



NEW HORIZON
COLLEGE OF ENGINEERING



A MINI PROJECT

REPORT

for
MINI PROJECT (20CSE59)

TALK-LINE CHAT

submitted by

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In partial fulfillment for the award of

the degree of

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE AND ENGINEERING



NEW HORIZON
COLLEGE OF ENGINEERING



Certificate

This is to certify that the mini project work titled

TALK-LINE CHAT

*Submitted in partial fulfillment of the degree of Bachelor of Engineering
in Computer Science and Engineering*

Submitted by

K. SREEJA

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ABSTRACT

Python uses Tkinter (Tk=Tool kit; inter=interface) to create GUI (Graphical User Interface). GUI helps to create a display interface in windows which is being used to take input from users and displaying output. Inserting and accessing data is happening with the help of backend through SQLite3 connection.

The create table command has been implemented in Python from which the database has been invoked to create the tables as well as the insert queries inserts the values into that table. Applications such as adding Group, Event and Post, showing details of all the members, projects and clients, sending and receiving messages, showing bar chart, etc. have been done in Python as a frontend which is processed in backend with the help of SQL in SQLite database.

The project contains entire information about the Group, Event, Post for each users. In the SQLite seven tables (User, Group, Event, Message, Post, Joins, Participate) have been created in the backend. All table has its own attributes and are related to each other through various participation and relationship which is described briefly below in coming chapters.

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CHAPTER 1

INTRODUCTION

1.1 PROBLEM DEFINITION

Nowadays people are becoming socially active. To make them interact with each other this project will help. It helps in creating a group for users, event and also people can post. It helps in online social networks by connecting a user's profile with those of other individuals or groups. Users can connect with their known ones. Users can chat and interact with other users. The manual distribution and display of meeting people in a group and containing events is very difficult. In a day there may be hundreds or thousands of persons used to create an event and they want to interact with people. The time required for this will be more and the people must travel to another person's place to interact with them.

The Talk-line chat Information System will display the details of the people, their chats friends list, contacts, and an event which their created. By this we can maintain a record of the media and also reduce the time for the people. The main purpose of this is to integrates people, place and process within the built environment. It improving the quality of life of people and the productivity of the core business.

1.2 OBJECTIVES

The main objective of this application project is to simplify the Information about social media. The main purpose of this media is an organizational function which integrates people, place and process within the built environment with the purpose of improving the quality of life of people and understanding the social life and the productivity of the core business.

So, in this project people can know all the details of the maintenance of social media. They have to give their input details like registration number, email, password.

- Learn to design the python program and it's applications

- Learn how to build Python modules for reusability purpose.
- Learn to design Object oriented programs.
- Learn to use class inheritance in Python Program for reusability.
- Learn to use exception handling in Python applications for error handling purpose.
- To make better understanding of lists, tuples, dictionaries in Python programs.
- To understand why Python is a useful and easiest programming language for developers.

➤ **Existing System:**

This will cover the functionalities such as adding a new group chat which can be managed and also removing a group from being managed getting general information such as the number of people present in a group. In turn these people will check out the information with the login into the social media. This is time taking process to go and meet people in a group member regarding to events.

➤ **Proposed System:**

The proposed system will available online. So, anybody who are interested to interact with people. And also, they can join their friends in online.

The benefits of this program include:

- This can be used for time reducing process.
- User will get to know that events of their friends.
- Easily interact with friends and unknown people.
- Reliable and accurate.
- User Friendly

1.3 METHODOLOGY TO BE FOLLOWED

- This project is done using python concepts. Here you have to register if you're a new user. After that the user should register the group and if there are any events the user can fill the organize an event form and invite friends by the admin.

1.4 EXPECTED OUTCOMES

1. It displays the welcome page
2. Next it displays the options
 - a) Login
 - b) Register
 - c) Exit
3. If we select option 1, we can go to the Login mode. After choosing this option it asks for other detail like
 - E-mail
 - >Password
4. If it is correct it will ask for other details like
 - a. Search new friends
 - b. create a Group
 - c. Organize an event
 - d. post
 - e. Friends List
 - f. Join Group
 - g. Participate in Event

5. If we choose option 2, we can go to the register mode. After choosing this option it asks for other detail like

- a. First name
- b. Last name
- c. Date of Birth
- d. Gender
- e. Address
- f. E-mail
- g. Password
- h. Phone number
- i. College

6. If we choose option 3 it will come out of the screen

CHAPTER 2

REQUIREMENT SPECIFICATION

2.1 HARDWARE REQUIREMENTS

- Processor : intel core i3
- RAM : at least 1Gb
- Hard Disk : 10 GB
- Input device : Standard Keyboard and Mouse
- Output device : High Resolution Monitor

2.2 SOFTWARE REQUIREMENTS

- Operating system : Windows XP
- Front End : ASP.Net 2.0
- IDE : Visual Studio 2008
- Data Base : SQL Server Management Studio 2005 Required..
- Server : Internet Information Services
- Platform : Python IDE or Jupiter Notebook
- Database Software : SQLite3

CHAPTER 3

FUNDAMENTALS

3.1 DATABASE FUNDAMENTALS

A database is an organized collection of structured information, or data, typically stored electronically in an exceedingly automatic data processing system. A database is sometimes controlled by a direction system (DBMS). It introduces database concepts, relational database, tables and data types, manipulation and data selection, views, stored procedures, backup and restore, normalization, constraints, indexes, security, and functions.

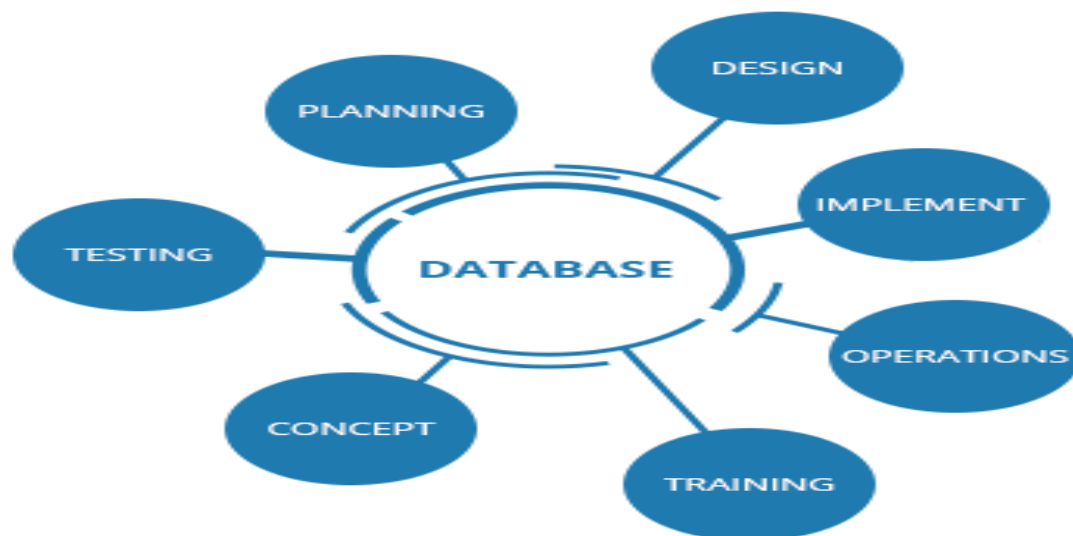


Fig 3.1 Data base

->**Tables:** It is most basic building of a database. It's the place where we will put our idea, and define their data type, and also their relationship with the other tables. It consists of rows and columns.

- Columns consists of three types: - Simple, Composite, Multi-valued

->**SQL:** SQL stands for Structured Query Language. It's a standard computer language for managing the relational database and manipulation of data. It is used to do all the operation in database like creation of schema, table, inserting, updating, deleting and

retrieving rows. SQL is used by various database management systems like: MySQL, Oracle, vertical, Sybase, etc.

->Select: The select statement retrieves zero or more rows from one or more database tables.

1. SQL join combines the records from two or more tables in a relational database.
2. CROSS join will produce the row which is the combination of each row from the first table with each row from the second table.
3. AN INTERSECTION gives the results of two queries and only returns rows that appear in both result sets.
4. A UNION enables to combine the results of two SQL queries into a single table of all matching row.

->Manipulate data:

1. Insert data: - The statement INSERT adds one or more records for any single table in a relational database.
2. Update data: - The statement UPDATE changes the data of one or more records in a table.
3. Delete data: - DELETE statements removes one or more records from the table.

Views:

Create views: It is the results of set data of stored query on data, where database system users can get only query just as they always collect the database object.

Stored Procedures: It is a subroutine which is available to all applications that access a relational database management system.

->Functions:

A user defined functions are provided by user and aggregate function is a function where the multiple values of rows are grouped together as an input on an certain criteria to form single value of more significant meaning.

->Normalization:

It is the process of organizing the columns and tables of a relational database to reduce into small size or minimize data redundancy.

The types are First normal form (1NF), Second normal form (2NF), Third normal form (3NF), Fourth normal form (4NF).

->Constraints:

We have to choose appropriate primary keys, select appropriate data type, select appropriate fields for composite keys, understand the relationship between foreign and primary key.

->Indexes:

They are basically used to quickly to locate data without having to search each and every row in database table every time a database table is accessed.

->Security:

Database security is the use of a board range of information security controls to store functions, protect databases, data servers, database systems, against compromises of their confidentiality, integrity, and availability.

->Backup and restore:

The process of backup are refers to the copying data of system or a computer and hiding the computer data so it may be used to restore the original data after the data loss event.

3.1.1 Entity and Attributes:

Entity type is a collection of entities which consists of various attributes which may be of various data types and can have various constraints. While selecting an entity we must always care of two things, does that selected entity have enough members and also enough attributes. If the entity satisfies both the conditions then such entities are called good entity but if the entity fails to satisfy one of these conditions then such entities are considered to be bad entities. Attributes for each entity should have a proper data type

assigned to it and may or may not have constraints. All the entities of Interactive multimedia are good entities because all of them has enough members and enough attributes. The entities used in this project and corresponding attributes are listed below:

1. USER (Uid, Fname, Lname, DOB, Address, Email, Password, Phone no, College)
2. GROUP (Gid, Gname, Tot_mem, Date_of_creation)
3. EVENT (Eid, Ename, Edate, Etime, Place, Interested_ppl)
4. POST (Pid, Ptype, No_likes, No_comments, No_shares)

3.1.2 Keys:

Key is a constraint used while defining attributes in a table. The key is useful to identify a row in a table.

It plays an important role in finding the relation between two tables. It helps you uniquely identify a row in a table by combination of one or more columns in that table. There are various keys which has various properties, one of them which is widely used is Primary key. Primary key is a unique identification of a table that is used while combining tables and it can never be NULL. In one table more than one column can be primary key. When this primary key column is used in other tables then that becomes Foreign key and its values can be NULL. Both primary and foreign key plays an important role in determining relation between two tables. Unique key is also one of them which ensures that the particular column has unique values.



Fig 3.2 Keys

Interactive multimedia makes use of two keys which are listed below:

i) Primary key:

- ◆ Uid
- ◆ Gid
- ◆ Eid
- ◆ Pid
- ◆ Mid
- ◆ Uid,Frnd_id
- ◆ Uid,Gid
- ◆ Uid,Eid

ii) Foreign key:

- ◆ Uid
- ◆ Gid
- ◆ Eid
- ◆ User_id

3.1.3 Relationship and Participation:

If one table has a foreign key that references the primary key of another table then there exists a relation between two relational databases. This means one or the other way an entity is related to the other like user entity type is related with group entity with the relation “joins”. Participation may be 1: 1, 1: N or M: N. One entity can relate with another table and can have partial or full participation. Here partial participation means the members of one entity may or may not be associated with the other entity whereas the full participation means that at least one member of an entity is associated or combined with the other one.

Interactive multimedia associates all relation with full participation which is reflected by the ER diagram above i.e. It means one or the other way at least one of the members of each entity is associated with other which are in relation. A sample snippet for relationship and participation from this project in chapter 4.



Fig 3.3 User-Group relation and participation

3.1.4 SQL COMMANDS

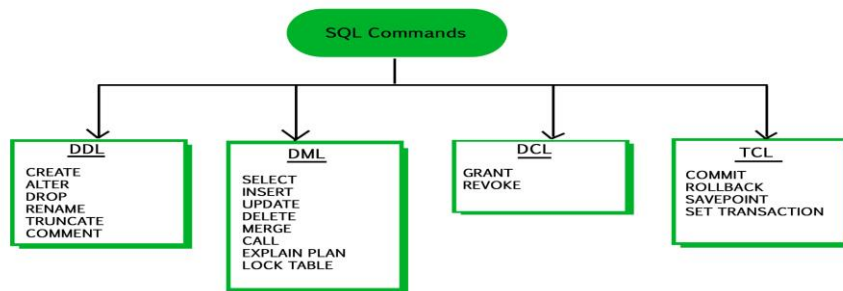


Fig 3.4 SQL Commands

I.DDL Command: DDL stands for Data Definition Language. These are the commands used for schema or the table definition manipulation but not for data. There are various DDL commands which are listed below:

CREATE -it is used to create the database

DROP-used to delete the objects from database

ALTER-used to alter the structure of database

TRUNCATE- it is used to remove all records from a table which includes all the spaces allocated for records.

COMMENT-used to add comments to the data dictionary.

RENAME- used to rename the object which is already there in the database

II.DML Command: DML stands for Data Manipulation Language and is used to manipulate the rows in the table. The rows in the table can be selected , updated, deleted and inserted, etc.

SELECT-selects records or data from a table

INSERT-used to enter data in database

UPDATE-update existing records within a table

DELETE-removes unwanted records from a table

III.DCL Command: DQL stands for Data Query Language for performing database queries.

GRANT- permits user to access the database

REVOKE-withdraws the permission given by GRANT

IV.TCL Command:

TCL stands for Transaction Control Language which deals with the transaction within the database.

COMMIT: This command is used to commit the transaction so that the previous transaction will be successfully saved into the database. Once commit is done, it is not possible to rollback. Syntax: COMMIT;

ROLLBACK: This command is used to rollback/ undo the transaction if any error occurs. Syntax: ROLLBACK;

3.2 PYTHON FUNDAMENTALS

Python is a high-level language programming and it is very easy to construct a program using python, it uses in large applications like GUI (graphical user interface) and web applications. Python program easy to construct code and simple to execute rather than other programming languages like c++, c and java ...

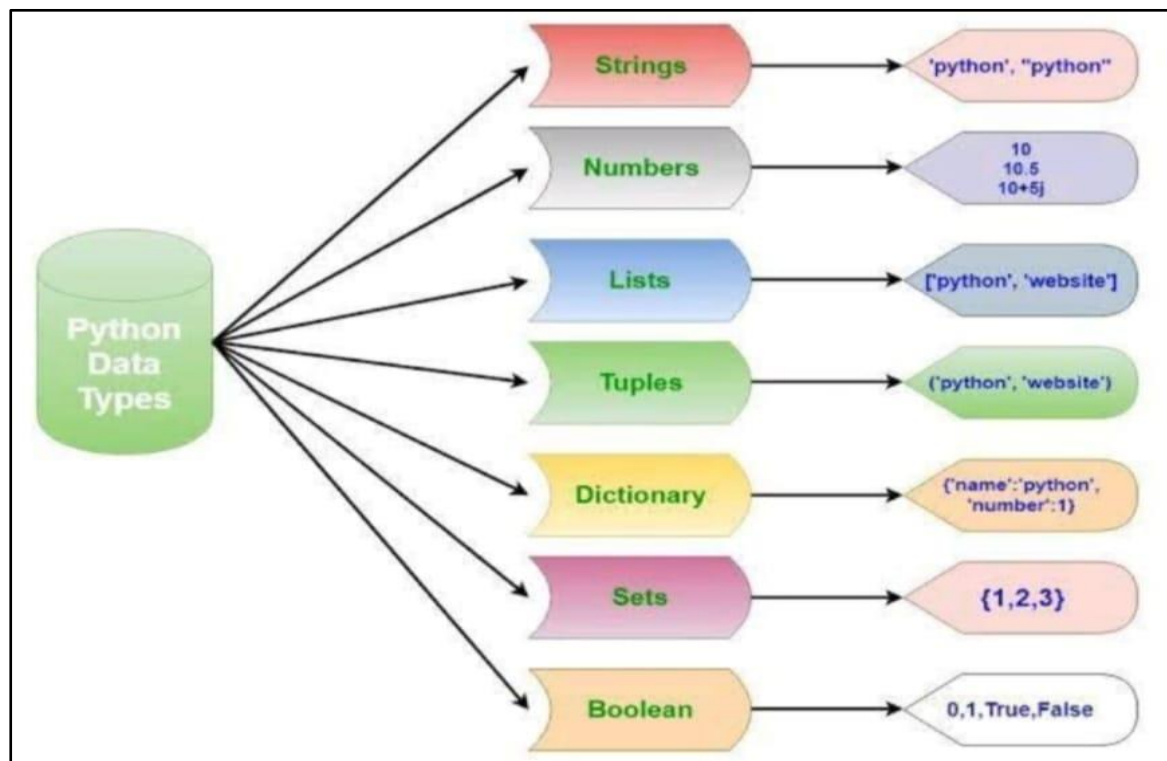


Fig 3.5 Python data types

To construct a good program of python you must know the basics concepts of python

It is major classified into

- Conditional Statements
- variables
- Loop
- strings

To use the python programming, we need to access an editor to execute the programming. Lot of us use NumPy, visual studio code and Anaconda and Jupiter and etc.

Programming is the background part of the web applications many applications uses different type of programming but everyone is more interested in python programming because it is very simple and easy to execute the code.

Now lets us discuss about the prerequisites of python programming.

A. Conditional statements

In order to write programs very easier, we always need the ability to check the statements and make it program as simple and easy to execute

Let us see about some control statements

- IF STATEMENT
- IF ELSE STATEMENT
- NESTED STATEMENTS

◆ IF STATEMENT

It is the simplest form

Ex: x=8

```
>>> if x < 10:
```

```
    Print ('NEW HORZION ')
```

```
    ...
```

Output:

NEW HORIZON

The Boolean expression after if statement is called as conditional, we always end the if statement with a colon (:)

To stop an if statement we use break statement.

◆ IF ELSE STATEMENT

This statement allows us to check for multiple expressions.

Ex: a=12

b=12

if y>x:

print ('b is greater than a ')

elif x==y:

print ('x and y are equal')

Output:

x and y are equal

In if statements there are two possibilities If the given statement is true it executes statement 1 or else it runs and execute the second statements.

◆ NESTED STATEMENT

Nested statements are three branch statements like one conditional statement are connected to other nested statements

Ex: if x == y:

Print ('x and y are equal')

Else:

if x < y:

Print ('x is less than y')

Else:

Print ('x is greater than y')

Nested statements always allow one inside another.

B. VARIABLES

- A variable is named place in the memory where a programmer can store data...
- A programmer gets to choose the names of the variable.
- Variable is always important for any language of programming because without a variable we can't print many outputs in programming language.
- Python variables Name rules
- Must start with a letter or underscore
- Must consists of letters, numbers and underscores
- It is a case sensitive

Ex: New horizon

Sreeja 23

_Horizon

Let's see an example of program with containing variables in it ..

Ex: a=11.0

b=12.24

c = a * b

print (c)

Here a, b, c are the variables of the given program it prints the output through c by calculating a * b...

C. LOOPS

Loops are (repeated steps) it have iteration variables that change each and every time through a loop, often their iteration variables go through a sequence of numbers.

When we are executing big applications were, we should print many values at that time loops are very helpful to us, by using loops we can reduce the code and easily can print the output.

Let us see discuss about different types of loops

- I. While loops
- II. For loops

First let us discuss about Infinite loops

I. While loop

While loops are used in python it is used to repeatedly execute a certain statement as long as the condition provided in while loop is true.

Let us see a program on while loop

Ex: n=5

While n > 0:

Print (n)

n = n-1

print ('new horizon !!')

print(n)

Desired output:

5

4

3

2

1

new horizon!!

0

a. Infinite loops in while loop

Infinite loops in while loop the given statement while never become false, the program enters the loop and keep on repeating the same steps over and over again

Ex:

n=5

while n >0:

print('friends')

print ('new horizon')

print('family')

It is not good to have an infinite loop

II. For loop

Most of the programming languages uses the for loop because it helps in coding easily the program it always has single line code.

Definite loop (for loop) have explicit iteration variables that change each time through a loop.

Syntax for loop in python

For a in sequence:

Body of for

Let us take an example for loop

Ex: for l in [5,4,3,2,1]:

Print [i]

- In loops we use the statements break, continue, count.

D. Strings

- A string is a sequence of characters (alphabets or letters)
- It always uses either single or double quote
- In strings + is used for Adding two words it is called as “concatenate”.

- We can always convert a string number into a number by using `int ()` because `int` is used for numbers

Let's us see example of sequence of characters

```
>>>fruit = 'apple'
```

```
>>>letter= fruit [1]
```

```
>>>print (letter)
```

Output: a

This example shows the index position of the 1 from the fruit

Variable and assigns it to the letter variable.

I. Len function

A function is stored code that we use. This Len function always takes some input and produces us a desired output

It is used to find the length.

The built-in function is `LEN`.

EX: >>>car = 'polo'

```
>>>print ( len (fruit))
```

Desired output:

4

II. String concatenation

i. When `+` operator is applied to string it means "concatenation "

Ex:

```
>>>a= 'hello'
```

```
>>> b= a + 'world'
```

Print (b)

Desired output:

hello world

ii. When the space required b/w two name

```
>>> c= a + '+'
```

```
>>>print (c)
```

Desired output:

hello world

- strings are used in many ways such as:
 - slicing strings
 - using as logical operator
 - string library
 - searching, replacing
 - prefix and postfix etc.....

3.2.2 Binary Trees: bytes, byte array, memory view

I. Bytes: The bytes () are method which returns a immutable bytes object initialized with the given size and data of it.

Syntax:

```
Bytes ([source [, encoding [, error]]])
```

Example:

```
size = 5
```

```
arr = bytes(size)
```

```
print(arr)
```

Output:

B'\x00\x00\x00\x00\x00'

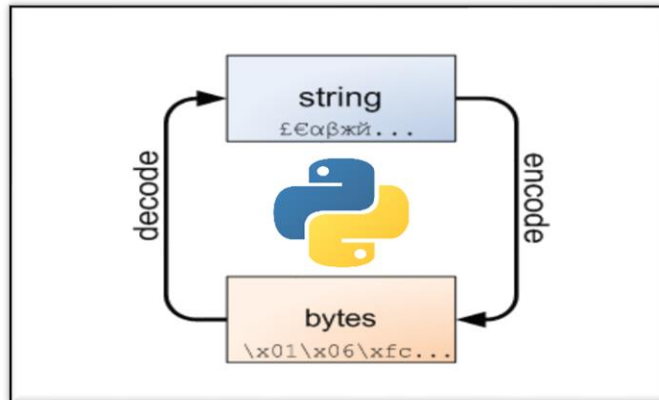


Fig 3.6 Bytes

II. Byte array: this method returns a byte array object which is an array of given bytes. It gives an mutable sequence of integers in the range of (zero) $0 \leq x < 256$.

Syntax: byte array (source, encoding, error)

Example:

```
String = "Python is very interesting."
```

```
arr = byte array (string, 'utf-8')
```

```
print(arr)
```

Output:

Byte array (b' Python is very interesting.')

III. Memory view: memory view objects allow Python code to access the interior data of an object that supports the buffer protocol without copying.

The memory view () function allows direct read and write access to an object's byte-oriented data with no need to repeat it first.

Which will yield large performance gains when operating on large objects since it doesn't create a replica when slicing.

Syntax: memory view (obj)

Parameters:

Return value:

Example:

```
random_byte_array = byte array ('ABC', 'utf-8')  
  
mv = memory view(random_byte_array)  
  
print(mv[0])
```

3.2.3 Tkinter Widgets

I. Frame:

A frame is a container which associated with other type of widgets. It is mainly used for grouping and organizing widgets. A bunch of labels, entry, buttons, etc. can be added into the frame and moving frame alone moves other widgets too. The examples are: bg, bd, cursor, relief, width, etc. can be used to configure frame.

Syntax: Frame (window_name, options)

Gaffer has made use of multiple frames with the help of which other contents can be raised above the previous contents using the same window without creating an extra window creating an illusion of user interface like in real world applications.

II. Label:

A label is an widget which is used to display an non-editable text. Label in fact is also used to display images using Photo Image module. The most commonly used label is with 'text' configuration option and can change this at any time. In label we can have a many option like: fg, bg, font, width, height, etc.

Syntax:

Label (window_name,
options) We can add an
image into label as below:


```
project_img=PhotoImage (file="path with file name")
project_img_label=ttk.Label(captainDashboard,
image=project_img)
```

III. Entry:

An entry is a single line text field user can use to type anything. It's mostly used in 'log_in' form for retrieving username and password. It has a special property to hide/encrypt the text typed by a user by using "show='*'" option which replaces each and every letter with the specified symbol/letter (in this case every letter typed by a user is encrypted with '*').

Syntax: Entry (window name, options)

IV. Button:

Button -> It is one of the widely used widget among all in Graphical user interface (GUI) with Tkinter. It is a functional widget that is clickable and on click it performs some action defined in the command option. It is used for linking two functions. They can display text or images same as labels, but also have a whole range of new options used to control their behavior.

Syntax: Button(window name, options)

Interactive multimedia has multiple buttons with various functions like raising a frame over other, linking two functions, etc.

V. List box:

List box displays a list of contents which a user interacts with and user can accept any number of times. It looks like a column of a table that displays values in various rows. It provides option to browse, select multiple, select single through select mode option. It also offers other variety of options like: bg, fg, font, height, width, highlight color, etc.

Syntax: List box(window name, options)

VI. Scrolled Text:

This widget provides the feature of multiple line input field with scrollbar wherein user can type multiple lines of text. This is very much useful for typing paragraphs, letters, essays, etc. In this it can also support different options like: height, width, etc. **Syntax:** scrolled text. Scrolled Text (window name, options)

3.2.4 Python Features

Python has a huge collection of defined library which makes very easy to code in python. Its library is portable and compatible with all platforms like Macintosh, UNIX, and Windows. You do not have to write your own code for each and every thing as it provides rich sets of modules and functions. It has various libraries for web browsing, regular expressions, etc.

I. Interpreted Language

Python is one of the Interpreted Language as its code is executed line by line at a time. It is not required to compile our code like in other languages like java, c++, etc. which makes it easier to debug our code. The python source code is converted into an immediate form where this form is called byte code.

II. Support for GUI Programming

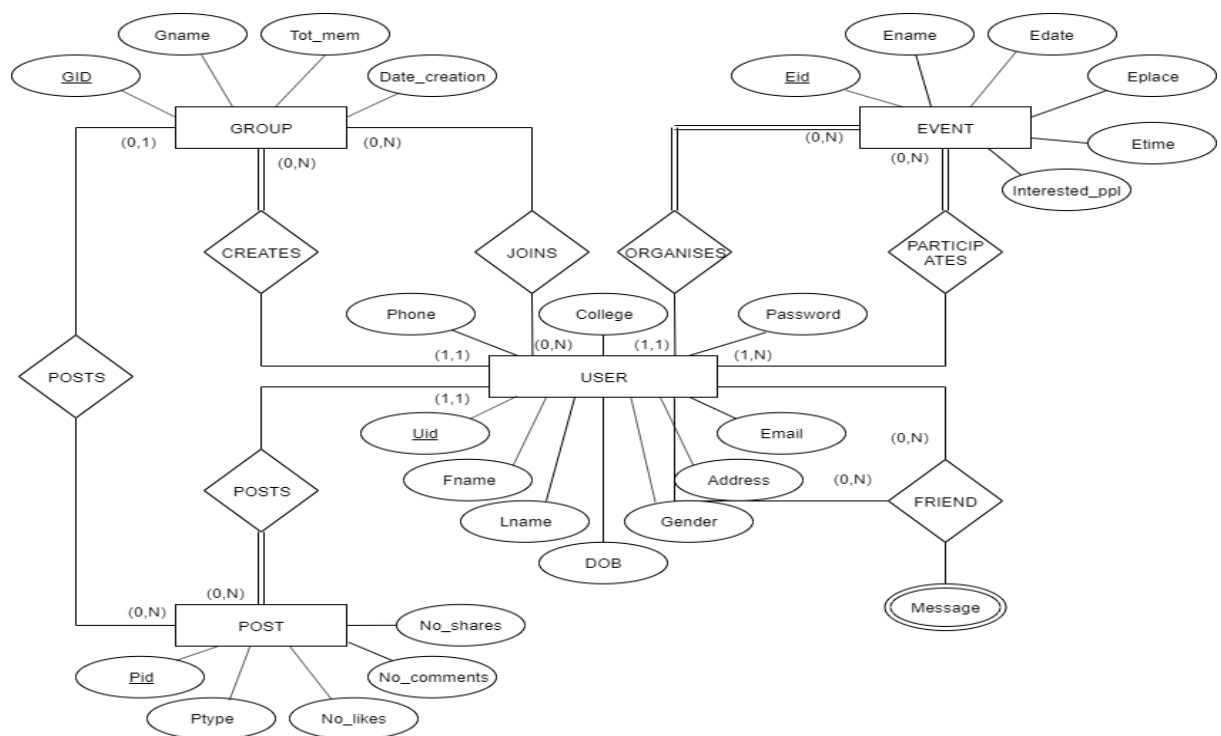
Python provides various modules like PyQt, Tkinter, wxPython through which can user created through Graphical User Interface (GUI) for all mobile applications. The most popular for creating graphical apps using python is PyQt5. Tkinter also provides all of the required options to create a beautiful user interface even Interactive multimedia is made importing Tkinter module. This user interface can be connected to the backend using any one of the DBMS also supported by python, makes it more beautiful.

III. Object Oriented Programming Language

Python is an object-oriented programming language which include the concept of class and object. It supports all OOPs concepts like inheritance, data abstraction, polymorphism, encapsulation etc.

IV. Scalable and Extendable

Python provides a structure and it supports a large program better than a shell scripting. It can also add a low-level module to the Python programmer. These modules are enable for programming to add or customize their tools which are more efficient.

CHAPTER 4**DATABASE / ALGORITHM DESIGN****4.1 ER DIAGRAM****Fig 4.1 ER diagram of Talk-line Chat**

4.2 Schema Structure

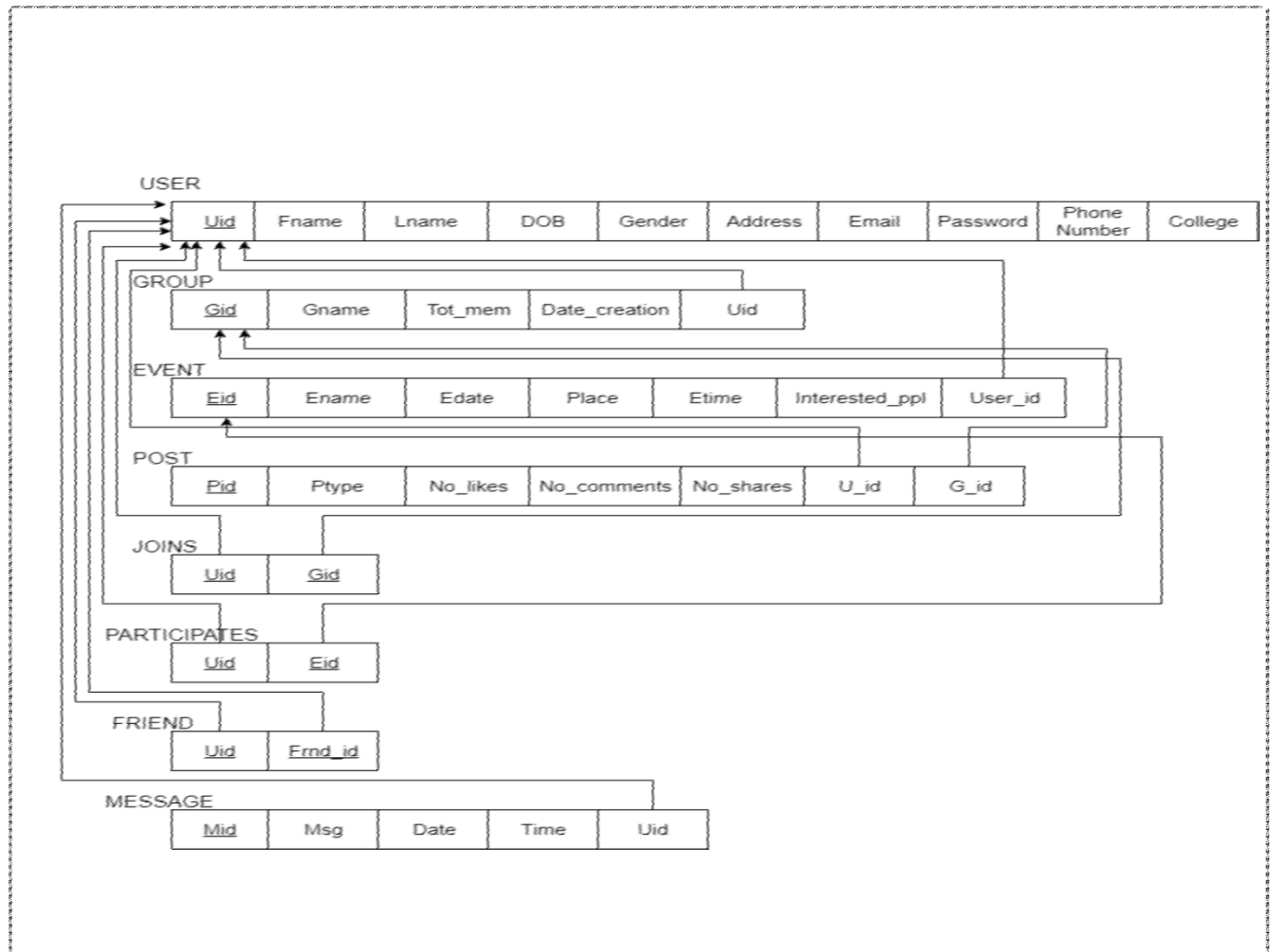


Fig 4.2 Schema diagram

4.3 DATABASE TABLES:

4.3.1 Search friends:

```
mysql> select * from friends;
```

uid	fname	lname	dob	address	gender	phoneno	clg
1	sreeja	kotha	2000-09-20	bangalore	f	987654321	nhce
2	sumana	p	2000-08-07	bangalore	f	987654329	nhce
3	ramya	s	2000-08-27	bangalore	f	987654389	nhce
4	santu	k	2010-08-27	bangalore	m	987604389	bmsce
5	jagadesh	n	2000-06-27	bangalore	m	927604389	pesit

5 rows in set (0.10 sec)

```
mysql>
```

Table 4.1

4.3.2. Create group:

```
mysql> select * from gorups;
```

gid	gname
1	cse-b
2	cse-d
3	eee-a

3 rows in set (0.00 sec)

```
mysql>
```

Table 4.2

4.3.3 Join group :

```
mysql> select * from joingroup;
```

gid	g_name	tot_mem	date_creation	uid
1	cse-d	52	2020-10-21	5
2	cse-b	48	2020-10-20	4
3	eee-a	21	2020-10-10	2

3 rows in set (0.00 sec)

```
mysql>
```

Table 4.3

4.3.4 Organize an event :

```
mysql> select * from event;
```

eid	event_name	event_date	event_time	event_place
1	coding	2020-11-28	9	nhce
2	quiz	2020-11-23	11	bmsce
3	hackathon	2020-11-20	10	pesit

3 rows in set (0.00 sec)

```
mysql>
```

Table 4.4

CHAPTER 5

IMPLEMENTATION

5.1 MODULE 1

1. This program starts with welcome page like:

->Login mode

->Registration

->Exit

5.2. MODULE 2

I. Login mode:

After choosing login mode the user is asked for E-mail and password that is only known to who created before. User has to know the E-mail, password to access into social media. After login into the account few options are listed like

- Search new friends
- create a Group
- Organize an event
- post
- Friends List
- Join Group
- Participate in Event

i. Search new friends:

Using this function, we can search new friends and add friends by using given options. In this it will show you friends list. And also it will display all the details of already exciting friends.

ii. Create a group:

Using this function, we can create a new group chat by giving some details like group name, and also add friends with giving name of the friends.

iii. Post:

Using this function, we can post any picture in the chat and also we can change the icons of the group chat.

iv. Friends list:

Using this function, it can display the list of friends present in a group.

v. Join Group:

Using this function, we can enter into exciting group for that we have to give some details like group Id, total members, date creation.

vi. Participate in event:

Using this function, we can participate in organized event for this we should enter some details like event Id, event name, event time and event place.

5.3 MODULE 3

I. Registration:

After choosing this mode few options are displayed like

- a. First name
- b. Last name
- c. Date of Birth
- d. Gender
- e. Address
- f. E-mail
- g. Password
- h. Phone number
- i. College

After finishing all details we can join into group chat and meet friends and organize a event, participate in a event.

5.4 MODULE 4

I. Creation of database, connection to it and creation of table :

#connection to SQLite database

```
db=sqlite3.connect("miniproject.db")
```

```
cursor=db.cursor()
```

```
c.execute("CREATE TABLE IF NOT EXISTS USER(UID INTEGER PRIMARY KEY DEFAULT  
1,FNAME VARCHAR(20) NOT NULL,LNAME VARCHAR(20),DOB DATE,GENDER  
VARCHAR(20) NOT NULL,ADDRESS VARCHAR(20),EMAIL VARCHAR(20) NOT  
NULL,PASSWORD VARCHAR(20) NOT NULL, PHONE_NO INT,COLLEGE VARCHAR(20))")
```

```
c.execute("""CREATE TABLE IF NOT EXISTS GRP(GID INTEGER PRIMARY KEY,GNAME  
VARCHAR(20),TOT_MEM INT DEFAULT 1,DATE_CREATION DATE,UID INT,CONSTRAINT  
FK11 FOREIGN KEY(UID) REFERENCES USER(UID))""")
```

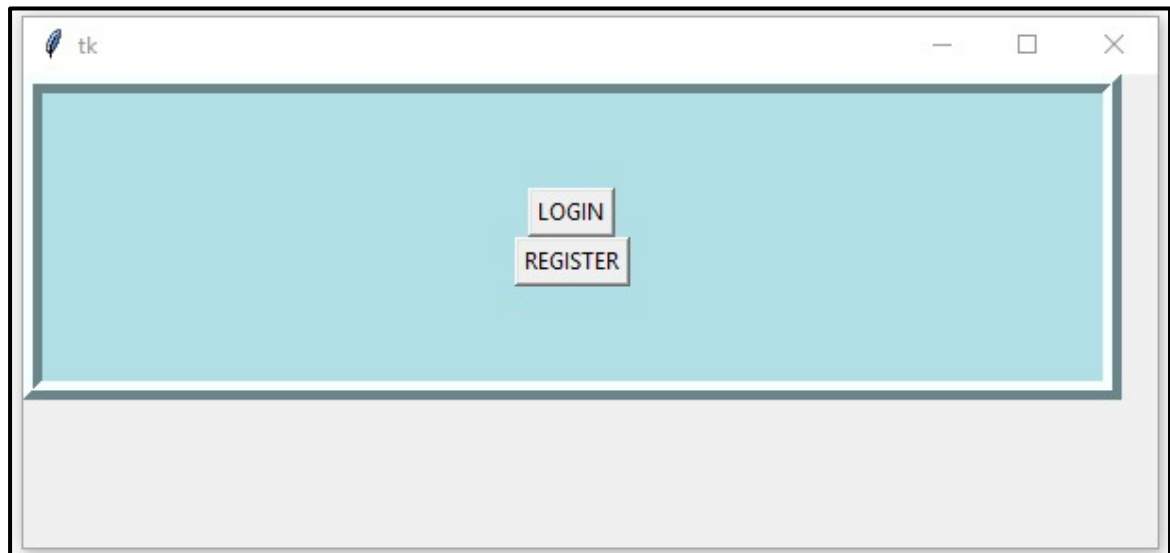
```
c.execute("CREATE TABLE IF NOT EXISTS JOINS(UID INTEGER,GID  
INTEGER, PRIMARY KEY(UID,GID),CONSTRAINT FK5 FOREIGN KEY(UID) REFERENCES  
USER(UID),CONSTRAINT FK6 FOREIGN KEY(GID) REFERENCES GRP(GID))")
```

```
c.execute("CREATE TABLE IF NOT EXISTS PARTICIPATE(UID INTEGER,EID  
INTEGER,CONSTRAINT FK7 FOREIGN KEY(UID) REFERENCES USER(UID),CONSTRAINT FK8  
FOREIGN KEY(EID) REFERENCES EVENT(EID))")
```

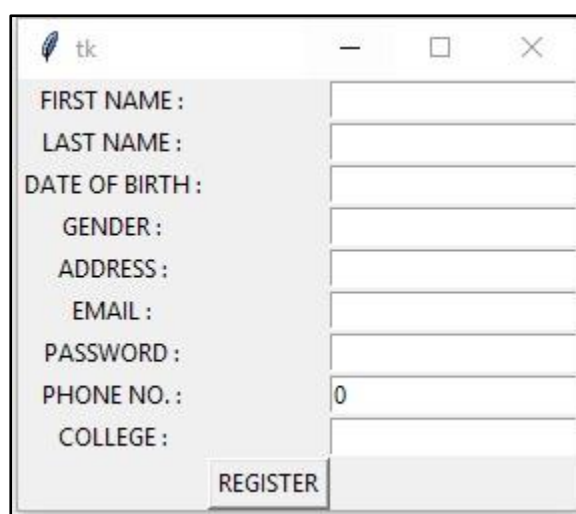
CHAPTER 6

OUTPUTS

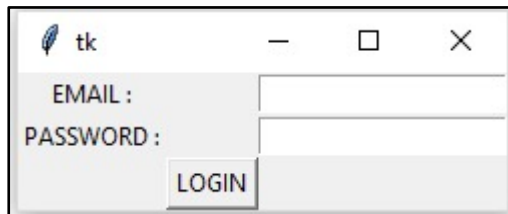
6.1 Home Page



6.2 Register Page

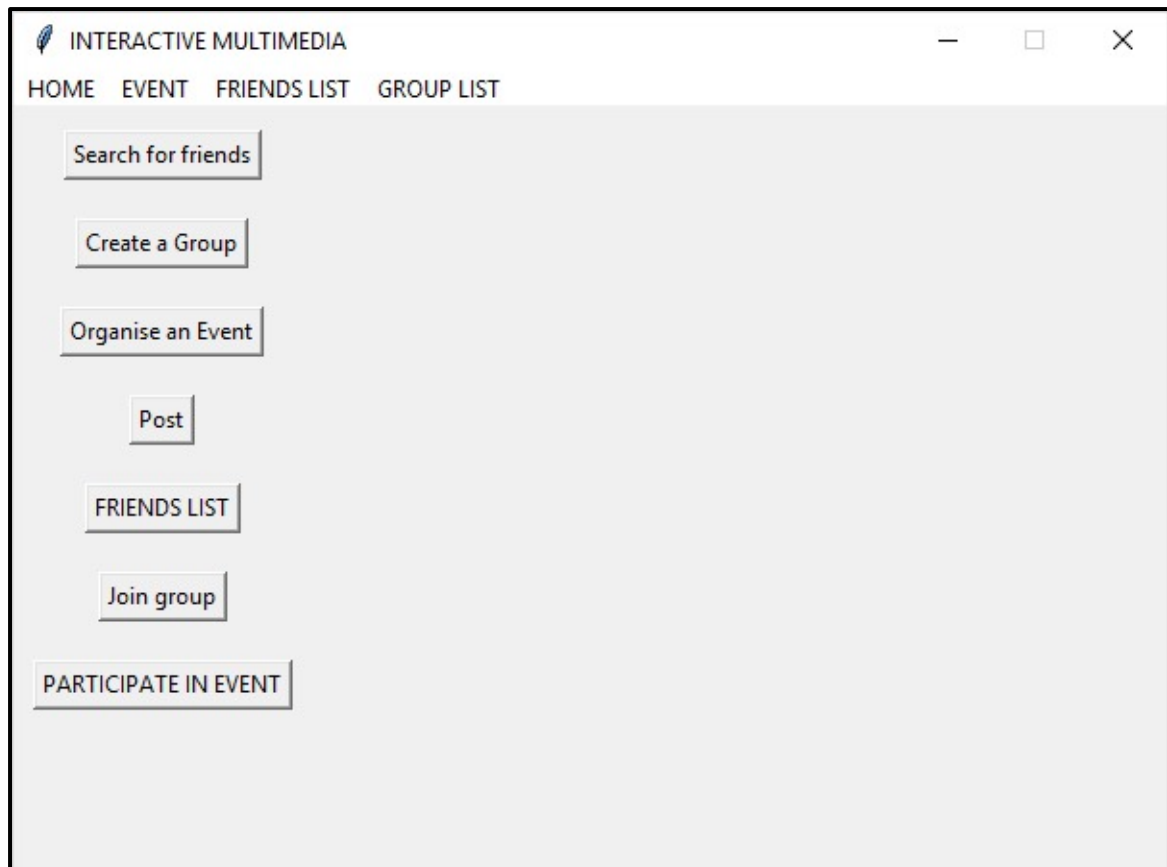
A screenshot of a Tkinter window titled 'tk'. The window has a light gray background and a white border. On the left side, there are labels for various fields: 'FIRST NAME :', 'LAST NAME :', 'DATE OF BIRTH :', 'GENDER :', 'ADDRESS :', 'EMAIL :', 'PASSWORD :', 'PHONE NO. :', and 'COLLEGE :'. To the right of each label is a corresponding text input field. The 'PHONE NO.' field contains the digit '0'. At the bottom right of the form, there is a 'REGISTER' button. The window has standard macOS-style window controls (red, yellow, green buttons) in the top-left corner.

6.3 Login Page



A screenshot of a login window titled "tk". The window has a standard title bar with minimize, maximize, and close buttons. Inside the window, there are two input fields: "EMAIL :" and "PASSWORD :". Below the password field is a button labeled "LOGIN".

6.4 Choosing any one option



A screenshot of the "INTERACTIVE MULTIMEDIA" application window. The window has a title bar with the text "INTERACTIVE MULTIMEDIA" and standard minimize, maximize, and close buttons. Below the title bar is a navigation bar with the following links: "HOME", "EVENT", "FRIENDS LIST", and "GROUP LIST". The main area of the window contains a list of buttons: "Search for friends", "Create a Group", "Organise an Event", "Post", "FRIENDS LIST", "Join group", and "PARTICIPATE IN EVENT".

6.5 Searching for a new friend

INTERACTIVE MULTIMEDIA

View Friends

Search

Search

ADD FRIEND

UID	FNAME	LNAME	DOB	ADD
1	venkat	J	<sqlite3.Cursor objec	bgl

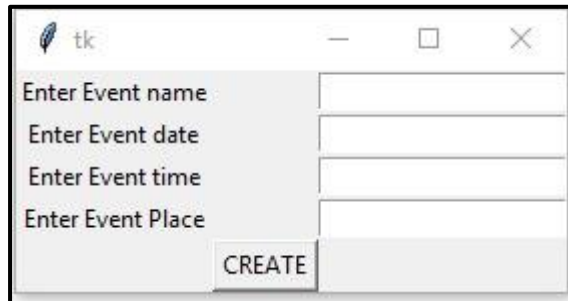
6.6 Creating a new group

tk

Enter group name

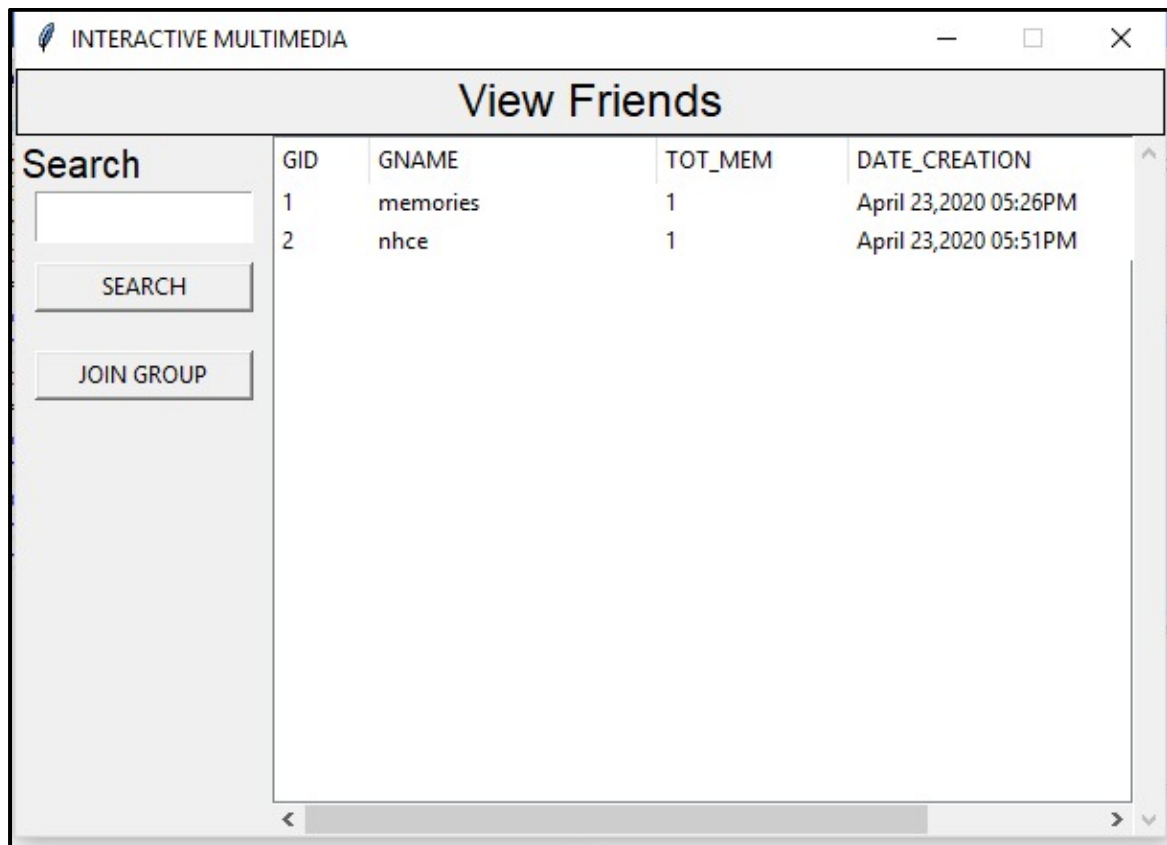
CREATE

6.7 Organize an event



A Tkinter window titled 'tk' with a standard Mac OS title bar (red, yellow, green buttons). The window contains four text input fields stacked vertically, each with a label to its left: 'Enter Event name', 'Enter Event date', 'Enter Event time', and 'Enter Event Place'. Below these fields is a single button labeled 'CREATE'.

6.8 Join any existing group



A Tkinter window titled 'INTERACTIVE MULTIMEDIA' with a standard Mac OS title bar. The window has a header bar with the text 'View Friends'. On the left side, there is a 'Search' section with a text input field, a 'SEARCH' button, and a 'JOIN GROUP' button. The main area of the window displays a table with the following data:

GID	GNAME	TOT_MEM	DATE_CREATION
1	memories	1	April 23,2020 05:26PM
2	nhce	1	April 23,2020 05:51PM

The table has a vertical scrollbar on the right and a horizontal scrollbar at the bottom.

6.9 Participate in an event

INTERACTIVE MULTIMEDIA

View EVENTS

Search

SEARCH

JOIN EVENT

EID	EVENT NAME	EVENT DATE	EVENT TIME
1	sargam	6-8	3:00
2	sargam	3-9-2020	<sqlite3.Cursor object at 0x

CHAPTER 7

CONCLUSION

The project is successfully completed and extent to the possible. The results of the project are shown earlier. The main objective behind creating Talk-line chat application was to bring out changes in the social networking between people and environment. Its aim is to make people spend time by connecting socially with others. Keeping the record of each users, posts, groups and events and activities in database is more efficient and it will helps us to preserve the data for further use and it help and it doesn't consume a lot of time. Realizing all facts like digital recording of data, keeping track on the users, data visualization, sending event information to users, getting ping on friend's birth date , updating information to the users and updating progress through any place would make this beautiful application very useful in corporate world.

Future scope: Further adding new features to it will continue in the future and it always provides new update for user.

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- This book explains all the concepts of python in detail, like, data types, variables, loops ,dictionaries ,lists, tuple methods, Graphical User Interface, widgets etc. and is a very helpful

guide to the students for learning and building project purposes.

[2] Database Management Systems by Abraham Sliberschatz and S Sudarshan

[3] Geeks for geeks

[4] Edureka. blog

[5] Python for everybody-Charles R.Severance, sue Blumenberg.