Students: <?php include 'counter/inactivecount.php'?></h5>
<a>
</div>
</div>
</div>
<!-- /. ROW -->
</div>
<!-- /. PAGE INNER -->
</div>
<!-- /. PAGE WRAPPER -->
</div>
<!-- /. WRAPPER -->
<script src="js/jquery-1.10.2.js"></script>
<!-- BOOTSTRAP SCRIPTS -->
<script src="js/bootstrap.js"></script>
<!-- METISMENU SCRIPTS -->
<script src="js/jquery.metisMenu.js"></script>
<!-- CUSTOM SCRIPTS -->
<script src="js/custom1.js"></script></body></html>
```


CHAPTER 7

SCREEN SHOTS

Fig. 7.1. Home Page

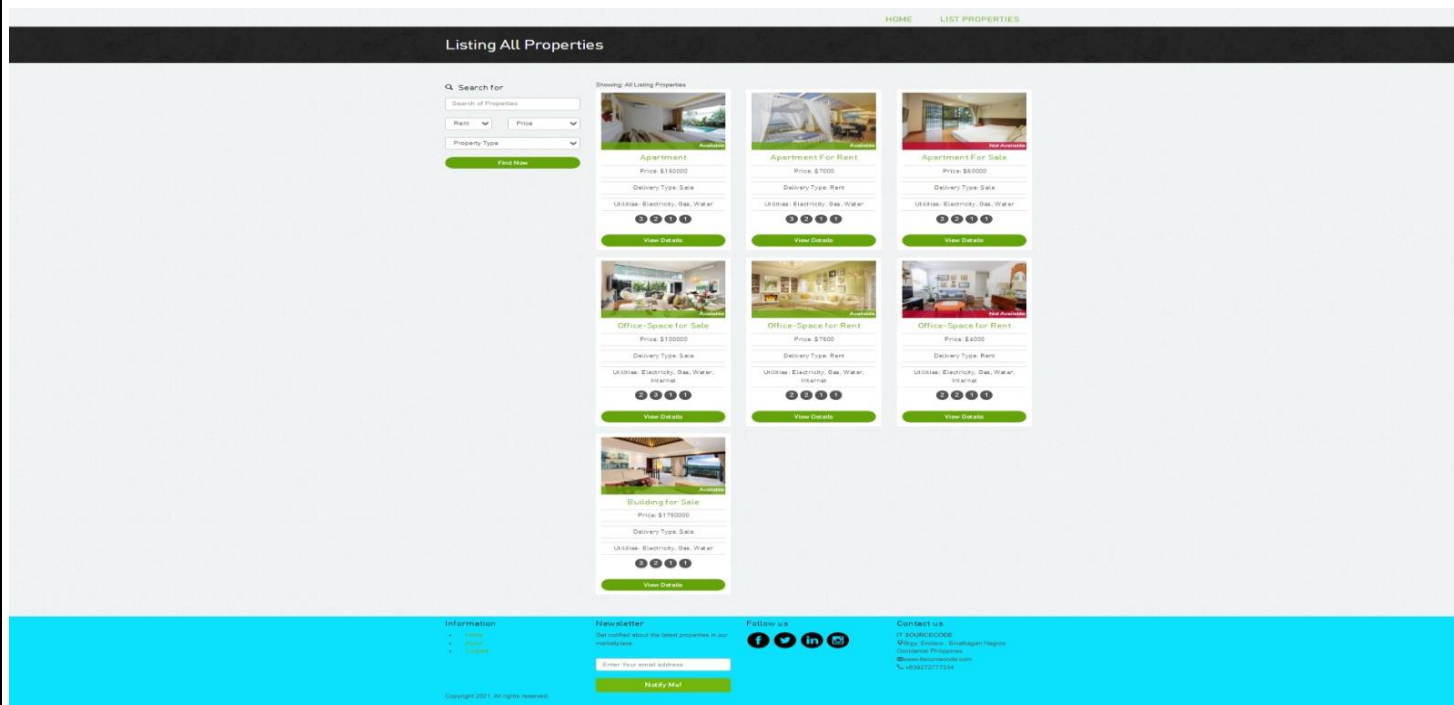


Fig. 7.2. Login page Section

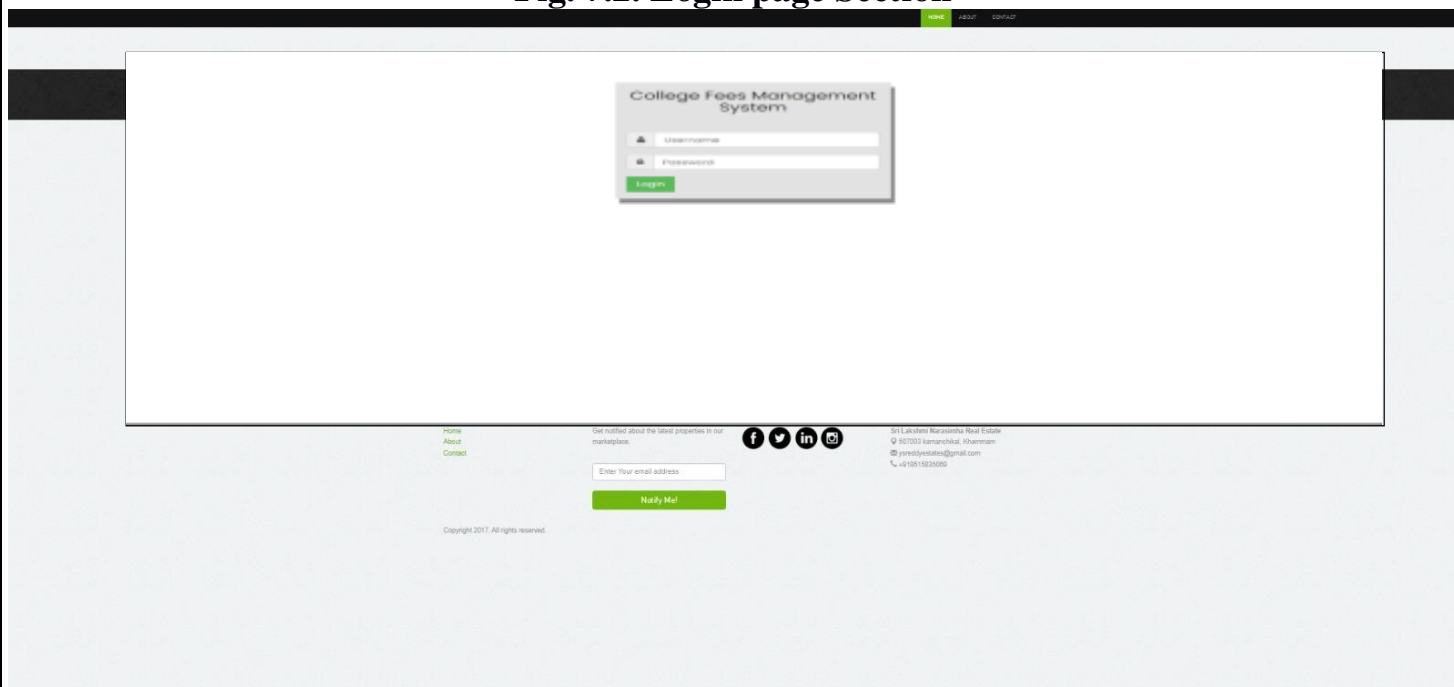
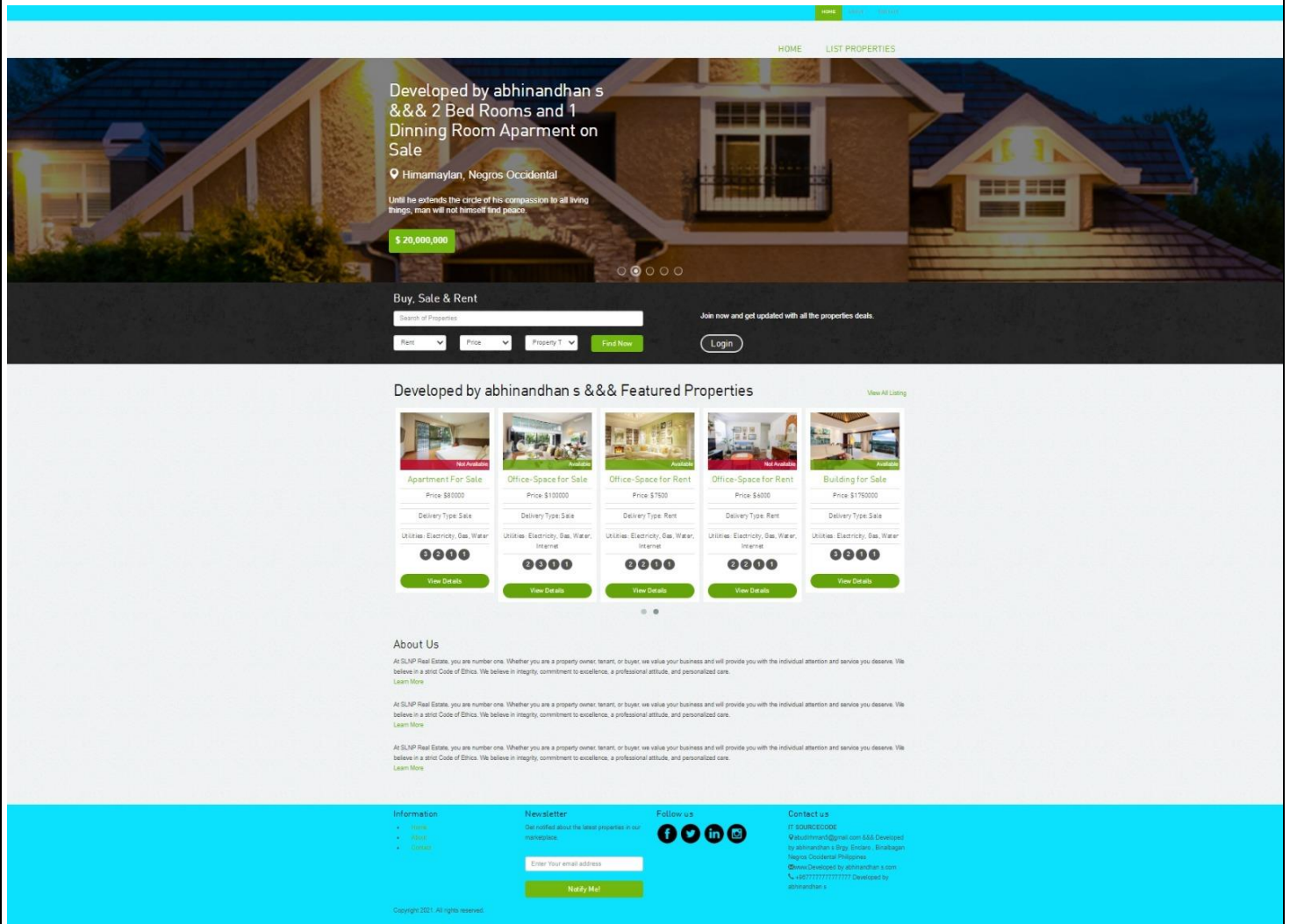


Fig. 7.3. Index Page



CHAPTER 8

CONCLUSION

The Real Estate Management System successfully meets the needs of property owners, managers, and tenants by offering an intuitive and efficient platform to manage property listings, transactions, and communication. The system enhances the ease of property management by automating tasks such as rent collection, maintenance requests, and lease management, reducing the workload on administrative staff and increasing overall operational efficiency.

Key features such as property search, document management, financial tracking, and tenant management provide users with a comprehensive tool for handling all aspects of real estate operations. The user-friendly interface and robust backend architecture ensure that the system is reliable, scalable, and adaptable to meet the evolving needs of the real estate industry.

Looking forward, future enhancements could include integrating advanced analytics for market trends, AI-powered recommendations for property investments, and mobile application support for on-the-go access. Overall, the Real Estate Management System proves to be a valuable asset for streamlining property management processes, ensuring better service for clients, and providing a solid foundation for the future growth of real estate operations.

The Real Estate Management System successfully meets the needs of property owners, managers, and tenants by offering an intuitive and efficient platform to manage property listings, transactions, and communication. The system enhances the ease of property management by automating tasks such as rent collection, maintenance requests, and lease management, reducing the workload on administrative staff and increasing overall operational efficiency.

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SweetAlert2 - <https://sweetalert2.github.io/v10.html>

