#### **CHAPTER 1:**

#### INTRODUCTION

Now a day's a huge number of people are purchasing their products online. Therefore, it is necessary for companies to advertise their products online. Online advertising is a very complicated task we need a system to manage it. This project shows how companies like Google, Microsoft and amazon maintain databases of advertisers and users who browse the internet using their apps or websites. Usually, These Databases are used by companies to answer questions like 'Which product is selling the most?', 'Which category of users are most likely to buy the product?', 'What type of ads do most people like?', and so on.

#### 1.1 PROBLEM STATEMENT

To design and develop a Ad's database management system that maintains and stores the information on websites, website owners, advertisers, ads, and users. It will handle all aspects of advertising on online websites.

#### 1.2 OBJECTIVE

- To store the information and details related to the ad's
- To retrieve the stored data on the ad's.
- To update the stored data on the ad's.
- To provide effective and efficient management of ad's database.
- To delete the stored data on the ad's.

## **1.3 SCOPE OF PROJECT**

It can be used by various companies to store and use the data associated with the ads being displayed on various online websites.

### **CHAPTER 2:**

## SYSTEM REQUIREMENTS AND SPECIFICATIONS

#### 2.1 HARDWARE REQUIREMENTS

- Computers are intel, Ryzen or compatible Pentium 333 MHZ or higher.
- Memory (or RAM) has 64 MB minimum, 128MB recommended.
- Hard disk space should have 1GB for the database and the client software. this requirement may increase with the increase in records.
- The monitor has VGA or higher resolution required for graphical tools.
- The pointing device has Microsoft mouse or compatible.

#### 2.2 SOFTWARE REQUIREMENTS

- Microsoft Windows XP/ Windows 7/ Windows Vista/ Windows 8/ Windows 10
- Jupyter Notebook should be installed.
- Oracle Database 10G Express Edition should be installed.
- Python Tkinter Module should be installed for GUI.

### 2.3 FUNCTIONAL REQUIREMENTS

- User Interface and User Experience: The system is easy to understand and use. A native user can also use the system effectively without any difficulties.
- Safety and robustness: The system is able to avoid or tackle disastrous actions. In other words, it should be foul proof.
- Error handling: Response to user errors and undesirable situations has been taken care of to ensure that the system operates without halting.
- Response time: The response time of all operations is good. This has been made possible by careful programming.

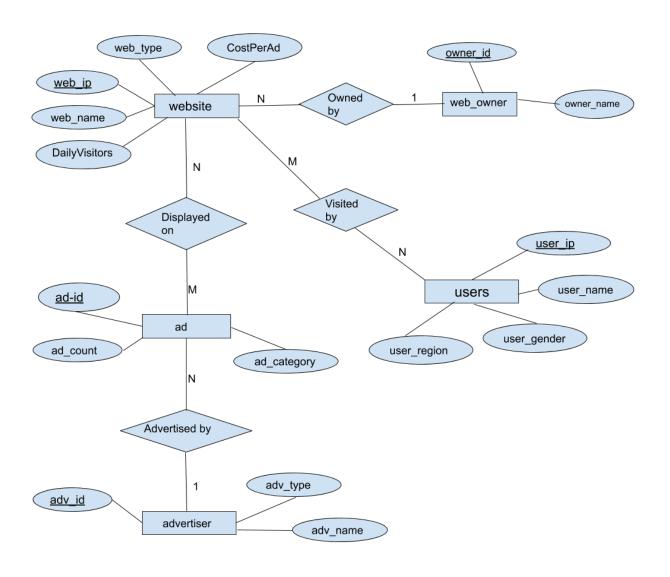
### 2.4 NON-FUNCTIONAL REQUIREMENTS

- Security: The system's backend server shall only be accessible to authenticated management.
- Reliability: The reliability of the overall project depends on the reliability of the separate components. The main pillar of reliability of the system is the backup of the database which is continuously maintained and updated to reflect the most recent changes.
- Availability: The system should be available all the time. A user-friendly system should work 24 hours without any hindrances.
- Supportability: The code and supporting models of the system are well documented and easy to understand.

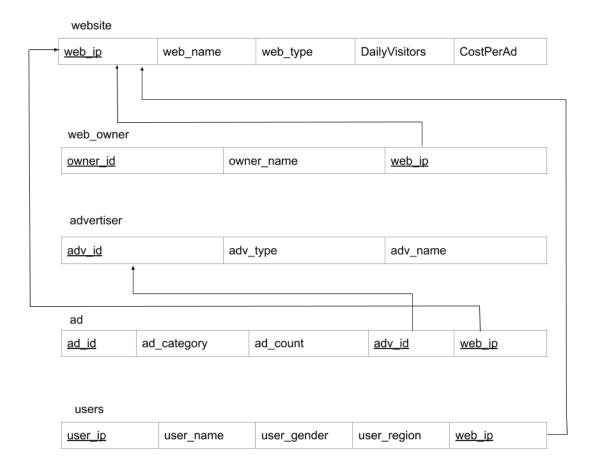
## **CHAPTER 3:**

## **SYSTEM DESIGN**

## 3.1 ENTITY-RELATIONSHIP DIAGRAM



## 3.2 SCHEMA DIAGRAM



## **CHAPTER 4:**

#### **IMPLEMENTATION**

#### 4.1 MODULE DESCRIPTION

• **website**: This module is used to store the information associated with a website. Here we maintain data such as web\_ip, web\_type, web\_name, DailyVisitors, CostPerAd.

Input: web\_ip, web\_type, web\_name, DailyVisitors, CostPerAd.

Output: We can insert, delete, update and view all the details of websites.

• **web\_owner**: This module is used to store the information associated with a website owner. Here we maintain data such as owner\_id, owner\_name and respective websites he/she owns.

Input: owner id, owner name, web ip.

Output: We can insert, delete, update and view all the details of web\_owner.

• **advertiser**: This module is used to store the information associated with an advertiser. Here we maintain data such as adv\_id, adv\_name, adv\_type. Input: adv\_id, adv\_name, adv\_type.

Output: We can insert, delete, update and view all the details of advertisers.

• ad: This module is used to store the information associated with an Ad. Here we maintain data such as ad\_id, ad\_category, ad\_count, and respective adv\_id and web\_ip.

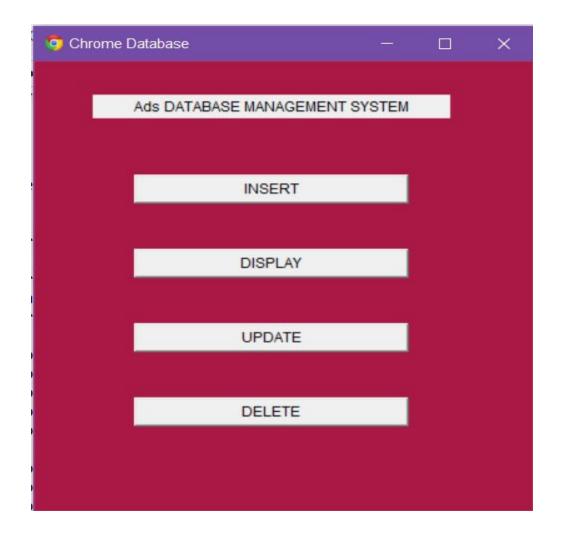
Input: ad\_id, ad\_category, ad\_count, and respective adv\_id and web\_ip. Output: We can insert, delete, update and view all the details of Ads.

• **users**: This module is used to store the information associated with a user. Here we maintain data such as user\_ip, user\_name, user\_region, and respective web ip.

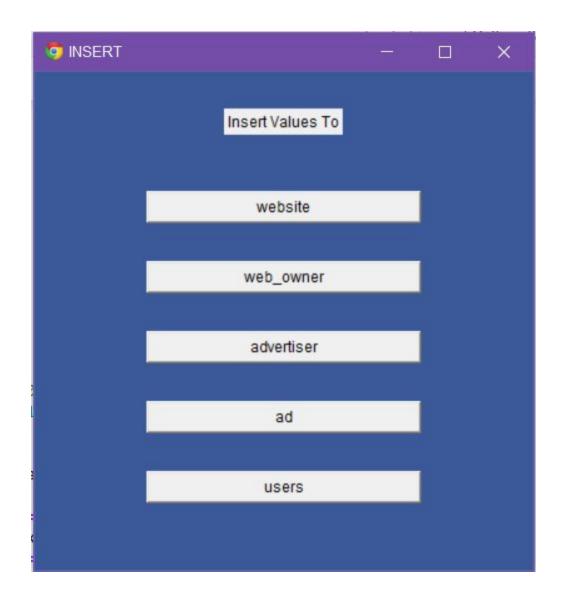
Input: user\_ip, user\_name, user\_region,web\_ip.

Output: We can insert, delete, update and view all the details of users.

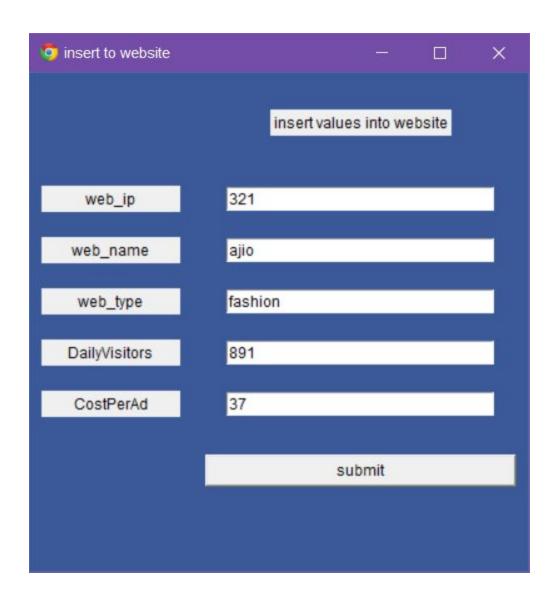
## **4.2 RESULT DESCRIPTION**



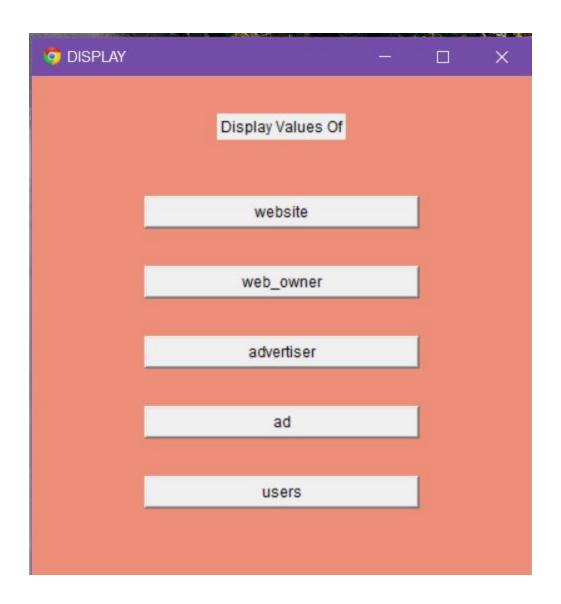
FIG(1): Main Menu Page



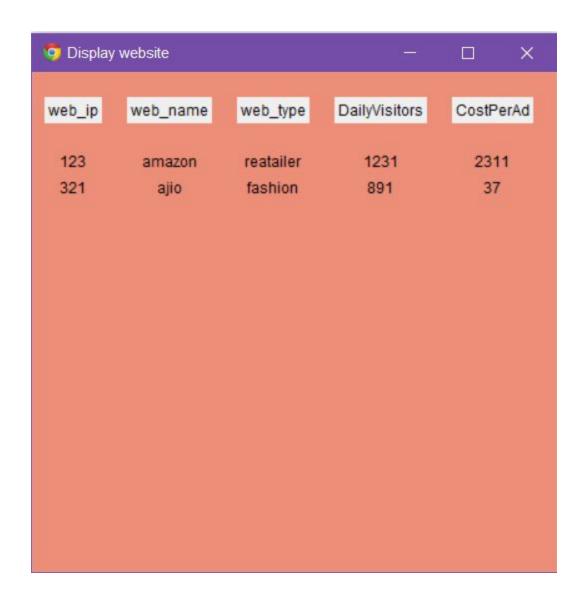
FIG(2): INSERT MENU PAGE



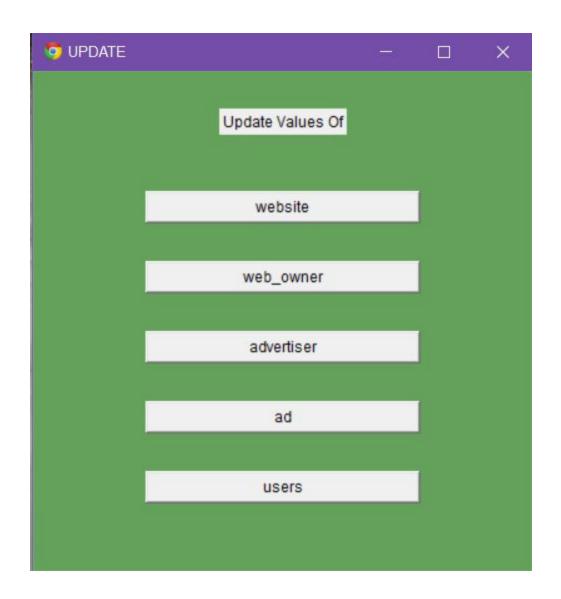
FIG(3): INSERTING TO WEBSITE TABLE



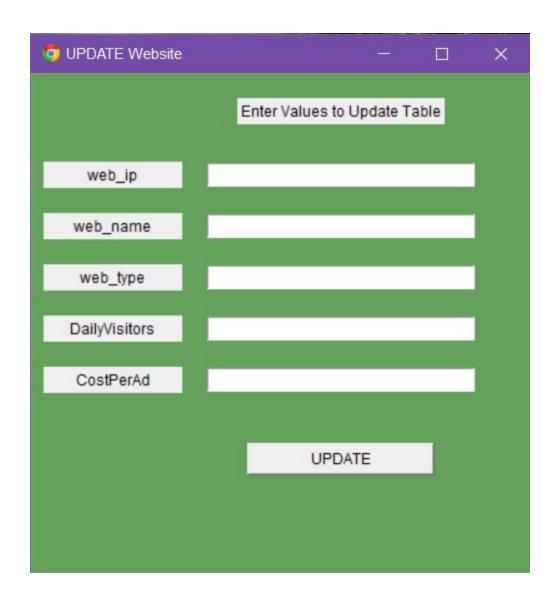
FIG(4): DISPLAY MENU PAGE



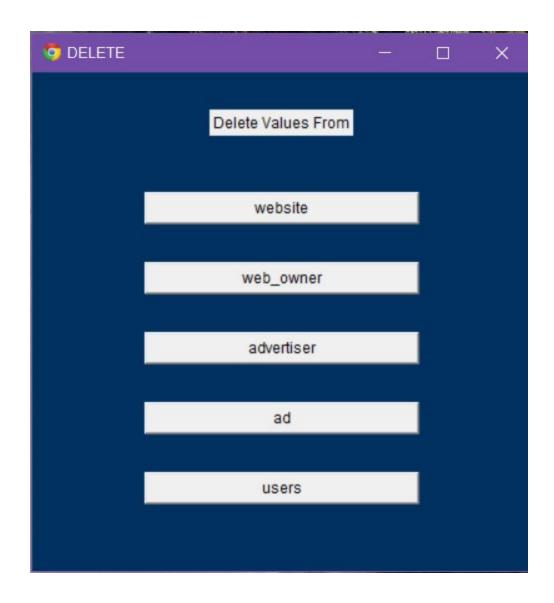
FIG(5): DISPLAYING CONTENTS OF WEBSITE



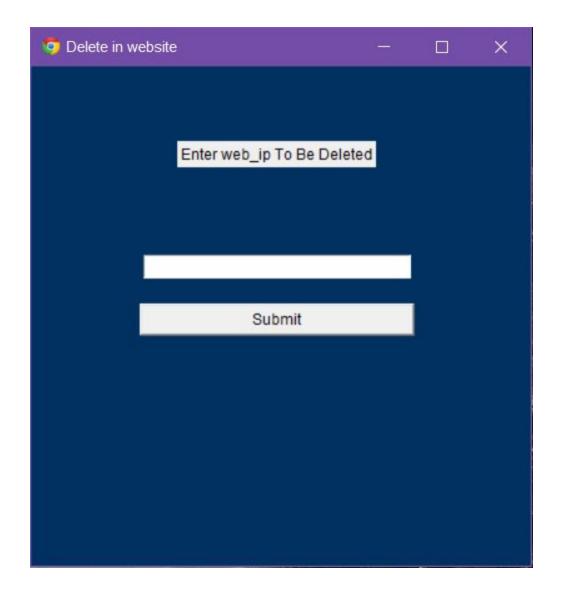
FIG(6): UPDATE MENU PAGE



FIG(7): UPDATE CONTENTS OF WEBSITE



FIG(8): DELETE MENU PAGE



FIG(9): DELETE CONTENTS OF WEBSITE

```
SQL> select * from website;
WEB_IP WEB_NAME WEB_TYPE DAILYVISITORS COSTPERAD
        amazon1 retailer 110 143
ajio fashion 891 37
123
321
SQL> select * from web_owner;
OWNER ID OWNER NAME WEB IP
781 amazon 123
190 reliance 321
SQL> select * from advertiser;
ADV_ID ADV_TYPE ADV_NAME
        Retailer nykaa
education ant coaching
878
980
SQL> select * from ad;
      AD_CATEGOR AD_COUNT ADV_ID WEB_IP
AD ID
     fashion 1 878
education 2 980
                                          123
888
980
                                           321
SQL> select * from users;
guru m urban 123
5435
             harish m rural 321
6767
```

FIG(10): BACKEND TABLE CONTENTS

## **CHAPTER 5:**

#### **CONCLUSION**

This database management system is used to improve overall efficiency and accuracy of information storing and provide effectiveness in maintaining data related to Ads advertised on websites. This can be used by various companies to advertise their different products or services on websites. This database system provides user-friendly environment to insert, update or delete the data and also it generates reports as per user requirements.

## **CHAPTER 6:**

## **REFERENCES**

- 1. <a href="www.w3schools.com">www.w3schools.com</a> (For GUI)
- 2. "Fundamentals of Database Systems" by Shamkant.b.navathe, 5th Edition, published by Dorling Kindersley.