# PM SHRI KENDRIYA VIDYALAYA BERHAMPUR


SESSION 2024-25

## A Project Report on

## REAL ESTATEMANAGEMENT SYSTEM

## For

## CBSE 2025 Examination

[As a part of the Computer Science Course (083)]

**SUBMITTED BY :**

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Class :XIIA

Roll NO:

**SUBMITTED TO:**

**MR. S K Misra**

PGT (Computer Science)

# CERTIFICATE

THIS IS TO CERTIFY THAT **SUJAL SEKHAR SASMAL** STUDYING IN CLASS **XII A**, HAS SATISFACTORILY COMPLETED PROJECT WITH THE TITLE **REAL ESTATEMANAGEMENT SYSTEM** UNDER THE GUIDANCE OF **Mr. SAROJ KANTAMISRA, PGT (COMPUTER SCIENCE)** DURING THE ACADEMIC YEAR **2024-25** IN PARTIAL FULFILLMENT OF **"COMPUTER SCIENCE"** PRACTICAL EXAMINATION OF **CENTRAL BOARD OF SECONDARY EXAMINATION (CBSE)**

_____ _____ Internal Examiner

External Examiner

_____

PRINCIPAL

# ACKNOWLEDGEMENT

I warmly acknowledge the continuous encouragement and timely suggestions offered by our Principal **Mr. SHIVAPRIYA DASH**. I extend my hearty thanks for giving me the opportunity to make use of the facilities available in the campus to carry out the project successfully.

I am highly indebted to **Mr. SAROJ KANTA MISRA, (PGT Computer Science**), for the constant supervision, providing necessary information and supporting in completing the project. I would like to express my gratitude towards them for their kind cooperation and encouragement.

Finally, I extend my gratefulness to one and all who are directly or indirectly involved in the successful completion of this project work.

Name: **Sujal Sekhar Sasmal**

Sign:

Class XII-A

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# INTRODUCTION

**"Designing a Comprehensive Real Estate Property Management Platform"**

Real estate management is a comprehensive field that focuses on the administration and oversight of various types of properties, including residential, commercial, and industrial real estate. This management discipline plays a pivotal role in maintaining and enhancing the value of property assets, ensuring that they are well-maintained, profitable, and aligned with the needs of both property owners and tenants. Effective real estate management encompasses a broad range of activities, including property maintenance, financial management, tenant relations, legal compliance, and strategic planning. Its goal is not only to ensure the physical upkeep of the properties but also to create an efficient operational framework that maximizes returns for property investors while meeting the demands of tenants and adhering to local regulations.

A key component of real estate management is **property maintenance**, which involves regular inspections, repairs, and upgrades to ensure the safety and functionality of a property. Well-maintained properties are more likely to retain their value, attract tenants, and minimize costly repairs. **Tenant management** also plays a critical role, as it involves creating and maintaining positive relationships with tenants, handling lease agreements, addressing complaints, and ensuring timely rent collection. By fostering strong tenant relationships, real estate managers can reduce turnover rates and enhance the long-term profitability of the property.

Another essential aspect of real estate management is **financial management**. This includes setting competitive rental prices, budgeting for ongoing expenses, and managing income and expenditures to ensure the property remains financially viable. Property managers must be skilled in financial

reporting, tax compliance, and ensuring that the property's revenue stream is maximized through efficient operational management. Legal compliance is equally important, as real estate managers must navigate complex local, state, and national regulations related to zoning laws, safety codes, lease terms, and tenant rights.

As the real estate industry evolves, the role of technology in property management has become increasingly important. From advanced property management software to digital marketing tools, technology helps streamline day-to-day operations, enhance communication with tenants, and improve decision-making through data analytics. Furthermore, real estate management now embraces sustainability initiatives, with a growing emphasis on eco-friendly building practices, energy-efficient systems, and waste reduction strategies, which not only benefit the environment but also reduce long-term operational costs.

Ultimately, the success of a real estate management project depends on the ability to balance the interests of property owners, tenants, and the surrounding community while achieving financial and operational objectives. Whether managing a single-family home or a large commercial complex, real estate managers must employ a combination of practical skills, legal knowledge, and strategic thinking to ensure the property’s sustained success. This project will explore the key principles and practices that drive effective real estate management, highlighting how the integration of maintenance, financial planning, legal compliance, and technological innovations can contribute to the success of real estate operations.

# HARDWARES  SOFTWARES REQUIRED

## Hardware used:

**While developing the software, the used hardware's are: PC with Intel Core i3 processor having 4.00 GB RAM and other required devices.**

## Software used:

1. **Microsoft Windows® 10 as Operating System.**
2. **Python IDLE as Front-end Development environment.**
3. **MySQL**
4. **Python Connector Module**

# PYTHON

# SOURCE CODE

```
import  mysql.connector




def orderprop():
   db = mysql.connector.connect(host="localhost", user="root", password="admin",
database="realestatemanagement")
   cur = db.cursor()
   try:
      ptype = input("Enter property type: ")
      pcat = input("Enter property category: ")



      query = "SELECT * FROM main_table WHERE PTYPE LIKE %s AND PCAT LIKE %s"
      cur.execute(query, ('%' + ptype + '%', '%' + pcat + '%'))
      data = cur.fetchall()


      if data:
         print("---------------")
         print("Property found!")



         for property in data:
            print("Property ID:", property[0])
            print("Property Category:", property[1])
            print("Property Type:", property[2])
            print("Ownership:", property[3])
            print("Locality:", property[4])
            print("Area in sqft:", property[5])
            print("Price:", property[6])
            print("Ratings:", property[7])
            print("-----------------")
```

```
        choice = input("Do you want to purchase ANY property? (yes/no): ")
        if choice.lower() == 'yes':
            username = input("Enter your name: ")
            orderid = int(input("Enter order ID: "))
            propertyid = int(input("Enter property ID: "))
            pcat=input("Enter property category: ")
            ptype=input("Enter property type: ")
            price=int(input("Enter property price: "))
            s="insert into order_table values ('{}', {}, {}, '{}', '{}',
{})".format(username,orderid,propertyid,pcat,ptype,price)
            cur.execute(s)
            db.commit()
            print("========= Order placed successfully ==============")
            print("Thank you for choosing us!")
            print("================================================")
        else:
            print("Thank you for visiting!")
            print("================================================")
    else:
        print("========== Invalid input: username and order ID are required ==========")

  except ValueError:
    print("========== Invalid input: username and order ID are required ==========")

  else:
    after_sigin()




def viewpropertycategorydetails():
  print(">>>>>>>>> PROPERTY CATEGORIES <<<<<<<<")
```

```
    db = mysql.connector.connect(host="localhost", user="root", password="admin",
database="realestatemanagement")
    cur = db.cursor()

    s = "SELECT DISTINCT PCAT FROM main_table"
    cur.execute(s)
    data = cur.fetchall()

    print("======= Available Property Categories =======")
    for i in data:
        print("*", i[0])

    print("\n")

    try:
        print("=====SELECT YOUR CHOICE FROM THE ABOVE======")

        inpcat = input("Enter your desired property category:- ")

        k = "SELECT * FROM main_table WHERE PCAT='{}'".format(inpcat)
        cur.execute(k)
        det = cur.fetchall()

        if det:
            print("====== PROPERTY DETAILS ======")
            for a in det:
                print("-----------------")
                print("Property ID:", a[0])
                print("Category:", a[1])
                print("Type:", a[2])
                print("Ownership:", a[3])
                print("Locality:", a[4])
                print("Area in sqft:", a[5])
```

```
            print("Price:", a[6])
            print("Ratings:", a[7])
            print("-----------------")
            print("\n")
        else:
            print(" ========== No properties found for the selected category ==========")
            after_sigin()

    except ValueError:
        print("<<<<<< INVALID INPUT >>>>>>")
        after_sigin()



    else:
        after_sigin()
        db.commit()



def viewpropertycategory():#to show the property categories

db=mysql.connector.connect(host="localhost",user="root",password="admin",database="realestatemanagement")
    cur=db.cursor()
    s="select distinct PCAT from main_table"

    cur.execute(s)
    a=cur.fetchall()
    print("========== PROPERTY CATEGORIES ============")
    for i in a:
        print("*",i[0])
    print("\n")
    after_sigin()
    db.commit()
```

```
def deleteproperty():# to delete the details

db=mysql.connector.connect(host="localhost",user="root",password="admin",database="realestatemanagement")
   cur=db.cursor()
   print("<<<<<<DELETING PROPERTY DETAILS FROM THE SOFTWARE>>>>>>")
   print("\n)")
   print("====== DO AT YOUR OWN RISK ======")

   try:
      pid=int(input("enter property id:- "))
      xdel="delete from main_table where PID={}".format(pid)
      cur.execute(xdel)
      print("\n")
      print("*******PROPERTY DETAILS DELETED SUCCESSFULLY*******")
      print("\n")
      db.commit()


   except ValueError:
      print(" ========= INVALID INPUT ======== ")
      after_login()

   except:
      print(" ============ PROPERTY DOES NOT EXIST ============== ")
      after_login()

   else:
      after_login()
```

```
def view_order_details():
    db = mysql.connector.connect(host="localhost", user="root", password="admin",
database="realestatemanagement")
    cur = db.cursor()

    try:

        query = "SELECT * FROM order_table"
        cur.execute(query)
        orders = cur.fetchall()

        if orders:
            print("===== ORDER DETAILS OF CUSTOMERS =====")
            for order in orders:
                print("-------------------------")
                print("Username:", order[0])
                print("Order ID:", order[1])
                print("Property ID:", order[2])
                print("Property Category:", order[3])
                print("Property Type:", order[4])
                print("Price:", order[5])
                print("-------------------------")
                print("\n")
        else:
            print("======== No orders found ==========")
            print("\n")

    except:
        print(" ========== ERROR OCCURRED ============== ")
        after_login()

    else:
```

```
    after_login()




def updateproperty():
    db = mysql.connector.connect(host="localhost", user="root", password="admin",
database="realestatemanagement")
    cur = db.cursor()

    print("<<<<<< UPDATING PROPERTY DETAILS >>>>>>")

    try:

        property_id = int(input("Enter the Property ID to update: "))
        cur.execute("SELECT * FROM main_table WHERE PID = %s", (property_id,))
        property_details = cur.fetchone()

        if property_details:

            print("Current Property Details:")
            print("-------------------------")
            print("Property ID:", property_details[0])
            print("Category:", property_details[1])
            print("Type:", property_details[2])
            print("Ownership:", property_details[3])
            print("Locality:", property_details[4])
            print("Area in sqft:", property_details[5])
            print("Price:", property_details[6])
            print("Ratings:", property_details[7])
            print("-------------------------")
```

```
        new_category = input("Enter new property category:- ")
        new_type = input("Enter new property type:- ")
        new_price = int(input("Enter new price:- "))
        new_ownership = input("Enter new ownership status:- ")



        update_query = """
        UPDATE main_table
        SET PCAT = %s, PTYPE = %s, PRICE = %s, OWNERSHIP = %s
        WHERE PID = %s
        """
        cur.execute(update_query, (new_category, new_type, new_price, new_ownership, property_id))
        db.commit()

        print("******* PROPERTY DETAILS UPDATED SUCCESSFULLY *******")
        print("\nUpdated Property Details:")
        print("-------------------------")
        print("Property ID:", property_id)
        print("Category:", new_category)
        print("Type:", new_type)
        print("Ownership:", new_ownership)
        print("Price:", new_price)
        print("-------------------------")
    else:
        print("========== PROPERTY NOT FOUND ==========")

except ValueError:
    print("========= INVALID INPUT: Please enter a valid Property ID =========")
    updateproperty()
```

```
    else:
        db.commit()
        after_login()




def viewpropertytype():#to show the types of property



db=mysql.connector.connect(host="localhost",user="root",password="admin",database="realestatemanagement")
    cur=db.cursor()


    a="select distinct PTYPE from main_table"
    cur.execute(a)
    qnot=cur.fetchall()
    print("="*5,"PROPERTY TYPES","="*5)


    for i in qnot:
        print("*",i[0])
    print("\n")
    print("<<<<<<<< HOPE YOU ARE GETTING APPROPRIATE RESULTS >>>>>>>>")
    print("\n")
    after_sigin()
    db.commit()







def viewpropertyarea(): #knowing details under required area.



db=mysql.connector.connect(host="localhost",user="root",password="admin",database="realestatemanagement")
```

```
cur=db.cursor()


try:
   print(" <<<< PRICE DETAILS >>>> ")
   print("\n")
   k="select * from main_table"
   cur.execute(k)
   data=cur.fetchall()
   a=int(input("enter under required area:- "))
   for i in data:

      if i[5]<=a:
         print("--------------------")


         print(">Property ID:", i[0])
         print(">Property Category:", i[1])
         print(">Property Type:", i[2])
         print(">Ownership:", i[3])
         print(">Locality:", i[4])
         print(">Area in sqft:", i[5])
         print(">Price:", i[6])
         print(">Ratings:", [7])
         print("--------------------")
         print("\n")


      else:
         print(" FOR -",i[4],"-REQUIRED AREA NOT FOUND")
         print("-----------------------")
         print("\n")


except ValueError:
```

```
        print(" <<<<<<<< INVALID INPUT >>>>>>>>")
        print("\n")
        after_sigin()

    else:

        print("...HOPE YOU R GETTING APPROPRIATE RESULTS...")
        after_sigin()




def viewpropertylocation():
    db = mysql.connector.connect(host="localhost", user="root", password="admin",
database="realestatemanagement")
    cur = db.cursor()
    try:
        print(" <<<< LOCATION DETAILS >>>> ")
        print("\n")
        l = input("ENTER YOUR DESIRED LOCATION:- ")
        s = "SELECT * FROM main_table"
        cur.execute(s)
        loc = cur.fetchall()
        print("-----PROPERTY DETAILS AT A CERTAIN LOCATION-----")
        print("\n")
        print("NEAR:-", l)
        print("\n")



        for i in loc:
            if l == i[4]:
                print("-----------------")
                print("CATEGORY:-", i[1])
```

```
            print("PROPERTY TYPE:-", i[2])
            print("PRICE-", i[6])
            print("-----------------")
            print("\n")


    if not any(l == i[4] for i in loc):
        print("======== No properties found in the specified location ========")


  except:
    print("======== ERROR OCCURED ========")
    viewpropertylocation()
  else:

    after_sigin()




def viewpropertyownership():
  print("-----CHECK FOR PROPERTY OWNERSHIP-----")
  print("\n")
  db = mysql.connector.connect(host="localhost", user="root", password="admin",
database="realestatemanagement")
  cur = db.cursor()
  s = "SELECT * FROM main_table"
  cur.execute(s)

  try:
    p_category = input("Enter your desired property category: ")
    p_type = input("Enter your required property type: ")
    print("\n")
    data = cur.fetchall()
    found = False
```

```
        for i in data:
            if p_category == i[1] and p_type == i[2]:
                found = True
                print("------------------")
                print("FOR--", i[4])
                print("CATEGORY:", i[1])
                print("TYPE:", i[2])
                print("==OWNERSHIP:==", i[3])
                print("LOCATION:", i[4])
                print("------------------")
                print("\n")

        if not found:
            print("======== No properties found matching the criteria ========")

    except ValueError:
        print(" <<<<<<< INVALID INPUT >>>>>>>")
        print("\n")
        viewpropertyownership()

    else:
        print(" -----------THANK YOU---------- ")
        after_sigin()



def sign_up_user():

    print("-----SIGN UP USER-----")
    print("\n")
```

```
db=mysql.connector.connect(host="localhost",user="root",password="admin",database="realestatemanagement")
   print("Enter 1 for Userlogin ")
   print("Enter 2 for Exit")
   print("\n")
   ch=int(input("Enter your choice:- "))

   if ch==1:
      userloginfo()
   elif ch==2:
      exit()
   else:
      print("====== invalid input ======")
      print("\n")
      sign_up_user()




def userloginfo():

   db = mysql.connector.connect(host="localhost", user="root", password="admin",
database="realestatemanagement")
   cur = db.cursor()

   print(" -----LOGIN PORTAL FOR USERS-----")

   try:

      cur.execute("SELECT * FROM user_login")
      user_data = cur.fetchall()
```

```
    username = input("Enter username:- ")
    password = input("Enter password:- ")

    user_found = False
    for user in user_data:
        if user[0] == username and user[1] == password:
            user_found = True
            print(" === USER EXIST === ")
            print("\n")
            print(" USERNAME:", user[0])
            print(" PASSWORD:", user[1])
            break

    if not user_found:
        print("\n")



except ValueError():
    print(" === INVALID INPUT === ")
    print("\n")
    userloginfo()



else:
    print(" ====== LOGIN HAS BEEN SUCCESSFUL ======= ")
    print("\n")
    after_sigin()

finally:
    db.commit()
```

```
def after_sigin():



   print("======== WELCOME TO REAL ESTATE MANAGEMENT SYSTEM ========")
   print("\n")
   print("-> 1 for view all properties: ")
   print("-> 2 for view all property types: ")
   print("-> 3 for view property location: ")
   print("-> 4 for view property details under required area: ")
   print("-> 5 for view property ownership: ")
   print("-> 6 for view rental properties: ")
   print("-> 7 for view property details under required category: ")
   print("-> 8 for view property categories: ")
   print("-> 9 for order property:")
   print("-> 10 for exit:")
   print("\n")


   ch=int(input("Enter your choice:- "))


   if ch==1:
      viewallproperty()
   elif ch==2:
      viewpropertytype()
   elif ch==3:
      viewpropertylocation()
   elif ch==4:
      viewpropertyarea()
   elif ch==5:
      viewpropertyownership()
   elif ch==6:
      viewrentalproperty()
```

```
    elif ch==7:
        viewpropertycategorydetails()
    elif ch==8:
        viewpropertycategory()
    elif ch==9:
        orderprop()

    elif ch==10:
        exit()




    else:
        print("======== invalid choice ========")
        print("\n")
        after_sigin()




def addproperty(): # adding details of a new property

db=mysql.connector.connect(host="localhost",user="root",password="admin",database="realestatemanagement")
    cur=db.cursor()
    print("<<<<<<ADDING PROPERTY DETAILS INTO THE SOFTWARE>>>>>>")
    print("\n")

    try:
      pcat=input("enter property category: ")
      ptype=input("enter property type: ")
      pid=int(input("enter p-id: "))
      area=int(input("enter area in sqft: "))
```

```
    loc=input("enter locality: ")
    own=input("enter ownership: ")
    price=int(input("enter price: "))
    rat=int(input("enter customer ratings: "))
    xnot="insert into main_table values({},'{}','{}','{}','{}',{},{},'{}')".format(pid,pcat,ptype,own,loc,area,price,rat)

    cur.execute(xnot)
    print("\n")
    db.commit()

  except ValueError:
    print("\n")
    print(" <<<<<<< INVALID INPUT >>>>>>> ")
    print("\n")
    addproperty()

  else:
    print(" <<<<<< PROPERTY DETAILS ADDED SUCCESSFULLY >>>>>>")
    print("\n")
    after_login()



def viewallproperty():#showing all the updated property details

db=mysql.connector.connect(host="localhost",user="root",password="admin",database="realestatemanagem
ent")
  cur=db.cursor()
  print("<<<<<<<<<<<< UPDATED PROPERTY DETAILS >>>>>>>>>>>>>")
  print("\n")
  a="select * from main_table"

  cur.execute(a)
```

```
    data=cur.fetchall()
    print(" ======== ALL PROPERTIES ARE SHOWN BELOW ========= ")

    for i in data:
        print("\n")
        print("---------------")
        print("Property id:",i[0])
        print("Property category:",i[1])
        print("Property type:",i[2])
        print("Ownership:",i[3])
        print("Locality:",i[4])
        print("Area in sqft:",i[5])
        print("Price:",i[6])
        print("Customer ratings:",i[7])
        print("----------------")
        print("\n")
    after_sigin()

    db.commit()




def adminloginfo(): #admin login portal

db=mysql.connector.connect(host="localhost",user="root",password="admin",database="realestatemanagem
ent")
    cur=db.cursor()
    print("******LOGIN PORTAL FOR ADMIN*******")

    try:
        x=input("Enter admin name:- ")
        y=int(input("Enter password:- "))
```

```
    a="select * from admin_login"
    cur.execute(a)
    ad=cur.fetchall()

    for i in ad:
       if i[0]==x and i[1]==y:
          print("LOGIN FOR ADMIN")
          print("NAME:",x)
          print("PASS:",y)
          print("\n")

       else:
          print(" ======== DATA UNMATCHED ========")
          print(" ======= PLEASE TRY AGAIN ========")
          print("\n")
          adminloginfo()



except ValueError:

    print(" <<<<<<< INVALID INPUT >>>>>>")
    print("\n")
    print("  <<<<< TRY AGAIN >>>>>")
    adminloginfo()

else:
    print("<<<< LOGIN HAS DONE SUCCESSFULLY >>>>")
    print("\n")
    after_login()
```

```
def after_login():
    print(" ======== WELCOME TO REAL ESTATE MANAGEMENT SYSTEM  ========")
    print("\n")
    print("=========ADMIN PAGE FOR PROPERTY MODIFICATION ONLY=======")
    print("\n")

    print(" PRESS 1 FOR ADDING PROPERTY ")
    print(" PRESS 2 FOR DELETING PROPERTY ")
    print(" PRESS 3 FOR UPDATING PROPERTY ")
    print(" PRESS 4 FOR VIEWING ORDER DETAILS OF CUSTOMERS")
    print(" PRESS 5 FOR EXIT ")
    print("\n")
    choice=int(input("ENTER YOUR CHOICE:- "))
    if choice==1:
        addproperty()
    elif choice==2:
        deleteproperty()
    elif choice==3:
        updateproperty()
    elif choice==4:
        view_order_details()
    elif choice==5:
        exit()



    else:
        print("========= INVALID CHOICE ==========")
        print("\n")
        print("====== PLEASE TRY AGAIN ======")
        after_login()
```

```
def viewrentalproperty():



    db= mysql.connector.connect(host="localhost", user="root", password="admin",
database="realestatemanagement")
    cur = db.cursor()


    print("<<<<<< VIEWING RENTAL PROPERTIES >>>>>>")
    print("\n")


    try:


        query = "SELECT * FROM main_table WHERE OWNERSHIP = 'Rent'"
        cur.execute(query)
        rental_properties = cur.fetchall()



        if rental_properties:
            print("-----RENTAL PROPERTY DETAILS-----")
            for property in rental_properties:
                print("-----------------")
                print("Property ID:", property[0])
                print("Property Category:", property[1])
                print("Property Type:", property[2])
                print("Ownership:", property[3])
                print("Locality:", property[4])
                print("Area in sqft:", property[5])
                print("Price Per quarter", property[6])
                print("Ratings:", property[7])
                print("-----------------")
```

```
            print("\n")
        else:
            print("======== No rental properties found ==========")


    except :
        print("===== An error occurred ========")


    else:
        after_sigin()



while True:


    print("=====================================================")
    print("================WELCOME TO SPEDOSERV=================")
    print("============REALESTATE MANAGEMENT SYSTEM==============")
    print("=====================================================")
    print("\n")
    print("=========PLEASE UNDERGO THE  FOLLOWING STEPS TO ACCESS THIS SOFTWARE=========")
    print("\n")
    print("1. LOGIN AS ADMIN")
    print("2. LOGIN AS USER")
    print("3. EXIT")
    try:
        choice = input("ENTER YOUR CHOICE:- ")
        if choice == "1":
            adminloginfo()
        elif choice == "2":
            sign_up_user()
        elif choice == "3":
            print("===== THANK YOU FOR USING SPEDOSERV ======")
            break
```

```
except ValueError:


    print(" <<<<<< INVALID INPUT >>>>>>")
    print("\n")
    print(" <<<<<<< PLEASE TRY AGAIN >>>>>>")
else:
    print("=======THANK YOU=======")
    print("\n")
```

# DATABASE

## #TABLE FOR ALL PROPERTY DETAILS:-

```
mysql> select * from main_table;
+------+-------------+-----------+-----------+-------------+------------+---------+---------+
| PID  | PCAT        | PTYPE     | OWNERSHIP | LOCALITY    | AREAinsqft | PRICE   | RATINGS |
+------+-------------+-----------+-----------+-------------+------------+---------+---------+
|    1 | Residential | Apartment | Sale      | Downtown    |       1200 |  250000 | 4       |
|    2 | Commercial  | Office    | Rent      | Uptown      |       1500 |    3000 | 5       |
|    3 | Residential | Villa     | Sale      | Suburb      |       2500 |  500000 | 3       |
|    4 | commercial  | theater   | sale      | losangles   |       2300 | 1200000 | 4       |
|    5 | Apartment   | Studio    | Sale      | Downtown    |        600 |  120000 | 4       |
|    6 | Villa       | Studio    | Sale      | Countryside |       3000 |  500000 | 5       |
|    7 | Apartment   | 2BHK      | Rent      | Uptown      |       1100 |    2200 | 4       |
|    8 | Condo       | 1BHK      | Sale      | City Center |        750 |  180000 | 3       |
|    9 | Villa       | 3BHK      | Rent      | Suburb      |       2500 |  100000 | 4       |
|   10 | Apartment   | Studio    | Sale      | Downtown    |       1200 |  250000 | 5       |
|   11 | Condo       | 3BHK      | Rent      | City Center |       1500 |    3500 | 4       |
|   12 | Villa       | 5BHK      | Sale      | Countryside |       4000 |  700000 | 5       |
|   13 | Apartment   | 1BHK      | Rent      | Uptown      |        800 |    1500 | 3       |
|   14 | Condo       | 2BHK      | Sale      | City Center |        950 |  220000 | 4       |
|   15 | Villa       | 4BHK      | Rent      | Suburb      |       2800 |    3500 | 4       |
|   16 | Apartment   | Studio    | Sale      | Downtown    |       1300 |  270000 | 5       |
|   17 | Condo       | 1BHK      | Rent      | City Center |        900 |    2000 | 4       |
|   18 | Villa       | Studio    | Sale      | Countryside |       2200 |  400000 | 5       |
|   19 | Apartment   | 2BHK      | Rent      | Uptown      |       1150 |    2400 | 4       |
|   20 | Condo       | 2BHK      | Sale      | City Center |       1000 |  230000 | 4       |
|   21 | Villa       | 3BHK      | Rent      | Downtown    |       9700 |  230000 | 5       |
|   22 | Apartment   | 2BHK      | Sale      | Uptown      |       5600 |  102000 | 4       |
+------+-------------+-----------+-----------+-------------+------------+---------+---------+
```

## #LOGIN TABLE FOR USERS:-

```
mysql> select * from user_login;
+-------------+-------------+
| username    | password    |
+-------------+-------------+
| sujal       |         123 |
| sankit      |         456 |
| sidhant     |         789 |
| pratyasha   |          10 |
| AYUSH       |           1 |
+-------------+-------------+
```

# #TABLE FOR RENTAL PROPERTIES:-

```
mysql> select * from pforental;
+-------------+--------------------+------+--------+
| ptype       | loc                | area | price  |
+-------------+--------------------+------+--------+
| Apartment   | Downtown           | 800  |   1200 |
| Villa       | Suburbs            | 1500 |   2500 |
| Studio      | City Center        | 400  |    800 |
| Condo       | Uptown             | 1000 |   1800 |
| Bungalow    | Countryside        | 1200 |   2000 |
| Loft        | Industrial Area    | 900  |   1500 |
+-------------+--------------------+------+--------+
```

# #TABLE FOR ORDER DETAILS OF CUSTOMERS:-

```
mysql> select * from order_table;
+----------+---------+---------+---------------+-----------+-----------+
| username | orderid | prop_id | prop_category | prop_type | price     |
+----------+---------+---------+---------------+-----------+-----------+
| doe      |     101 |       1 | Apartment     | 2BHK      | 250000.00 |
| smith    |     102 |       2 | Villa         | Studio    | 350000.00 |
| alice    |     103 |       3 | Condo         | 1BHK      | 180000.00 |
| bob      |     104 |       4 | Apartment     | 1BHK      | 150000.00 |
| charlie  |     105 |       5 | Villa         | Studio    | 500000.00 |
| david    |     106 |       6 | Condo         | 2BHK      | 220000.00 |
| eve      |     107 |       7 | Apartment     | Studio    | 270000.00 |
| frank    |     108 |       8 | Villa         | 3BHK      | 300000.00 |
| grace    |     109 |       9 | Condo         | Studio    | 240000.00 |
| henry    |     110 |      10 | Apartment     | 1BHK      | 120000.00 |
| ayush    |     111 |       9 | Villa         | 3BHK      | 100000.00 |
| smruti   |     112 |      14 | Condo         | 2BHK      | 220000.00 |
| sujal    |     123 |       3 | commercial    | vending   |  76890.00 |
+----------+---------+---------+---------------+-----------+-----------+
```

# #OUTPUTS#

## # DISPLAYING MAIN MENU :-

```
==========================================================
================WELCOME TO SPEDOSERV======================
============REALESTATE MANAGEMENT SYSTEM==============
==========================================================


==========PLEASE UNDERGO THE  FOLLOWING STEPS TO ACCESS THIS SOFTWARE==========


1. LOGIN AS ADMIN
2. LOGIN AS USER
3. EXIT
ENTER YOUR CHOICE:-
```

## # LOGIN AS ADMIN:-

```
******LOGIN PORTAL FOR ADMIN*******
Enter admin name:- sujal
Enter password:- 123
LOGIN FOR ADMIN
NAME: sujal
PASS: 123



<<<< LOGIN HAS DONE SUCCESSFULLY >>>>
```

# # ADMIN PAGE :-:-

======== WELCOME TO REAL ESTATE MANAGEMENT SYSTEM ========

==========ADMIN PAGE FOR PROPERTY MODIFICATION ONLY=======

PRESS 1 FOR ADDING PROPERTY
PRESS 2 FOR DELETING PROPERTY
PRESS 3 FOR UPDATING PROPERTY
PRESS 4 FOR VIEWING ORDER DETAILS OF CUSTOMERS
PRESS 5 FOR EXIT

ENTER YOUR CHOICE:-

---

# # ADDING PROPERTY:-

ENTER YOUR CHOICE:- 1
<<<<<<ADDING PROPERTY DETAILS INTO THE SOFTWARE>>>>>>

enter property category: Villa
enter property type: 5BHK
enter p-id: 23
enter area in sqft: 7600
enter locality: Downtown
enter ownership: Sale
enter price: 120000
enter customer ratings: 5

<<<<<< PROPERTY DETAILS ADDED SUCCESSFULLY >>>>>>

---

# #UPDATING PROPERTY DETAILS:-

```
ENTER YOUR CHOICE:- 3
<<<<<< UPDATING PROPERTY DETAILS >>>>>>
Enter the Property ID to update: 22
Current Property Details:
-------------------------
Property ID: 22
Category: Apartment
Type: 2BHK
Ownership: Sale
Locality: Uptown
Area in sqft: 5600
Price: 102000
Ratings: 4
-------------------------
Enter new property category:- Villa
Enter new property type:- 3BHK
Enter new price:- 56000
Enter new ownership status:- Rent
******* PROPERTY DETAILS UPDATED SUCCESSFULLY *******

Updated Property Details:
-------------------------
Property ID: 22
Category: Villa
Type: 3BHK
Ownership: Rent
Price: 56000
```

# #SHOWING ORDER DETAILS :-

```
ENTER YOUR CHOICE:- 4
====== ORDER DETAILS OF CUSTOMERS ======
-------------------------
Username: nikhil
Order ID: 116
Property ID: 22
Property Category: Apartment
Property Type: 2BHK
Price: 102000
-------------------------
```

SO ON....

# #LOGIN AS USER:-

```
ENTER YOUR CHOICE:- 2
-----SIGN UP USER-----


Enter 1 for Userlogin
Enter 2 for Exit


Enter your choice:- 1
 -----LOGIN PORTAL FOR USERS-----
Enter username:- sankit
Enter password:- 456


 ====== LOGIN HAS BEEN SUCCESSFUL =======


======== WELCOME TO REAL ESTATE MANAGEMENT SYSTEM ========


-> 1 for view all properties:
-> 2 for view all property types:
-> 3 for view property location:
-> 4 for view property details under required area:
-> 5 for view property ownership:
-> 6 for view rental properties:
-> 7 for view property details under required category:
-> 8 for view property categories:
-> 9 for order property:
-> 10 for exit:


Enter your choice:-
```

# #VIEWING ALL PROPERTY DETAILS:-

======== ALL PROPERTIES ARE SHOWN BELOW =========

---

Property id: 1
Property category: Residential
Property type: Apartment
Ownership: Sale
Locality: Downtown
Area in sqft: 1200
Price: 250000
Customer ratings: 4

---

---

Property id: 2
Property category: Commercial
Property type: Office
Ownership: Rent
Locality: Uptown
Area in sqft: 1500
Price: 3000
Customer ratings: 5

---

---
Property id: 3
Property category: Residential
Property type: Villa
Ownership: Sale
Locality: Suburb
Area in sqft: 2500
Price: 500000
Customer ratings: 3
---

---
Property id: 4
Property category: commercial
Property type: theater
Ownership: sale
Locality: losangles
Area in sqft: 2300
Price: 1200000
Customer ratings: 4
---

**SO ON..**

## # SHOWING ALL PROPERTY CATEGORIES:-

Enter your choice:- 8
========== PROPERTY CATEGORIES ==========
* Residential
* Commercial
* Apartment
* Villa
* Condo

# # DETAILS FOR A SPECIFIC LOCATION:-

```
Enter your choice:- 3
 <<<< LOCATION DETAILS >>>>


ENTER YOUR DESIRED LOCATION:- Downtown
-----PROPERTY DETAILS AT A CERTAIN LOCATION-----


NEAR:- Downtown


----------------
CATEGORY:- Residential
PROPERTY TYPE:- Apartment
PRICE- 250000
----------------


----------------
CATEGORY:- Apartment
PROPERTY TYPE:- Studio
PRICE- 120000
----------------


----------------
CATEGORY:- Apartment
PROPERTY TYPE:- Studio
PRICE- 250000
----------------
```

# # DETAILS UNDER REQUIRED AREA:-

```
Enter your choice:- 4
 <<<< PRICE DETAILS >>>>


enter under required area:- 1020
 FOR - Downtown -REQUIRED AREA NOT FOUND
----------------------


 FOR - Uptown -REQUIRED AREA NOT FOUND
----------------------


 FOR - Suburb -REQUIRED AREA NOT FOUND
----------------------


 FOR - losangles -REQUIRED AREA NOT FOUND
----------------------



--------------------
>Property ID: 5
>Property Category: Apartment
>Property Type: Studio
>Ownership: Sale
>Locality: Downtown
>Area in sqft: 600
>Price: 120000
>Ratings: [7]
--------------------
```

## #SHOWING RENTAL PROPERTIES:-

```
Enter your choice:- 6
<<<<<< VIEWING RENTAL PROPERTIES >>>>>>


-----RENTAL PROPERTY DETAILS-----
-----------------
Property ID: 2
Property Category: Commercial
Property Type: Office
Ownership: Rent
Locality: Uptown
Area in sqft: 1500
Price Per quarter 3000
Ratings: 5
-----------------


-----------------
Property ID: 7
Property Category: Apartment
Property Type: 2BHK
Ownership: Rent
Locality: Uptown
Area in sqft: 1100
Price Per quarter 2200
Ratings: 4
-----------------


-----------------
Property ID: 9
Property Category: Villa
Property Type: 3BHK
Ownership: Rent
Locality: Suburb
Area in sqft: 2500
```

# #PROPERTY DETAILS USING CATEGORIES:-

```
Enter your choice:- 7
>>>>>>>>>> PROPERTY CATEGORIES <<<<<<<<<
======= Available Property Categories =======
* Residential
* Commercial
* Apartment
* Villa
* Condo


=====SELECT YOUR CHOICE FROM THE ABOVE======
Enter your desired property category:- Condo
====== PROPERTY DETAILS ======
----------------
Property ID: 8
Category: Condo
Type: 1BHK
Ownership: Sale
Locality: City Center
Area in sqft: 750
Price: 180000
Ratings: 3
----------------


----------------
Property ID: 11
Category: Condo
Type: 3BHK
Ownership: Rent
Locality: City Center
Area in sqft: 1500
Price: 3500
Ratings: 4
```

# #ORDERING PROPERTY:-

```
Enter your choice:- 9
Enter property type: 2BHK
Enter property category: Apartment
--------------
Property found!
Property ID: 7
Property Category: Apartment
Property Type: 2BHK
Ownership: Rent
Locality: Uptown
Area in sqft: 1100
Price: 2200
Ratings: 4
----------------
Property ID: 19
Property Category: Apartment
Property Type: 2BHK
Ownership: Rent
Locality: Uptown
Area in sqft: 1150
Price: 2400
Ratings: 4
----------------
Do you want to purchase ANY property? (yes/no): yes
Enter your name: sankit
Enter order ID: 100
Enter property ID: 19
Enter property category: Apartment
Enter property type: 2BHK
Enter property price: 2400
========== Order placed successfully ================
Thank you for choosing us!
================================================
```

# References

In order to work on this project titled –(**REAL ESTATEMANAGEMENT SYSTEM)**, the following books and websites are referred by me during the various phases of development of the project.


1) Class 11th & 12th Computer Science Books (SUMITA ARORA)

2) www.youtube.com

3) www.python.com


Other than the above-mentioned books, the suggestions and supervision of my teacher and my class experience also helped me to develop this software project.