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INTRODUCTION

The project entitled “Employee Payroll Management System” is a project of MCA 3rd Semester students. It is a small software package which is helpful in the areas of Payment. This program package include all the activities in which salary is managed. The activities like save employee data, update and delete employee data, etc are included.

In terms of security this software is totally secured as it doesn't give access to unauthorized users as the username and password facility is provided. Hence, this software is helpful for the employee payroll management system teams who want to improve the efficiency of the management and want to be the competitive in this day to day changing throw world. This project is also a small step towards development of big professional software.

In the existing system, most of the records are maintained on paper, it becomes very inconvenient to modify the data. In the existing system, here is a possibility that the same data in different registers may have different values which means the entries of the same data do not match. This inconsistent state does not supply the concrete information which poses a problem in the case information related to particular search record.

Our project is very useful. User is no longer required to check his register in search of records, as now it can be searched over the software by choosing some options. The user need not to type in most of the information. User just required to enter the desired options. On the whole it liberates the user from keeping lengthy manual records.

TOOLS AND TECHNOLOGY

DATABASE:-

This module will keep the lists and stock details of all the furniture available ,all the details about the furniture and all the information about the user , their orders and their payments details.

What is Database?

A database is a separate application that stores a collection of data. Each database has one or more distinct APIs for creating, accessing, managing, searching and replicating the data it holds.

Other kinds of data stores can be used, such as files on the file system or large hash tables in memory but data fetching and writing would not be so fast and easy with those types of systems.

So nowadays, we use relational database management system (RDBMS) to store and manage huge volume of data. This is called relational database because all the data is stored into different tables and relations are established using primary keys or other keys known as foreign keys.

A Relational Database Management System (RDBMS) is a software that:

Enables you to implement a database with tables, columns and indexes.
Guarantees the Referential Integrity between rows of various tables.
Updates the indexes automatically. Interprets an SQL query and combines information from various tables.

MySQL Database:-

MySQL is a fast, easy-to-use RDBMS being used for many small and big business. MySQL is developed, marketed, and supported by MySQL AB, which is a Swedish company. MySQL is becoming so popular because of many good reasons:

- MySQL is released under an open-source license. So you have nothing to pay to use it.
- MySQL is a very powerful program in its own right. It handles a large subset of the functionality of the most expensive and powerful database packages.
- MySQL uses a standard form of the well-known SQL data language.
- MySQL works on many operating systems and with many languages including PHP, PERL, C, C++, JAVA, Python, etc.
- MySQL works very quickly and works well even with large data sets.
- MySQL is very friendly to PHP, the most appreciated language for web development.
- MySQL supports large databases, up to 50 million rows or more in a table. The default file size limit for a table is 4GB, but you can increase this (if your operating system can handle it) to a theoretical limit of 8 million terabytes(TB).
- MySQL is customizable. The open-source GPL license allows programmers to modify the MySQL software to fit their own specific environments.

FEATURES OF MYSQL:-

- MySQL follows ANSI SQL 99, the standard SQL>
- Cross platform
- RDBMS features like stored procedures, triggers, cursor, views when can be updated.
- Full text indexing and searching.
- Partial Unicode support.

HARDWARE AND SOFTWARE

Hardware Requirement:-

- The hardware used for the development of the project is:
- Processor : intel(R) Core(TM) i3-6006U CPU @ 2.00GHz 2.00 GHz
- RAM : 4.00 GB (3.87 GB usable)
- Hard Disk : 1TB
- Monitor : LED
- Keyboard/Mouse : Optical

Software Requirement:-

- The software used for the development of the project is:
- Operating System : Windows 10
- Front_End : Python
- Back_End : MySQL
- IDE : Visual Studio Code
- Tools used : IDLE Shell 3.10.6

VISUAL STUDIO CODE

Visual Studio (VS) Code is an open-source code editor primarily used to correct and repair cloud and web applications coding errors. VS Code is developed by Microsoft and supports the macOS, Linux, and Windows operating systems. VS Code's tools can be used to enhance the functionality of any written code. Based on the Electron framework, VS Code employs the same editor component used in Azure DevOps. By incorporating multiple FTP extensions, Users can sync code between the server and the editor without having to download extra software.

HOW VISUAL STUDIO CODE WORKS

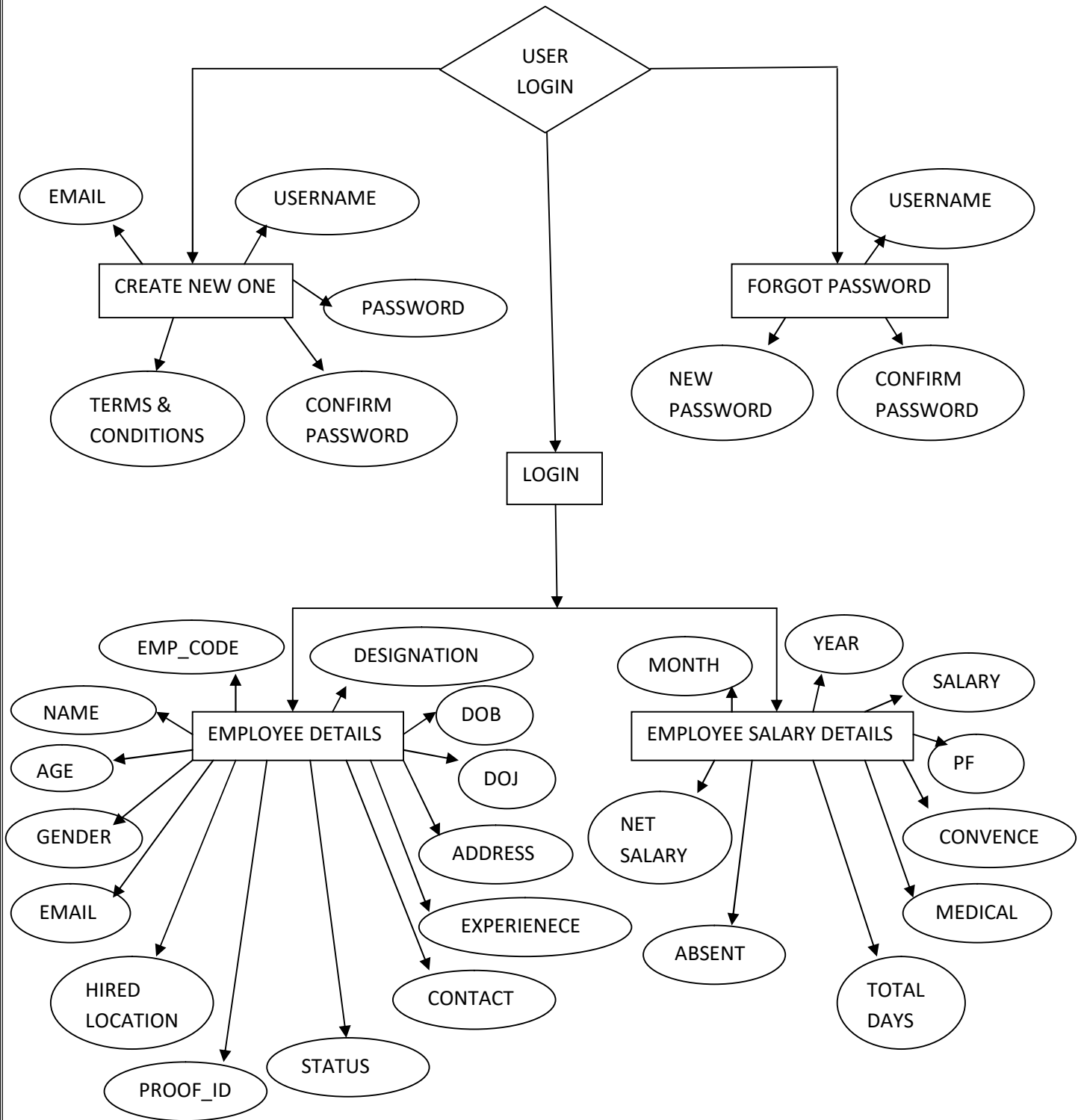
Once downloaded and installed, VS Code launches, identifies the programming language used, and what specific features to implement. The developer can then explore or search options to find and correct coding errors. Major editing is done via the extension option, while source control allows utilization of the Git repository. Users can customize and fine-tune their code using the VS Code's Interactive Editor Playground before deploying their project.

BENEFITS OF VISUAL STUDIO CODE

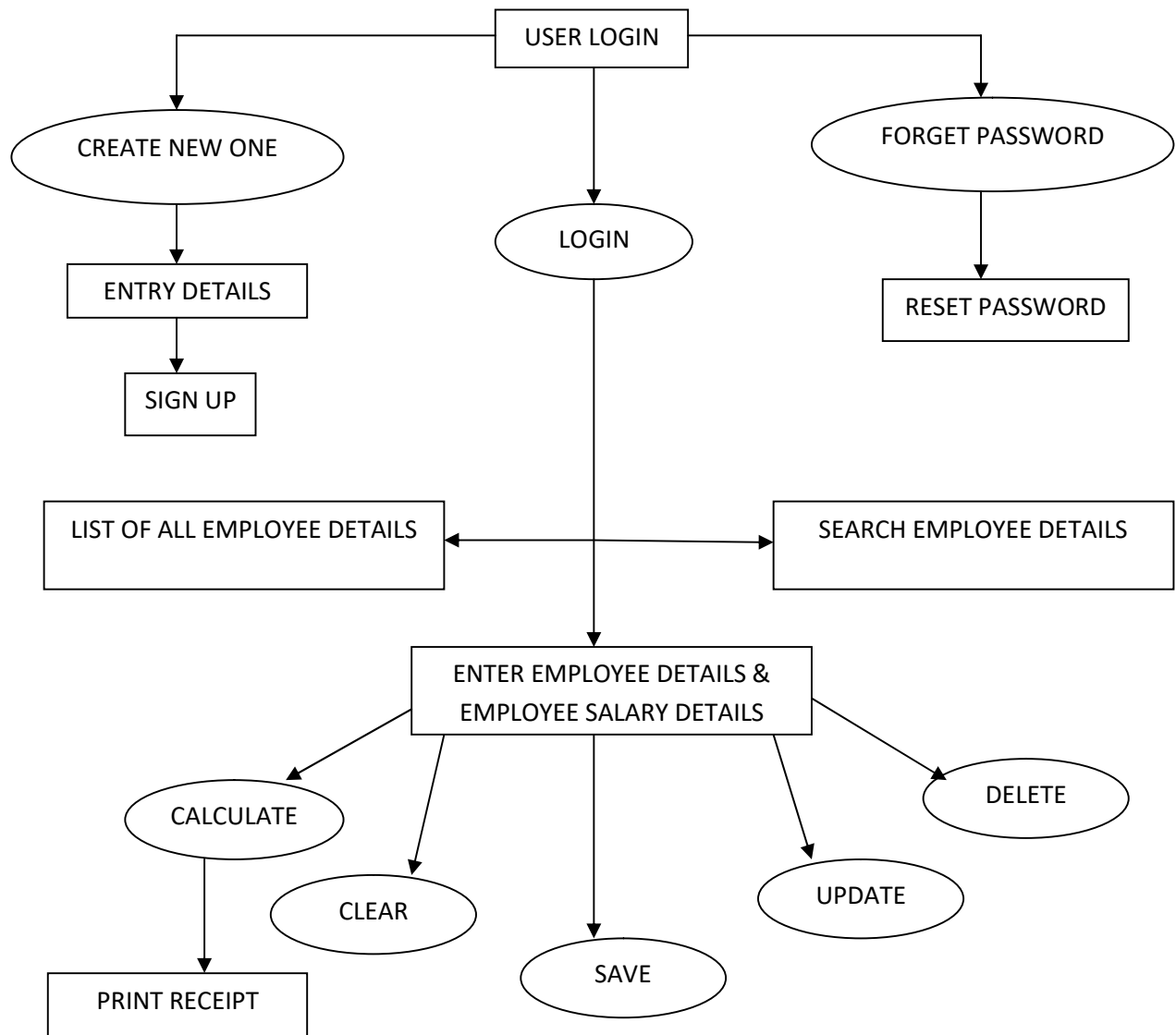
Programmers can swiftly navigate between multiple tools to make the necessary corrections to their code. Aside from its easy-to-use customization options, VS Code also offers keyboard shortcuts for common key combos and repetitive operations.

Besides supporting website development, programmers can use the VS Code on desktop applications. Front-end developers use Visual Studio Code's integrated development environment to make their code more effective and error-free.

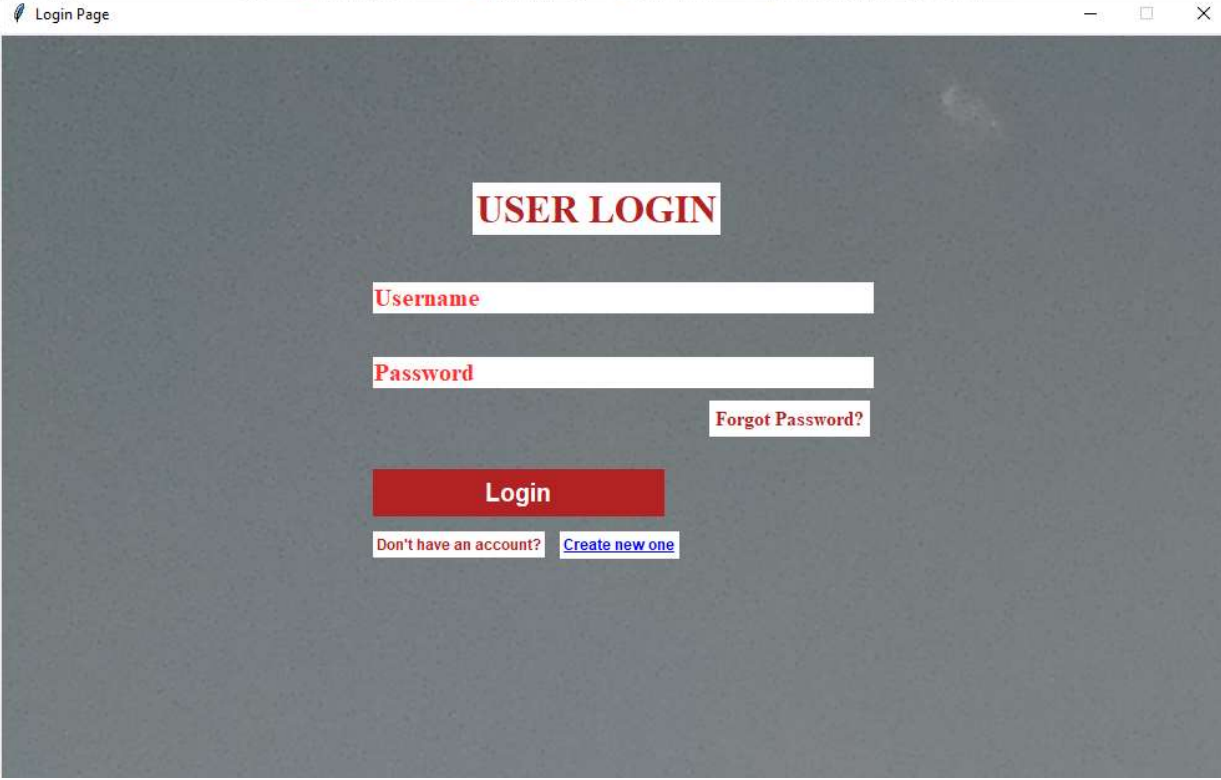
ER-DIAGRAM



DATA FLOW DIAGRAM (DFD)



LOGIN FORM



The screenshot shows a web browser window titled "Login Page". The main content area has a dark gray background. In the center, there is a white box containing the text "USER LOGIN" in red. Below this, there are two white input fields. The first field is labeled "Username" in red text. The second field is labeled "Password" in red text. To the right of the password field, there is a link "Forgot Password?" in red text. Below the input fields, there is a red button with the text "Login" in white. At the bottom, there is a link "Don't have an account?" in red text, followed by a link "Create new one" in blue text.

Login Page

USER LOGIN

Username

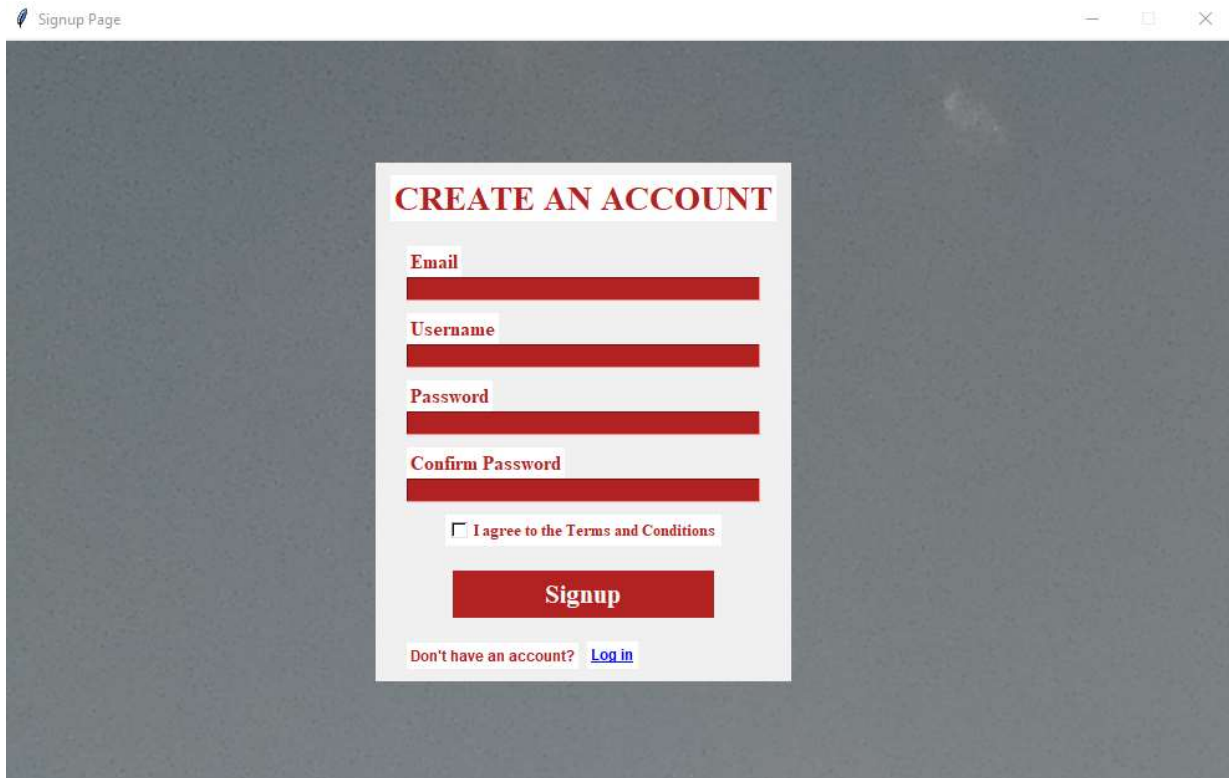
Password

[Forgot Password?](#)

Login

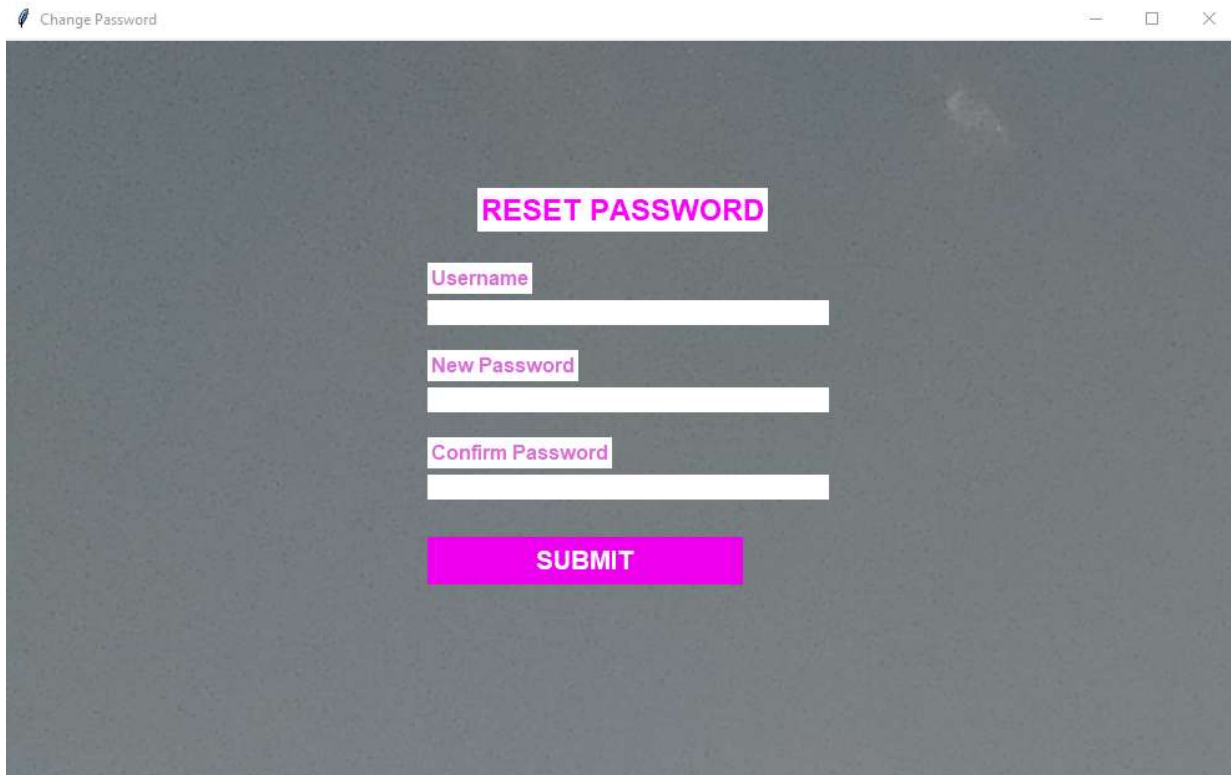
[Don't have an account?](#) [Create new one](#)

CREATE NEW ACCOUNT FORM



The image shows a web browser window titled "Signup Page". The main content is a form titled "CREATE AN ACCOUNT" in red text. The form has four input fields: "Email", "Username", "Password", and "Confirm Password", each with a red underline. Below these fields is a checkbox labeled "I agree to the Terms and Conditions". At the bottom of the form is a red "Signup" button. Below the button is a link that says "Don't have an account? [Log in](#)".

PASSWORD RESET FORM



The screenshot shows a web browser window with the title "Change Password". The browser's address bar is empty. The main content area has a dark gray background. In the center, there is a white rectangular box containing the text "RESET PASSWORD" in bold, black, uppercase letters. Below this box, there are three input fields, each with a label in a small white box to its left: "Username", "New Password", and "Confirm Password". Each label is followed by a white rectangular input field. At the bottom of the form, there is a red rectangular button with the text "SUBMIT" in white, uppercase letters.

EMPLOYEE DETAILS FORM

Employee Payroll Management System

Employee Payroll Management System

All Employee's

Employee Details

Employee Code

Search

Designation

D.O.B.

Name

D.O.J.

Age

Experience

Gender

Proof ID

Email

Contact No

Hired Location

Status

Address

Employee Salary Details

Month

Year

Salary

Total Days

Absents

Medical

PF

Convenience

Net Salary

Calculate

Save

Clear

Update

Delete

Salary Receipt

Company Name, XYZ

Address: Xyz, Floor4

Employee ID

:

Salary Of

:

Mon-YYYY

Generated On

:

DD-MM-YYYY

Total Days

:

DD

Total Present

:

DD

Total Absent

:

DD

Convenience

:

Rs.----

Medical

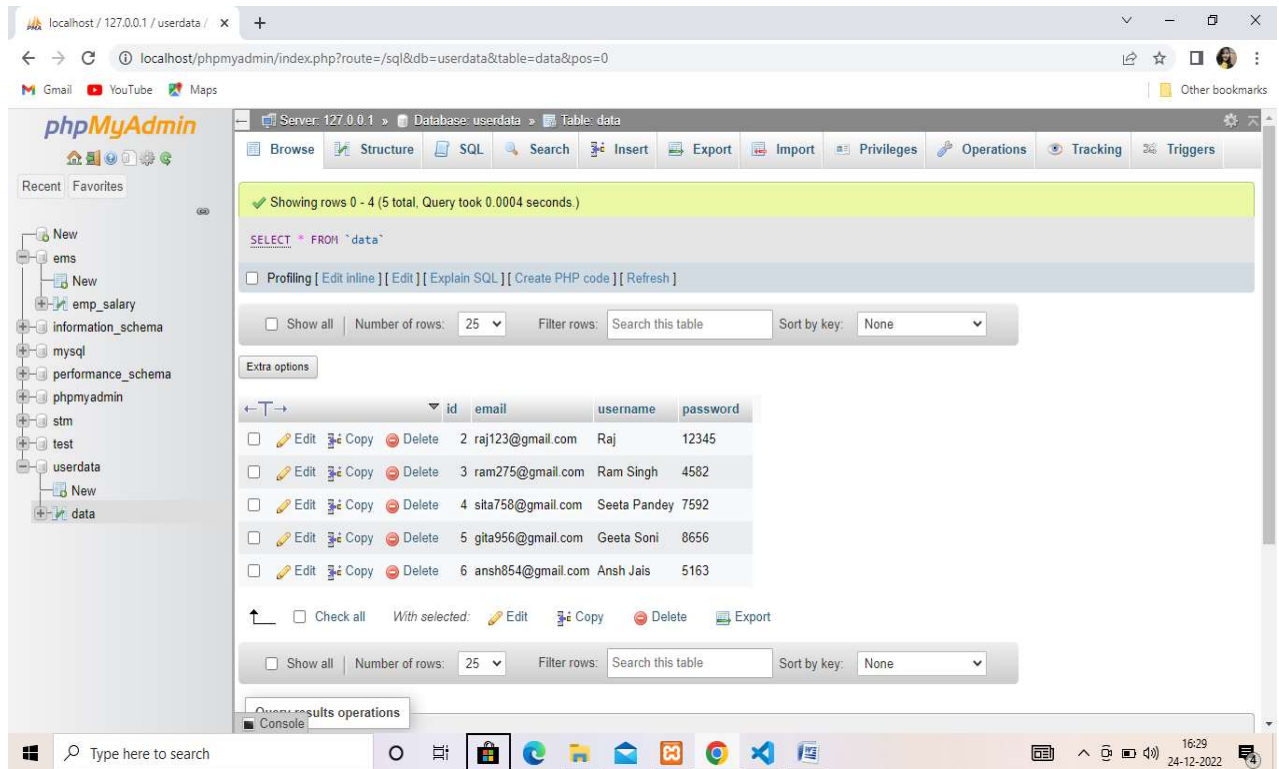
:

Rs.----

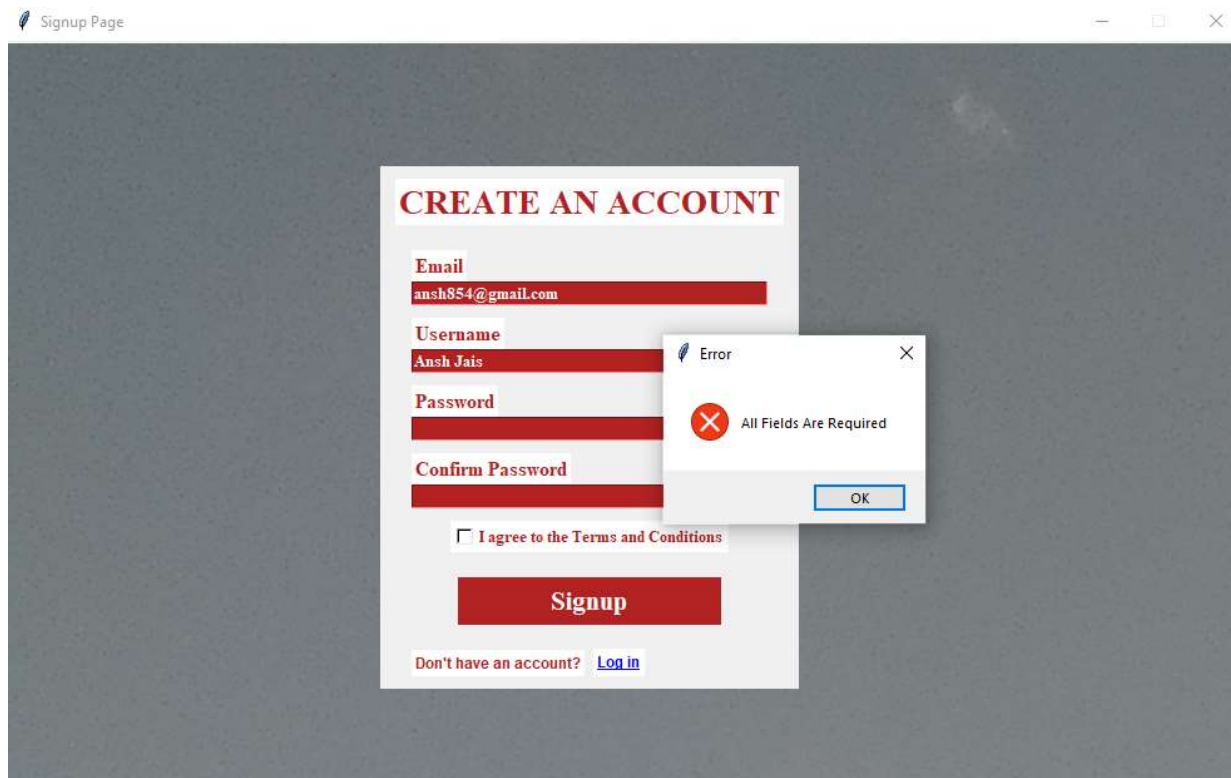
Print

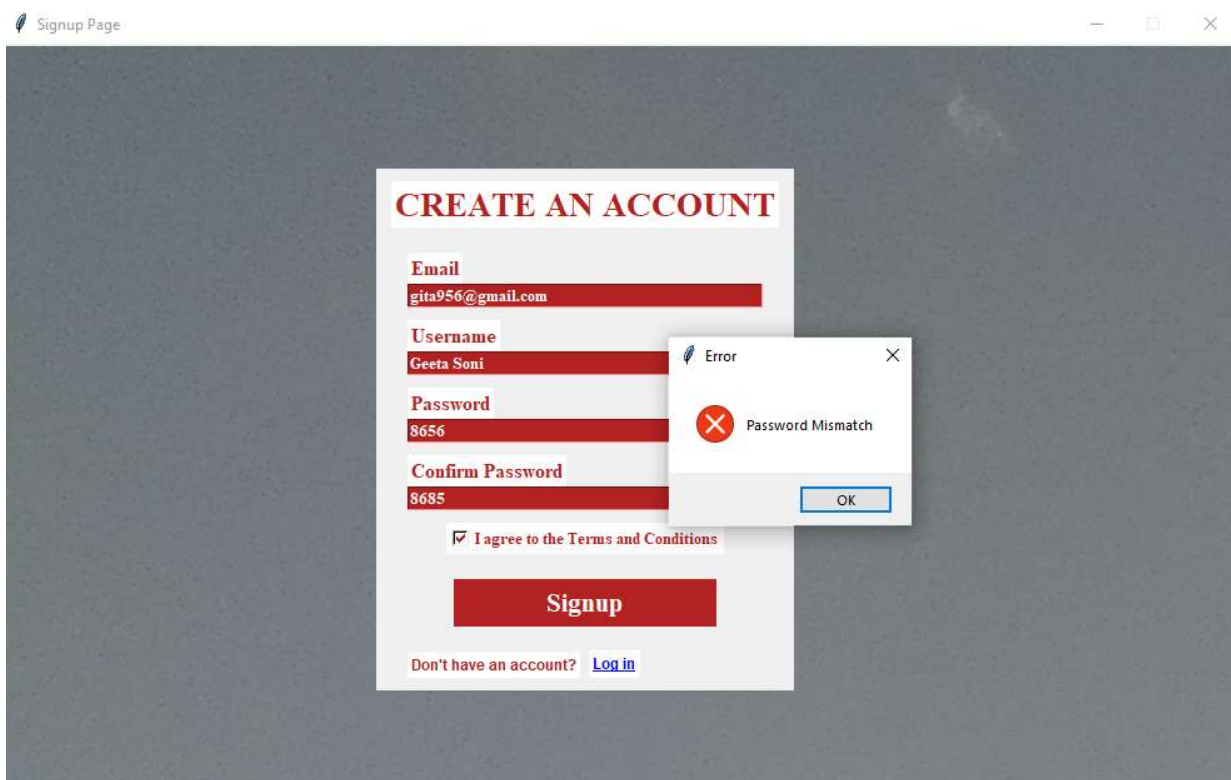
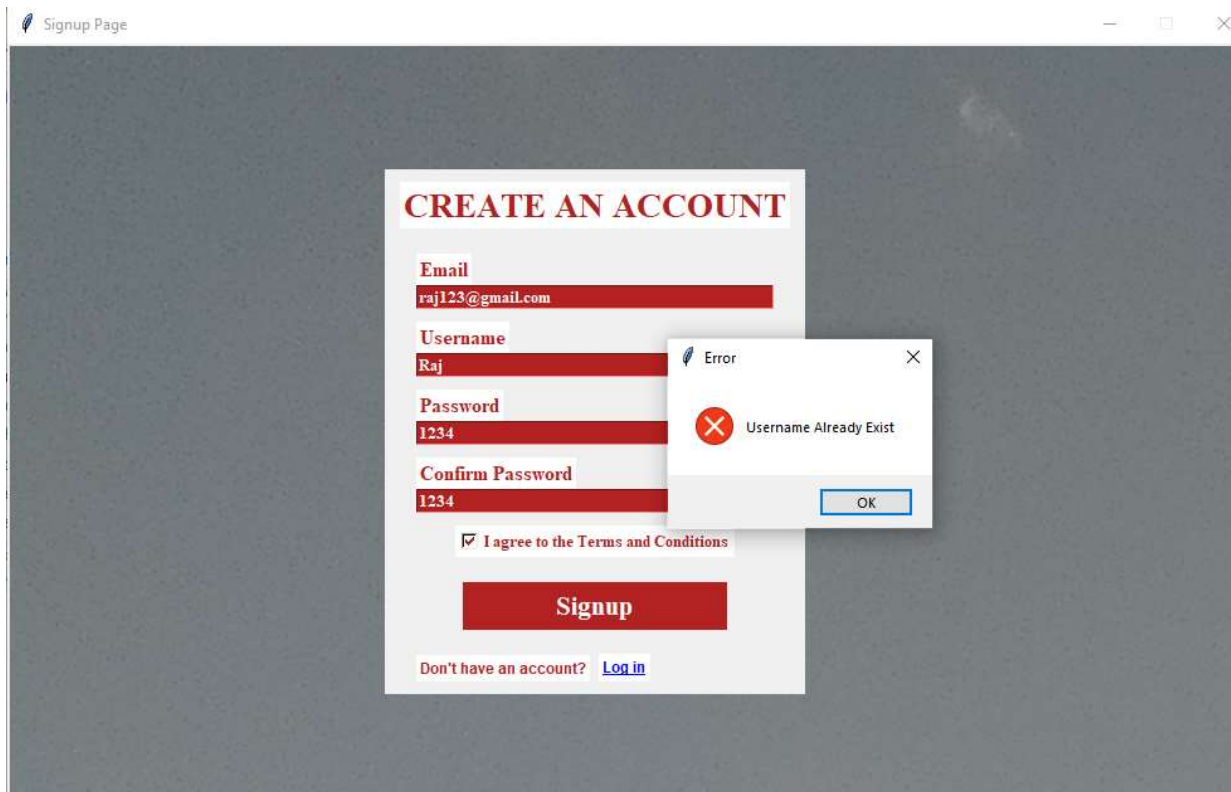
7	8	9	/
4	5	6	*
1	2	3	-
0	C	+	=

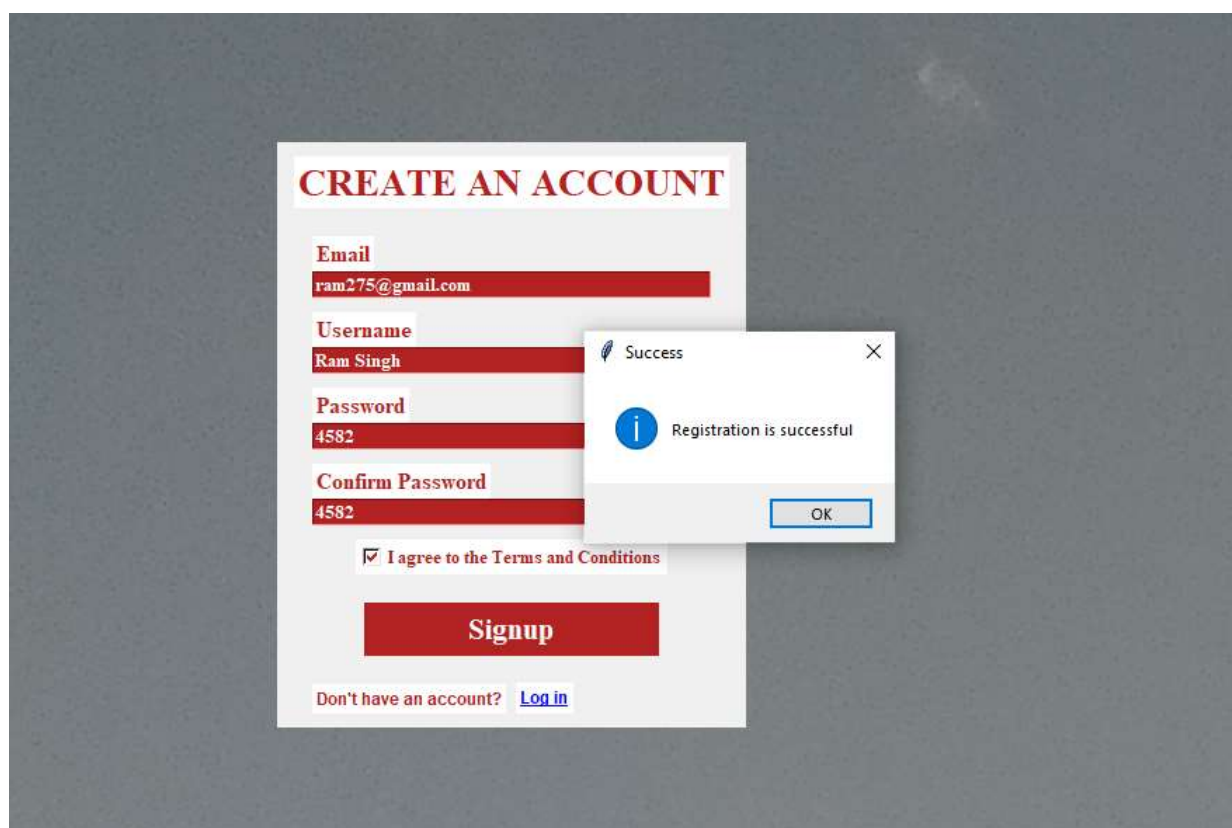
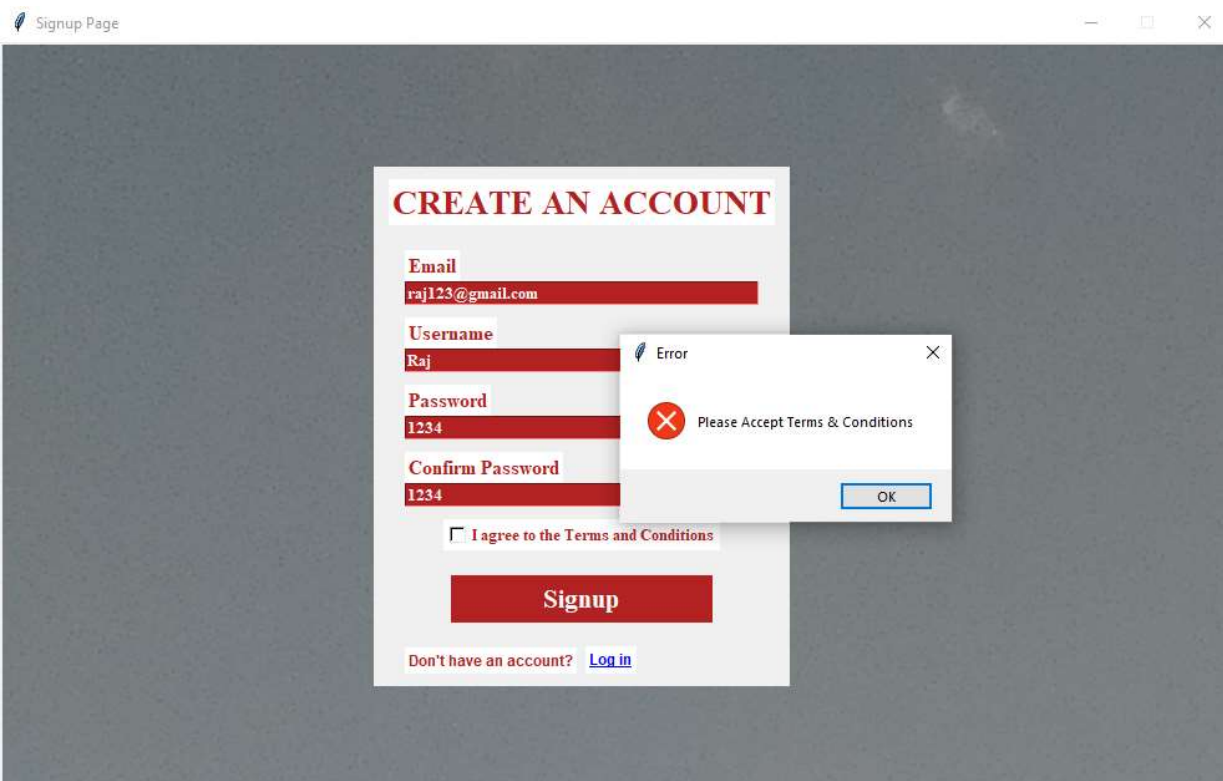
LOGIN FORM DATABASE



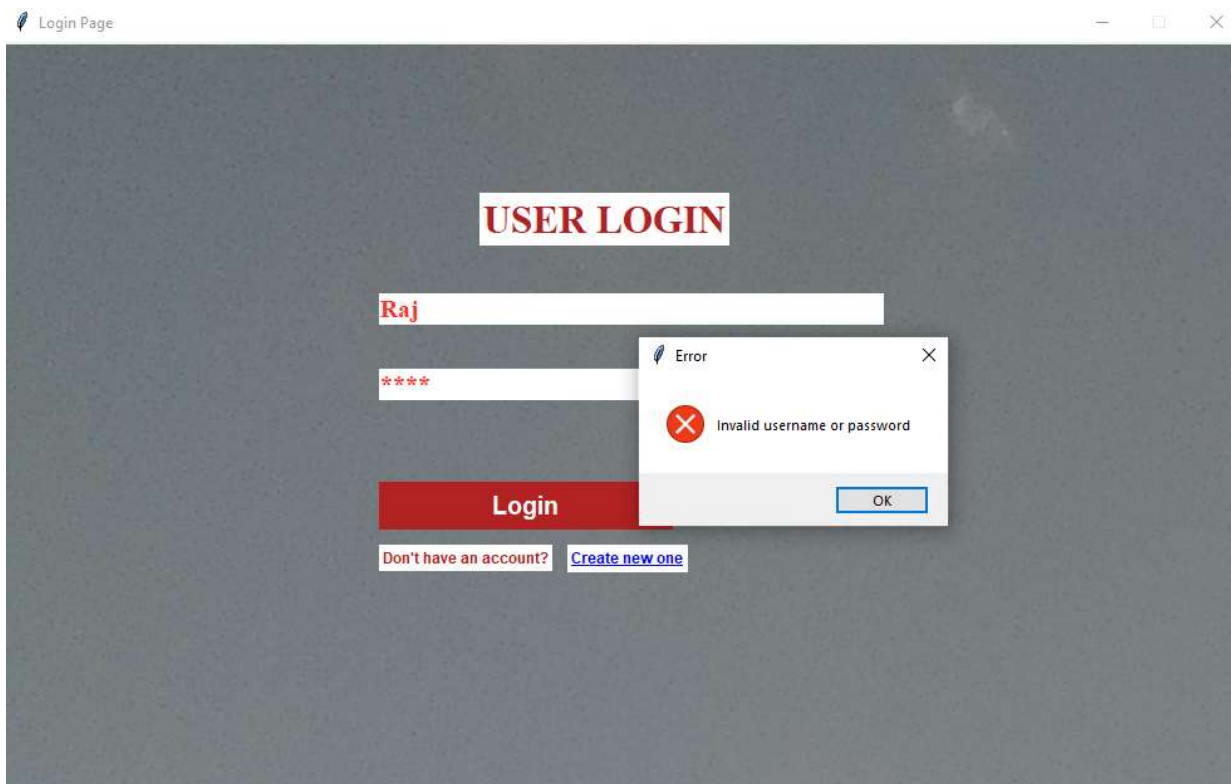
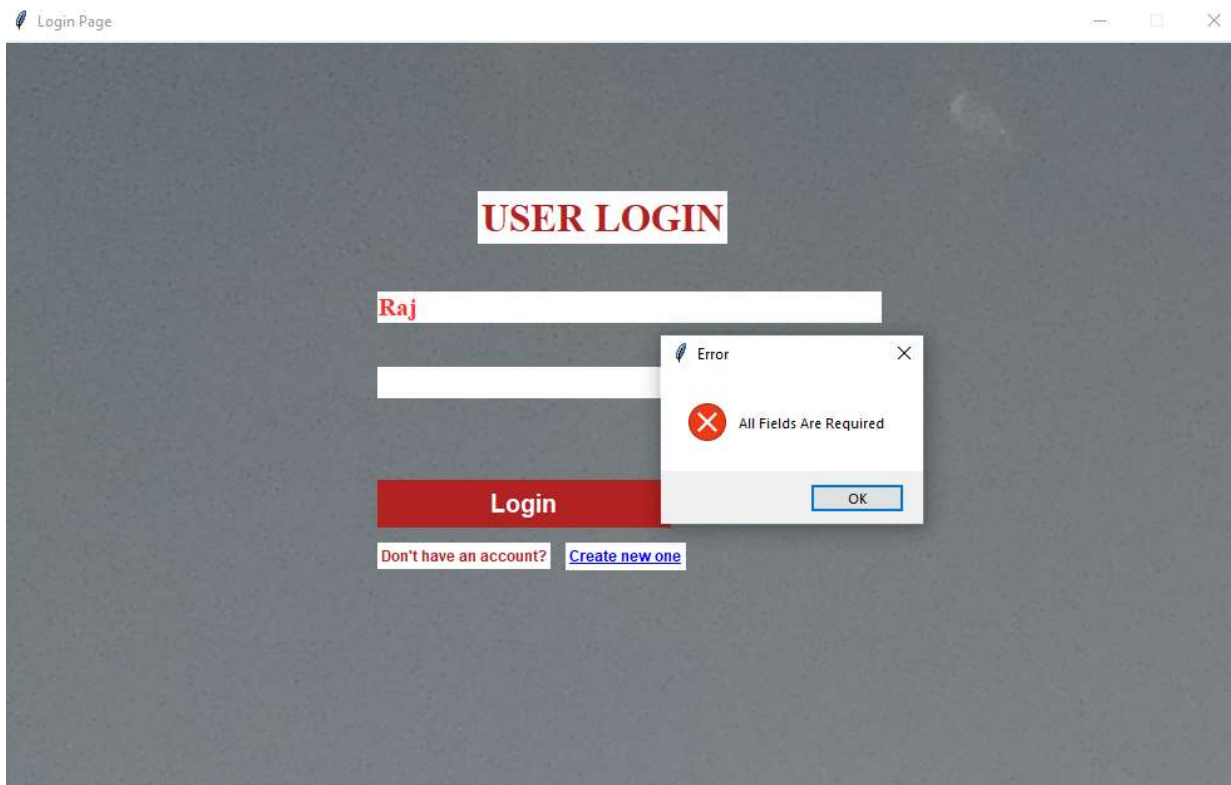
CONDITIONS WHEN WE CREATE NEW ACCOUNT

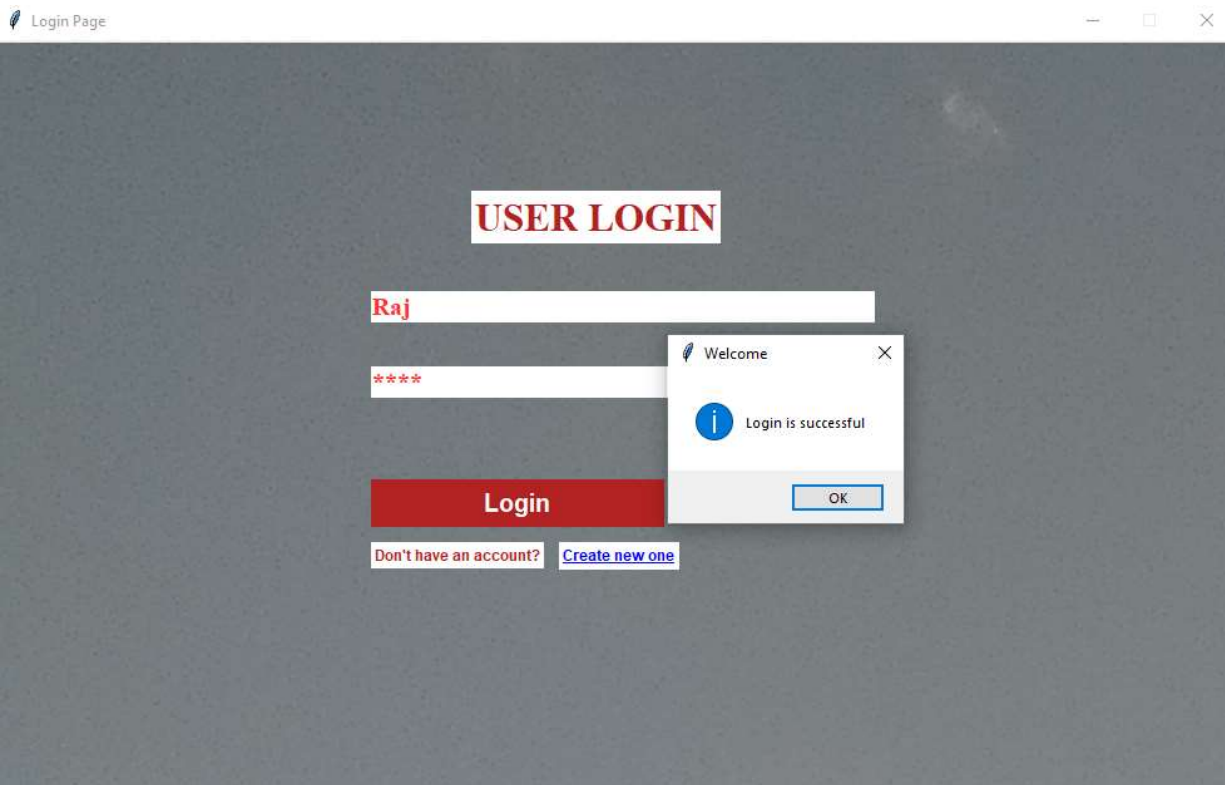






CONDITIONS WHEN WE LOGIN





CONDITIONS WHEN WE FORGET PASSWORD

Change Password

RESET PASSWORD

Username
Raj

New Password

Confirm Password

SUBMIT

Error
All fields Are Required
OK

Change Password

RESET PASSWORD

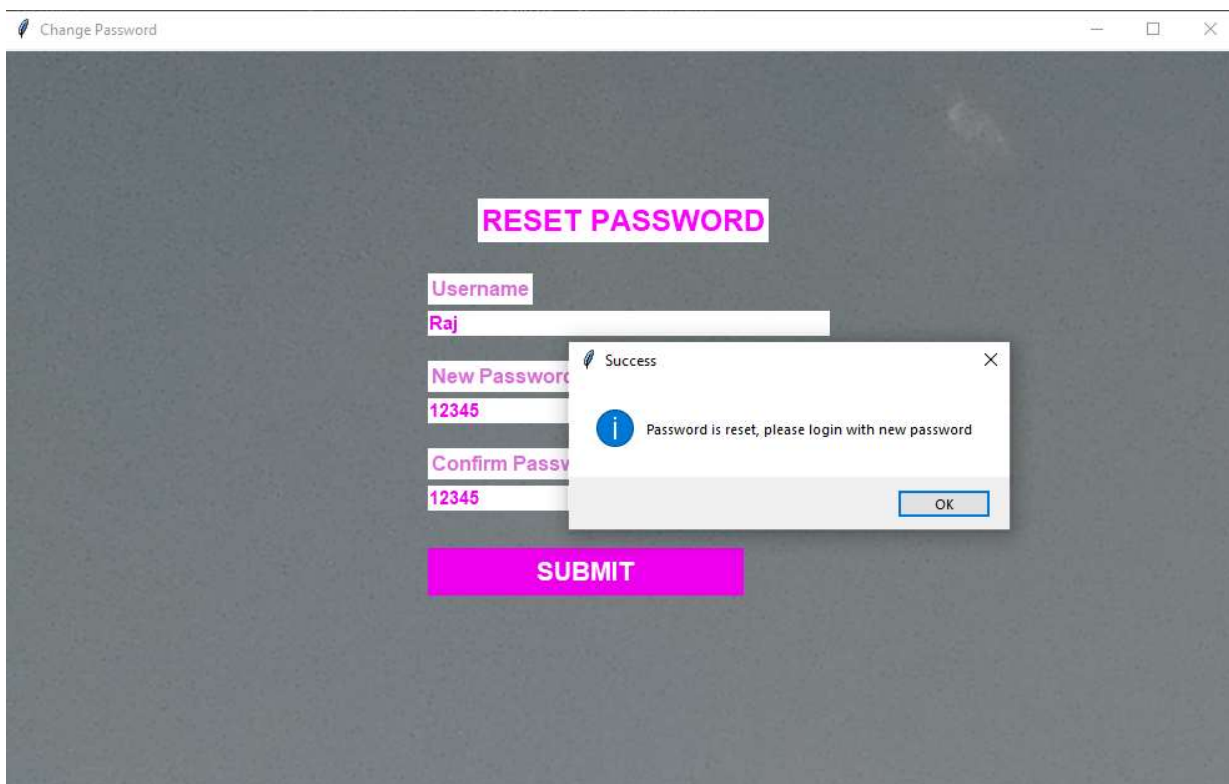
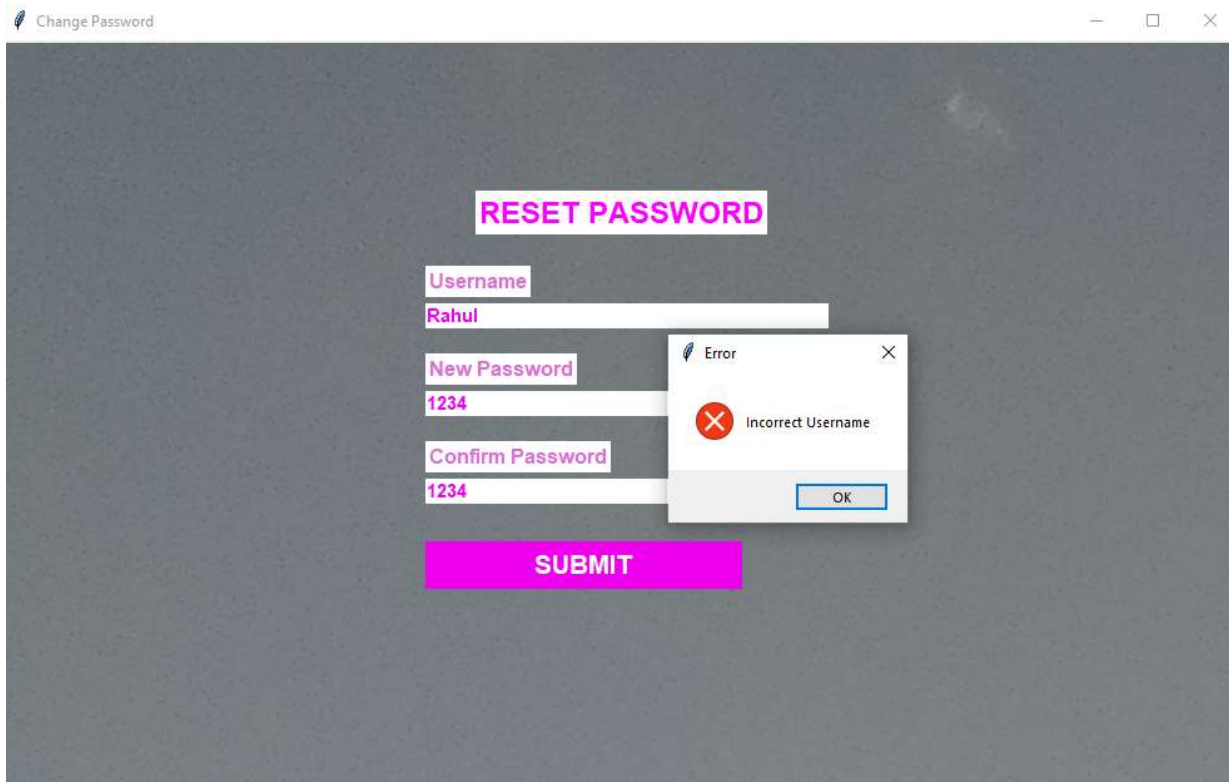
Username
Raj

New Password
2585

Confirm Password
8525

SUBMIT

Error
Password and Confirm Password are not matching
OK



EMPLOYEE DETAILS DATABASE

localhost / 127.0.0.1 / ems / emp x

localhost/phpmyadmin/index.php?route=/sql&db=ems&table=emp_salary&pos=0

Gmail YouTube Maps

Other bookmarks

Server: 127.0.0.1 Database: ems Table: emp_salary

BrowserStructureSQLSearchInsertExportImportPrivilegesOperationsTrackingTriggers

e_id	designation	name	age	gender	email	hr_location	doj	dob	experience	proof_id	contact	status	address	month	year	basic_salary	total_day	
ete	101	Bhopal	Harsh Singh	24	Male	harsh123@gmail.com	Banglore	25/12/2021	12/05/1996	1yr	1523-6525-8965	9214639870	Active	Nagar, Ram Vihar Colony, Bhopal	August	2021	35000	31
ete	102	Jabalpur	Aditya Singh	25	Male	aditya456@gmail.com	Hyderabad	12/08/2020	25/09/1995	2yrs	4521-6352-9874	8569230147	Active	51/8652 Anupam Nagar, Goyar Marg, Jabalpur	September	2022	40000	30
ete	103	Gwalior	Rishita Pathak	23	Female	rishita789@gmail.com	Indore	18/12/2021	25/10/1999	6 months	8523-6914-8569	7548963201	Active	52/4851 Gulab Nagar, Ram Vihar Colony, Gwalior	October	2022	38000	31
ete	104	Indore	Ashika Patel	22	Female	ashika147@gmail.com	Banglore	28/11/2021	12/12/2000	Fresher	1234-5826-4569	9513648790	Work from home	12/5812 Vijay Nagar, Gali No. 2, Indore	May	2022	30000	30

Console

Type here to search

18:10 24-12-2022

localhost / 127.0.0.1 / ems / emp x

localhost/phpmyadmin/index.php?route=/sql&db=ems&table=emp_salary&pos=0

Gmail YouTube Maps

Other bookmarks

Server: 127.0.0.1 Database: ems Table: emp_salary

Browse

Structure

SQL

Search

Insert

Export

Import

Privileges

Operations

Tracking

Triggers

dob	experience	proof_id	contact	status	address	month	year	basic_salary	total_days	absent_days	medical	provident_fund	convenice	net_salary	salary_receipt	
2/2021	12/05/1996	1yr	1523-6525-8965	9214639870	Active	Ram Vihar Colony, Bhopal	August	2021	35000	31	2	1500	2000	1500	30741.94	101.txt
2/2020	25/09/1995	2yrs	4521-6352-9874	8569230147	Active	51/8652 Anupam Nagar, Goyar Marg, Jabalpur	September	2022	40000	30	3	1500	2000	1800	34300.0	102.txt
2/2021	25/10/1999	6 months	8523-6914-8569	7548963201	Active	52/4851 Gulab Nagar, Ram Vihar Colony, Gwalior	October	2022	38000	31	2	1800	2500	1500	32748.39	103.txt
2/2021	12/12/2000	Fresher	1234-5826-4569	9513648790	Work from home	12/5812 Vijay Nagar, Gali No. 2, Indore	May	2022	30000	30	1	1500	1500	1500	27500.0	104.txt

Console

Type here to search

18:10 24-12-2022

SAVE EMPLOYEE DETAILS

Employee Payroll Management System

All Employee's

Employee Details

Employee Code: 101

Designation: Bhopal D.O.B.: 12/05/1996

Name: Harsh Singh D.O.J.: 25/12/2021

Age: 24 Experience: 1yr

Gender: Male Proof ID: 15

Email: harsh123@gmail.com Contact No: 92

Hired Location: Bangalore Status: Active

Address: 21/1251 Nirala Nagar, Ram Vihar Colony, Bhopal

Employee Salary Details

Month: August Year: 2021 Salary: 35000

Total Days: 31 Absents: 2

Medical: 1500 PF: 2000

Convenience: 1500 Net Salary: 30741.94

Salary Receipt

Company Name: XYZ
Address: Xyz, Floor4

Employee ID: :
Salary Of: : Mon-YYYY
Generated On: : DD-MM-YYYY

Total Days: : DD
Total Present: : DD
Total Absent: : DD
Convenience: : Rs. ---
Medical: : Rs. ---

Success
Record Updated Successfully

OK

CALCULATE SALARY

Employee Payroll Management System

All Employee's

Employee Details

Employee Code: 101

Designation: Bhopal D.O.B.: 12/05/1996

Name: Harsh Singh D.O.J.: 25/12/2021

Age: 24 Experience: 1yr

Gender: Male Proof ID: 1523-6525-8965

Email: harsh123@gmail.com Contact No: 9214639870

Hired Location: Bangalore Status: Active

Address: 21/1251 Nirala Nagar, Ram Vihar Colony, Bhopal

Employee Salary Details

Month: August Year: 2021 Salary: 35000

Total Days: 31 Absents: 2

Medical: 1500 PF: 2000

Convenience: 1500 Net Salary: 30741.94

Salary Receipt

Company Name: XYZ
Address: Xyz, Floor4

Employee ID: : 101
Salary Of: : August-2021
Generated On: : 24-12-2022

Total Days: : 31
Total Present: : 29
Total Absent: : 2
Convenience: : Rs. 1500
Medical: : Rs. 1500

SEARCH EMPLOYEE DETAILS

Employee Payroll Management System

All Employee's

Employee Details

Employee Code

Designation D.O.B.

Name D.O.J.

Age Experience

Gender Proof ID

Email Contact

Hired Location Status

Address

Employee Salary Details

Month Year Salary

Total Days Absents

Medical PF

Convenience Net Salary

Salary Receipt

Company Name, XYZ
Address: Xyz, Floor4

Employee ID :
Salary Of : Mon-YYYY
Generated On : DD-MM-YYYY

Total Days : DD
Total Present : DD
Total Absent : DD
Convenience : Rs. ---
Medical : Rs. ---

Error

Invalid Employee Id, please try with another Employee ID

OK

CLEAR EMPLOYEE DETAILS

Employee Payroll Management System

All Employee's

Employee Details

Employee Code

Designation D.O.B.

Name D.O.J.

Age Experience

Gender Proof ID

Email Contact No

Hired Location Status

Address

Employee Salary Details

Month Year Salary

Total Days Absents

Medical PF

Convenience Net Salary

Salary Receipt

Company Name, XYZ
Address: Xyz, Floor4

Employee ID :
Salary Of : Mon-YYYY
Generated On : DD-MM-YYYY

Total Days : DD
Total Present : DD
Total Absent : DD
Convenience : Rs. ---
Medical : Rs. ---

UPDATE EMPLOYEE DETAILS

Employee Payroll Management System | All Employee's

Employee Details

Employee Code:

Designation: D.O.B.:

Name: D.O.J.:

Age: Experience:

Gender: Proof ID:

Email: Contact No:

Hired Location: Status:

Address:

Employee Salary Details

Month: Year: Salary:

Total Days: Absents:

Medical: PF:

Convenence: Net Salary:

Salary Receipt

Company Name, XYZ
Address: Xyz, Floor4

Employee ID :
Salary Of : Mon-YYYY
Generated On : DD-MM-YYYY

Total Days : DD
Total Present : DD
Total Absent : DD
Convenence : Rs ----
Medical : Rs ----

Success
Record Updated Successfully

DELETE EMPLOYEE DETAILS

Employee Payroll Management System | All Employee's

Employee Details

Employee Code:

Designation: D.O.B.:

Name: D.O.J.:

Age: Experience:

Gender: Proof ID:

Email: Contact No:

Hired Location: Status:

Address:

Employee Salary Details

Month: Year: Salary:

Total Days: Absents:

Medical: PF:

Convenence: Net Salary:

Salary Receipt

Company Name, XYZ
Address: Xyz, Floor4

Employee ID :
Salary Of : Mon-YYYY
Generated On : DD-MM-YYYY

Total Days : DD
Total Present : DD
Total Absent : DD
Convenence : Rs ----
Medical : Rs ----

Confirm
Do you really want to delete?

ALL EMPLOYEE DETAILS

Employee Payroll Management System

All Employee Details

E_Id	Designation	Name	Age	Gender	Email	HiredLocation	D.O.J.	D.O.B.	Experience
101	Bhopal	Harsh Singh	24	Male	harsh123@gmail.com	Bangalore	25/12/2021	12/05/1996	1yr
102	Jabalpur	Aditya Singh	25	Male	aditya456@gmail.com	Hyderabad	12/08/2020	25/09/1995	2yrs
103	Gwalior	Rishita Pathak	23	Female	rishita789@gmail.com	Indore	18/12/2021	25/10/1999	6 months
104	Indore	Ashika Patel	22	Female	ashika147@gmail.com	Bangalore	28/11/2021	12/12/2000	Fresher

Salary 30000

Salary 1500

Salary 27500.0

Salary Receipt

Company Name, XYZ
Address: Xyz, Floor4

Employee ID : 104
Salary Of : May-2022
Generated On : 24-12-2022

Total Days : 30
Total Present : 29
Total Absent : 1
Convenience : Rs.1500
Medical : Rs.1500

Print

EMPLOYEE RECEIPT FORMAT

Receipt101.pdf - Adobe Acrobat Reader (64-bit)

File Edit View Sign Window Help

Home Tools Receipt101.pdf x

Search 'Edit Text'

Export PDF
Edit PDF
Create PDF
Comment
Combine Files
Organize Pages

Delete, insert, extract and rotate pages.

Try now

Compress PDF
Redact
Prepare Form

Company Name, XYZ
Address: Xyz, Floor4

Employee ID : 101
Salary Of : August-2021
Generated On : 24-12-2022

Total Days : 31
Total Present : 29
Total Absent : 2
Convenience : Rs.1500
Medical : Rs.1500
Provident Fund : Rs.2000
Gross Payment : Rs.35000
Net Salary : Rs.30741.94

This is computer generated slip, not required any signature

CODING

Login Form:-

```
from tkinter import*
from tkinter import messagebox
from PIL import ImageTk
import pymysql

#Functionality Part
def forget_pass():
    def change_password():
        if user_entry.get()==" or newpass_entry.get()==" or
        confirmpass_entry.get()=="":
            messagebox.showerror('Error','All fields Are Required',parent=window)
        elif newpass_entry.get() != confirmpass_entry.get():
            messagebox.showerror('Error','Password and Confirm Password are not
            matching',parent=window)
        else:
            con=pymysql.connect(host='localhost',user='root',password="",database='userdata'
            )

            mycursor=con.cursor()
            query = 'select * from data where username=%s'
            mycursor.execute(query, (user_entry.get()))
            row=mycursor.fetchone()
            if row==None:
                messagebox.showerror('Error','Incorrect Username',parent=window)
            else:
                query='update data set password=%s where username=%s'
                mycursor.execute(query,(newpass_entry.get(),user_entry.get()))
                con.commit()
                con.close()
                messagebox.showinfo('Success','Password is reset, please login with
                new password',parent=window)
                window.destroy()
            window = Toplevel()
            window.title('Change Password')
            window.geometry('990x600+50+50')
```

```

bgPic = ImageTk.PhotoImage(file='IMG_20210212_180134.jpg')
bglabel = Label(window, image=bgPic)
bglabel.grid()
heading_label = Label(window, text='RESET
PASSWORD',font=('arial','18','bold'),
bg='white',fg='magenta')
heading_label.place(x=380,y=120)

userlabel = Label(window, text='Username',
font=('arial',12,'bold'),bg='white',fg='orchid')userlabel.place(x=340,y=180)
user_entry = Entry(window, width=40, fg='magenta2',
font=('arial',11,'bold'),bd=0)user_entry.place(x=340,y=210)

passwordlabel = Label(window, text='New Password',
font=('arial',12,'bold'),bg='white',fg='orchid')passwordlabel.place(x=340,y=250)
newpass_entry = Entry(window, width=40, fg='magenta2',
font=('arial',11,'bold'),bd=0)newpass_entry.place(x=340,y=280)

confirmpasslabel = Label(window, text='Confirm Password',
font=('arial',12,'bold'),bg='white',fg='orchid')
confirmpasslabel.place(x=340,y=320)
confirmpass_entry = Entry(window, width=40, fg='magenta2',
font=('arial',11,'bold'),bd=0)confirmpass_entry.place(x=340,y=350)

submitButton = Button(window,
text='SUBMIT',bd=0,bg='magenta2',fg='white',font=('Open Sans','16','bold'),
width=19,cursor='hand2',activebackground='magenta2',activeforeground='white',
command=change_password)
submitButton.place(x=340,y=400)
window.mainloop()

def signup_page():
    login_window.destroy()
    import Sign_up

def Login():

```

```

if usernameEntry.get()==" or passwordEntry.get()=="":
    messagebox.showerror('Error','All Fields Are Required')
else:
    try:
        con=pymysql.connect(host='localhost',user='root',password="")
        mycursor=con.cursor()
    except:
        messagebox.showerror('Error','Connection is not established try again')
        return
    query = 'use userdata'
    mycursor.execute(query)
    query='select * from data where username=%s and password=%s'
    mycursor.execute(query,(usernameEntry.get(),passwordEntry.get()))
    row=mycursor.fetchone()
    if row==None:
        messagebox.showerror('Error','Invalid username or password')
    else:
        messagebox.showinfo('Welcome','Login is successful')
        login_window.destroy()
        import Employee
def user_enter(event):
    if usernameEntry.get()=='Username':
        usernameEntry.delete(0,END)

def password_enter(event):
    if passwordEntry.get()=='Password':
        passwordEntry.delete(0,END)
        passwordEntry.config(show= '*')

#Gui Part
login_window=Tk()
login_window.geometry('990x600+50+50')
login_window.resizable(0,0)
login_window.title('Login Page')
bgImage=ImageTk.PhotoImage(file='IMG_20210212_180134.jpg')

bgLabel=Label(login_window,image=bgImage)

```

```

bgLabel.place(x=0,y=0)
heading=Label(login_window,text='USER LOGIN',font=('Times New
Roman',23,'bold'),bg='white',fg='firebrick')
heading.place(x=380,y=120)

usernameEntry=Entry(login_window,width=40,font=('Times New
Roman',15,'bold'),bd=0,fg='firebrick1')
usernameEntry.place(x=300,y=200)
usernameEntry.insert(0,'Username')
usernameEntry.bind('<FocusIn>',user_enter)
passwordEntry=Entry(login_window,width=40,font=('Times New
Roman',15,'bold'),bd=0,fg='firebrick1')
passwordEntry.place(x=300,y=260)
passwordEntry.insert(0,'Password')
passwordEntry.bind('<FocusIn>',password_enter)

forgetButton=Button(login_window,text='Forgot
Password?',bd=0,bg='white',activebackground='white',cursor='hand2'
,font=('Times New Roman',12,'bold'),fg='firebrick',command=forget_pass)
forgetButton.place(x=570,y=295)

loginButton=Button(login_window,text='Login',font=('Open
Sans',15,'bold'),fg='white',bg='firebrick'
,activeforeground='white',activebackground='firebrick',cursor='hand2',bd=0,widt
h=19,command=Login)
loginButton.place(x=300,y=350)
signupLabel=Label(login_window,text="Don't have an account?",font=('Open
Sans',9,'bold'),fg='firebrick',bg='white')
signupLabel.place(x=300,y=400)

newaccountButton=Button(login_window,text='Create new one',font=('Open
Sans',9,'bold underline'),fg='blue',bg='white'
,activeforeground='blue',activebackground='firebrick',cursor='hand2',bd=0,comm
and=signup_page)
newaccountButton.place(x=450,y=400)

login_window.mainloop()

```

Signup Form:-

```
from tkinter import *
from tkinter import messagebox
from PIL import ImageTk
import pymysql

def clear():
    emailEntry.delete(0,END)
    usernameEntry.delete(0,END)
    passwordEntry.delete(0,END)
    confirmEntry.delete(0,END)
    check.set(0)

def connect_database():
    if emailEntry.get()==" or usernameEntry.get()==" or passwordEntry.get()=="
or confirmEntry.get()=="":
        messagebox.showerror('Error','All Fields Are Required')
    elif passwordEntry.get() != confirmEntry.get():
        messagebox.showerror('Error','Password Mismatch')
    elif check.get()==0:
        messagebox.showerror('Error','Please Accept Terms & Conditions')
    else:
        try:
            con=pymysql.connect(host='localhost',user='root',password='')
            mycursor=con.cursor()
        except:
            messagebox.showerror('Error','Database Connectivity Issue, Please Try
Again')
        return
    try:
        query='create database userdata'
        mycursor.execute(query)
        query='use userdata'
        mycursor.execute(query)
```

```

        query='create table data(id int auto_increment primary key not null,
email varchar(50),username varchar(100),password varchar(20))'
        mycursor.execute(query)
    except:
        mycursor.execute('use userdata')

    query='select * from data where username=%s'
    mycursor.execute(query,(usernameEntry.get()))

    row=mycursor.fetchone()
    if row != None:
        messagebox.showerror('Error','Username Already Exist')

    else:
        query='insert into data(email,username,password) values(%s,%s,%s)'

mycursor.execute(query,(emailEntry.get(),usernameEntry.get(),passwordEntry.g
et()))
    con.commit()
    con.close()
    messagebox.showinfo('Success','Registration is successful')
    clear()
    signup_window.destroy()
    import Login

def Login():
    signup_window.destroy()
    import Login

signup_window=Tk()
signup_window.geometry('990x600+50+50')
signup_window.title("Signup Page")
signup_window.resizable(False,False)
background=ImageTk.PhotoImage(file='IMG_20210212_180134.jpg')

```

```
bgLabel=Label(signup_window,image=background)
bgLabel.grid()
```

```
frame=Frame(signup_window)
frame.place(x=300,y=100)
```

```
heading=Label(frame,text='CREATE AN ACCOUNT',font=('Times New
Roman',20,'bold'),bg='white',fg='firebrick')
heading.grid(row=0,column=0,padx=10,pady=10)
```

```
emailLabel=Label(frame,text='Email',font=('Times New
Roman',12,'bold'),bg='white',fg='firebrick')
emailLabel.grid(row=2,column=0,sticky='w',padx=25,pady=(10,0))
```

```
emailEntry=Entry(frame,width=40,font=('Times New
Roman',10,'bold'),fg='white',bg='firebrick')
emailEntry.grid(row=3,column=0,sticky='w',padx=25)
```

```
usernameLabel=Label(frame,text='Username',font=('Times New
Roman',12,'bold'),bg='white',fg='firebrick')
usernameLabel.grid(row=4,column=0,sticky='w',padx=25,pady=(10,0))
```

```
usernameEntry=Entry(frame,width=40,font=('Times New
Roman',10,'bold'),fg='white',bg='firebrick')
usernameEntry.grid(row=5,column=0,sticky='w',padx=25)
```

```
passwordLabel=Label(frame,text='Password',font=('Times New
Roman',12,'bold'),bg='white',fg='firebrick')
passwordLabel.grid(row=6,column=0,sticky='w',padx=25,pady=(10,0))
```

```
passwordEntry=Entry(frame,width=40,font=('Times New
Roman',10,'bold'),fg='white',bg='firebrick')
passwordEntry.grid(row=7,column=0,sticky='w',padx=25)
```

```
confirmLabel=Label(frame,text='Confirm Password',font=('Times New Roman',12,'bold'),bg='white',fg='firebrick')
confirmLabel.grid(row=8,column=0,sticky='w',padx=25,pady=(10,0))
```

```
confirmEntry=Entry(frame,width=40,font=('Times New Roman',10,'bold'),fg='white',bg='firebrick')
confirmEntry.grid(row=9,column=0,sticky='w',padx=25)
check=IntVar()
```

```
termsandconditions=Checkbutton(frame,text='I agree to the Terms and Conditions',font=('Times New Roman',10,'bold'),
fg='firebrick',bg='white',activebackground='white',activeforeground='firebrick',c
ursor='hand2',variable=check)
termsandconditions.grid(row=10,column=0,padx=15,pady=10)
```

```
signupButton=Button(frame,text='Signup',font=('Times New Roman',16,'bold'),bd=0,bg='firebrick',fg='white',
activebackground='firebrick',activeforeground='white',width=17,command=con
nect_database)
signupButton.grid(row=11,column=0,pady=10)
```

```
alreadyaccount=Label(frame,text="Don't have an account?",font=('Open Sans','9','bold'),bg='white',fg='firebrick')
alreadyaccount.grid(row=12,column=0,sticky='w',padx=25,pady=10)
```

```
loginButton=Button(frame,text="Log in",font=('Open Sans',9,'bold underline')
,bg='white',fg='blue',bd=0,cursor='hand2',activebackground='white',activeforegr
ound='blue',command=Login)
loginButton.place(x=170,y=385)
```

```
signup_window.mainloop()
```


Employee Details Form:-

```
from tkinter import*
from tkinter import messagebox,ttk
import pymysql
import time
import os
import tempfile

class EmployeeSystem:
    def __init__(self,root):
        self.root=root
        self.root.title("Employee Payroll Management System")
        self.root.geometry("1350x700+0+0")
        self.root.config(bg="white")
        title=Label(self.root,text="Employee Payroll Management
System",font=("times new
roman",30,"bold"),bg="#262626",fg="white",padx=10)
        title.place(x=0,y=0,relwidth=1)
        btn_emp=Button(self.root,text="All
Employee's",command=self.employee_frame,font=("times new
roman",13),bg="gray",fg="white")
        btn_emp.place(x=1100,y=10,height=30,width=120)

        #=====Frame1=====
        #=====Variables=====

        self.var_emp_code=StringVar()
        self.var_designation=StringVar()
        self.var_name=StringVar()
        self.var_age=StringVar()
        self.var_gender=StringVar()
        self.var_email=StringVar()
        self.var_hiredlocation=StringVar()
        self.var_dob=StringVar()
```

```

self.var_doj=StringVar()
self.var_proof_id=StringVar() #Adhaar Card No.
self.var_contact=StringVar()
self.var_status=StringVar()
self.var_experience=StringVar()

Frame1=Frame(self.root,bd=5,relief=RIDGE,bg="white")
Frame1.place(x=10,y=70,width=750,height=620)
title2=Label(Frame1,text="Employee Details",font=("times new
roman",20,)),bg="lightgray",fg="black",padx=10).place(x=0,y=0,relwidth=1)

lbl_code=Label(Frame1,text="Employee Code",font=("times new
roman",20,)),bg="white",fg="black").place(x=10,y=70)
self.txt_code=Entry(Frame1,font=("times new
roman",15),textvariable=self.var_emp_code,bg="lightyellow",fg="black")
self.txt_code.place(x=220,y=75,width=200)

btn_search=Button(Frame1,text="Search",command=self.search,font=("times
new roman",20,)),bg="gray",fg="black").place(x=440,y=72,height=30)

#=====ROW1=====
lbl_designation=Label(Frame1,text="Designation",font=("times new
roman",20,)),bg="white",fg="black").place(x=10,y=120)
txt_designation=Entry(Frame1,font=("times new
roman",15),textvariable=self.var_designation,bg="lightyellow",fg="black").place
(x=170,y=125,width=200)
lbl_dob=Label(Frame1,text="D.O.B.",font=("times new
roman",20,)),bg="white",fg="black").place(x=390,y=120)
txt_dob=Entry(Frame1,font=("times new
roman",15),textvariable=self.var_dob,bg="lightyellow",fg="black").place(x=520,
y=125)

#=====ROW2=====
lbl_name=Label(Frame1,text="Name",font=("times new
roman",20,)),bg="white",fg="black").place(x=10,y=170)

```

```
txt_name=Entry(Frame1,font=("times new
roman",15),textvariable=self.var_name,bg="lightyellow",fg="black").place(x=17
0,y=175,width=200)
```

```
lbl_doj=Label(Frame1,text="D.O.J.",font=("times new
roman",20,),bg="white",fg="black").place(x=390,y=170)
```

```
txt_doj=Entry(Frame1,font=("times new
roman",15),textvariable=self.var_doj,bg="lightyellow",fg="black").place(x=520,y
=175)
```

```
#=====ROW3=====
```

```
lbl_age=Label(Frame1,text="Age",font=("times new
roman",20,),bg="white",fg="black").place(x=10,y=220)
```

```
txt_age=Entry(Frame1,font=("times new
roman",15),textvariable=self.var_age,bg="lightyellow",fg="black").place(x=170,y
=225,width=200)
```

```
lbl_experience=Label(Frame1,text="Experience",font=("times new
roman",20,),bg="white",fg="black").place(x=390,y=220)
```

```
txt_experience=Entry(Frame1,font=("times new
roman",15),textvariable=self.var_experience,bg="lightyellow",fg="black").place(
x=520,y=225)
```

```
#=====ROW4=====
```

```
lbl_gender=Label(Frame1,text="Gender",font=("times new
roman",20),bg="white",fg="black").place(x=10,y=270)
```

```
txt_gender=Entry(Frame1,font=("times new
roman",15),textvariable=self.var_gender,bg="lightyellow",fg="black").place(x=1
70,y=275,width=200)
```

```
lbl_proof=Label(Frame1,text="Proof ID",font=("times new
roman",20),bg="white",fg="black").place(x=390,y=270)
```

```
txt_proof=Entry(Frame1,font=("times new
roman",15),textvariable=self.var_proof_id,bg="lightyellow",fg="black").place(x=
520,y=275)
```

```
#=====ROW5=====
```

```

        lbl_email=Label(Frame1,text="Email",font=("times new
roman",20),bg="white",fg="black").place(x=10,y=320)
        txt_email=Entry(Frame1,font=("times new
roman",15),textvariable=self.var_email,bg="lightyellow",fg="black").place(x=170
,y=325,width=200)
        lbl_contact=Label(Frame1,text="Contact No.",font=("times new
roman",20),bg="white",fg="black").place(x=390,y=320)
        txt_contact=Entry(Frame1,font=("times new
roman",15),textvariable=self.var_contact,bg="lightyellow",fg="black").place(x=5
20,y=325)

#=====ROW6=====
        lbl_hired=Label(Frame1,text="Hired Location",font=("times new
roman",19),bg="white",fg="black").place(x=10,y=372)
        txt_hired=Entry(Frame1,font=("times new
roman",15),textvariable=self.var_hiredlocation,bg="lightyellow",fg="black").plac
e(x=170,y=375,width=200)
        lbl_status=Label(Frame1,text="Status",font=("times new
roman",20),bg="white",fg="black").place(x=390,y=370)
        txt_status=Entry(Frame1,font=("times new
roman",15),textvariable=self.var_status,bg="lightyellow",fg="black").place(x=52
0,y=375)

#=====ROW7=====
        lbl_address=Label(Frame1,text="Address",font=("times new
roman",20),bg="white",fg="black").place(x=10,y=422)
        self.txt_address=Text(Frame1,font=("times new
roman",15),bg="lightyellow",fg="black")
        self.txt_address.place(x=170,y=425,width=550,height=150)

#=====Frame2=====
#=====Variables=====

self.var_month=StringVar()
self.var_year=StringVar()

```

```
self.var_salary=StringVar()
self.var_totaldays=StringVar()
self.var_absents=StringVar()
self.var_medical=StringVar()
self.var_providentfund=StringVar()
self.var_convence=StringVar()
self.var_netsalary=StringVar()
```

```
Frame2=Frame(self.root,bd=3,relief=RIDGE,bg="white")
Frame2.place(x=770,y=70,width=580,height=300)
title3=Label(Frame2,text="Employee Salary Details",font=("times new
roman",20,),bg="lightgray",fg="black",padx=10).place(x=0,y=0,relwidth=1)
```

```
lbl_month=Label(Frame2,text="Month",font=("times new
roman",18,),bg="white",fg="black").place(x=10,y=60)
txt_month=Entry(Frame2,font=("times new
roman",15),textvariable=self.var_month,bg="lightyellow",fg="black").place(x=90
,y=62,width=100)
```

```
lbl_year=Label(Frame2,text="Year",font=("times new
roman",18,),bg="white",fg="black").place(x=210,y=60)
txt_year=Entry(Frame2,font=("times new
roman",15),textvariable=self.var_year,bg="lightyellow",fg="black").place(x=270,
y=62,width=100)
```

```
lbl_salary=Label(Frame2,text="Salary",font=("times new
roman",18,),bg="white",fg="black").place(x=380,y=60)
txt_salary=Entry(Frame2,font=("times new
roman",15),textvariable=self.var_salary,bg="lightyellow",fg="black").place(x=46
0,y=62,width=100)
```

```
#=====ROW1=====
```

```
lbl_days=Label(Frame2,text="Total Days",font=("times new
roman",18,),bg="white",fg="black").place(x=10,y=120)
```

```
txt_days=Entry(Frame2,font=("times new
roman",15),textvariable=self.var_totaldays,bg="lightyellow",fg="black").place(x=
170,y=125,width=100)
```

```
lbl_absent=Label(Frame2,text="Absents",font=("times new
roman",18,),bg="white",fg="black").place(x=300,y=120)
```

```
txt_absent=Entry(Frame2,font=("times new
roman",15),textvariable=self.var_absents,bg="lightyellow",fg="black").place(x=4
20,y=125,width=120)
```

```
#=====ROW2=====
```

```
lbl_medical=Label(Frame2,text="Medical",font=("times new
roman",18,),bg="white",fg="black").place(x=10,y=150)
```

```
txt_medical=Entry(Frame2,font=("times new
roman",15),textvariable=self.var_medical,bg="lightyellow",fg="black").place(x=1
70,y=155,width=100)
```

```
lbl_pf=Label(Frame2,text="PF",font=("times new
roman",18,),bg="white",fg="black").place(x=300,y=150)
```

```
txt_pf=Entry(Frame2,font=("times new
roman",15),textvariable=self.var_providentfund,bg="lightyellow",fg="black").pla
ce(x=420,y=155,width=120)
```

```
#=====ROW3=====
```

```
lbl_convence=Label(Frame2,text="Convence",font=("times new
roman",18,),bg="white",fg="black").place(x=10,y=180)
```

```
txt_convence=Entry(Frame2,font=("times new
roman",15),textvariable=self.var_convence,bg="lightyellow",fg="black").place(x
=170,y=185,width=100)
```

```
lbl_netsalary=Label(Frame2,text="Net Salary",font=("times new
roman",18,),bg="white",fg="black").place(x=300,y=180)
```

```
txt_netsalary=Entry(Frame2,font=("times new
roman",15),textvariable=self.var_netsalary,bg="lightyellow",fg="black").place(x=
420,y=185,width=120)
```

```
btn_calculate=Button(Frame2,text="Calculate",command=self.calculate,font=("t
```

```

imes new
roman",20,),bg="orange",fg="black").place(x=150,y=225,height=30,width=120)
    self.btn_save=Button(Frame2,text="Save",command=self.add,font=("times
new roman",20,),bg="green",fg="white")
    self.btn_save.place(x=285,y=225,height=30,width=120)
    btn_clear=Button(Frame2,text="Clear",command=self.clear,font=("times
new
roman",20,),bg="gray",fg="black").place(x=420,y=225,height=30,width=120)

```

```

self.btn_update=Button(Frame2,text="Update",state=DISABLED,command=self.
update,font=("times new roman",20,),bg="blue",fg="white")
    self.btn_update.place(x=150,y=260,height=30,width=180)

```

```

self.btn_delete=Button(Frame2,text="Delete",state=DISABLED,command=self.d
elete,font=("times new roman",20,),bg="red",fg="white")
    self.btn_delete.place(x=340,y=260,height=30,width=200)

```

```

#=====Frame3=====
Frame3=Frame(self.root,bd=3,relief=RIDGE,bg="white")
Frame3.place(x=770,y=380,width=580,height=310)

```

```

#=====Calculator Frame=====

```

```

self.var_txt=StringVar()
self.var_operator=""
def btn_click(num):
    self.var_operator=self.var_operator+str(num)
    self.var_txt.set(self.var_operator)

```

```

def result():
    res=str(eval(self.var_operator))
    self.var_txt.set(res)
    self.var_operator=""

```

```

def clear_cal():

```

```
self.var_txt.set("")
self.var_operator=""
```

```
Cal_Frame=Frame(Frame3,bg="white",bd=2,relief=RIDGE)
Cal_Frame.place(x=2,y=2,width=246,height=300)
```

```
txt_result=Entry(Cal_Frame,bg='lightyellow',textvariable=self.var_txt,font=("times new roman",20,"bold"),justify=RIGHT).place(x=0,y=0,relwidth=1,height=50)
```

```
#=====Row1=====
```

```
btn_7=Button(Cal_Frame,text='7',command=lambda:btn_click(7),font=("times new roman",15,"bold")).place(x=0,y=52,width=60,height=60)
```

```
btn_8=Button(Cal_Frame,text='8',command=lambda:btn_click(8),font=("times new roman",15,"bold")).place(x=61,y=52,width=60,height=60)
```

```
btn_9=Button(Cal_Frame,text='9',command=lambda:btn_click(9),font=("times new roman",15,"bold")).place(x=122,y=52,width=60,height=60)
```

```
btn_divide=Button(Cal_Frame,text='/',command=lambda:btn_click('/'),font=("times new roman",15,"bold")).place(x=183,y=52,width=60,height=60)
```

```
#=====Row2=====
```

```
btn_4=Button(Cal_Frame,text='4',command=lambda:btn_click(4),font=("times new roman",15,"bold")).place(x=0,y=112,width=60,height=60)
```

```
btn_5=Button(Cal_Frame,text='5',command=lambda:btn_click(5),font=("times new roman",15,"bold")).place(x=61,y=112,width=60,height=60)
```

```
btn_6=Button(Cal_Frame,text='6',command=lambda:btn_click(6),font=("times new roman",15,"bold")).place(x=122,y=112,width=60,height=60)
```



```
btn_multiply=Button(Cal_Frame,text='*',command=lambda:btn_click('*'),font=(
"times new roman",15,"bold")).place(x=183,y=112,width=60,height=60)
```

```
#=====Row3=====
```

```
btn_1=Button(Cal_Frame,text='1',command=lambda:btn_click(1),font=("times
new roman",15,"bold")).place(x=0,y=172,width=60,height=60)
```

```
btn_2=Button(Cal_Frame,text='2',command=lambda:btn_click(2),font=("times
new roman",15,"bold")).place(x=61,y=172,width=60,height=60)
```

```
btn_3=Button(Cal_Frame,text='3',command=lambda:btn_click(3),font=("times
new roman",15,"bold")).place(x=122,y=172,width=60,height=60)
```

```
btn_subtract=Button(Cal_Frame,text='-',command=lambda:btn_click('-
'),font=("times new roman",15,"bold")).place(x=183,y=172,width=60,height=60)
```

```
#=====Row4=====
```

```
btn_zero=Button(Cal_Frame,text='0',command=lambda:btn_click(0),font=("time
s new roman",15,"bold")).place(x=0,y=232,width=60,height=60)
```

```
btn_clear=Button(Cal_Frame,text='C',command=clear_cal,font=("times new
roman",15,"bold")).place(x=61,y=232,width=60,height=60)
```

```
btn_add=Button(Cal_Frame,text='+',command=lambda:btn_click('+'),font=("tim
es new roman",15,"bold")).place(x=122,y=232,width=60,height=60)
```

```
btn_equal=Button(Cal_Frame,text='=',command=result,font=("times new
roman",15,"bold")).place(x=183,y=232,width=60,height=60)
```

```
#=====Calculator Frame=====
```

```
sal_Frame=Frame(Frame3,bg="white",bd=2,relief=RIDGE)
```

```
sal_Frame.place(x=251,y=2,width=320,height=300)
```

```
title_sal=Label(sal_Frame,text="Salary Receipt",font=("times new
roman",20,),bg="lightgray",fg="black",padx=10).place(x=0,y=0,relwidth=1)
```

```
sal_Frame2=Frame(sal_Frame,bg="white",bd=2,relief=RIDGE)
sal_Frame2.place(x=0,y=30,relwidth=1,height=230)
self.sample=f"""\tCompany Name, XYZ\n\tAddress: Xyz, Floor4
```

```
-----
Employee ID\t\t:
Salary Of\t\t: Mon-YYYY
Generated On\t\t: DD-MM-YYYY
-----
```

```
Total Days\t\t: DD
Total Present\t\t: DD
Total Absent\t\t: DD
Convence\t\t: Rs.----
Medical\t\t: Rs.----
Provident Fund\t\t: Rs.----
Gross Payment\t\t: Rs.-----
Net Salary\t\t: Rs.-----
-----
```

```
This is computer generated slip, not
required any signature
'''
```

```
scroll_y=Scrollbar(sal_Frame2,orient=VERTICAL)
scroll_y.pack(fill=Y,side=RIGHT)
```

```
self.txt_salary_receipt=Text(sal_Frame2,font=("times new
roman",13),bg='lightyellow',yscrollcommand=scroll_y.set)
self.txt_salary_receipt.pack(fill=BOTH,expand=1)
scroll_y.config(command=self.txt_salary_receipt.yview)
self.txt_salary_receipt.insert(END,self.sample)
```

```
self.btn_print=Button(sal_Frame,text="Print",state=DISABLED,command=self.pri
nt,font=("times new roman",20,'bold'),bg="blue",fg="lightblue")
self.btn_print.place(x=180,y=262,height=30,width=120)
```

```
self.check_connection()
```

```
#=====All Functions Start  
Here=====
```

```
def search(self):  
    try:  
        con=pymysql.connect(host='localhost',user='root',password='',db='ems')  
        cur=con.cursor()  
        cur.execute("select * from emp_salary where  
e_id=%s",(self.var_emp_code.get()))  
        row=cur.fetchone()  
        # print(rows)  
        if row==None:  
            messagebox.showerror("Error","Invalid Employee Id, please try with  
another Employee ID",parent=self.root)  
        else:  
            # print(row)  
            self.var_emp_code.set(row[0])  
            self.var_designation.set(row[1])  
            self.var_name.set(row[2])  
            self.var_age.set(row[3])  
            self.var_gender.set(row[4])  
            self.var_email.set(row[5])  
            self.var_hiredlocation.set(row[6])  
            self.var_doj.set(row[7])  
            self.var_dob.set(row[8])  
            self.var_experience.set(row[9])  
            self.var_proof_id.set(row[10])  
            self.var_contact.set(row[11])  
            self.var_status.set(row[12])  
            self.txt_address.delete('1.0',END)  
            self.txt_address.insert(END,row[13])  
            self.var_month.set(row[14])  
            self.var_year.set(row[15])  
            self.var_salary.set(row[16])
```

```
self.var_totaldays.set(row[17])
self.var_absents.set(row[18])
self.var_medical.set(row[19])
self.var_providentfund.set(row[20])
self.var_convence.set(row[21])
self.var_netsalary.set(row[22])
```

```
self.btn_save.config(state=DISABLED)
self.btn_update.config(state=NORMAL)
self.btn_delete.config(state=NORMAL)
self.txt_code.config(state='readonly')
self.btn_print.config(state=DISABLED)
```

except Exception as ex:

```
    messagebox.showerror("Error",f'Error due to: {str(ex)}')
```

def clear(self):

```
    self.btn_save.config(state=NORMAL)
    self.btn_update.config(state=DISABLED)
    self.btn_delete.config(state=DISABLED)
    self.btn_print.config(state=DISABLED)
    self.txt_code.config(state=NORMAL)
```

```
self.var_emp_code.set("")
self.var_designation.set("")
self.var_name.set("")
self.var_age.set("")
self.var_gender.set("")
self.var_email.set("")
self.var_hiredlocation.set("")
self.var_doj.set("")
self.var_dob.set("")
self.var_experience.set("")
self.var_proof_id.set("")
```

```

self.var_contact.set("")
self.var_status.set("")
self.txt_address.delete('1.0',END)
self.var_month.set("")
self.var_year.set("")
self.var_salary.set("")
self.var_totaldays.set("")
self.var_absents.set("")
self.var_medical.set("")
self.var_providentfund.set("")
self.var_convince.set("")
self.var_netsalary.set("")
self.txt_salary_receipt.delete('1.0',END)
self.txt_salary_receipt.insert(END,self.sample)

```

```
def delete(self):
```

```

    if self.var_emp_code.get()=="":
        messagebox.showerror("Error","Employee Id must be required")
    else:
        try:

```

```

con=pymysql.connect(host='localhost',user='root',password='',db='ems')

```

```

    cur=con.cursor()

```

```

    cur.execute("select * from emp_salary where

```

```

e_id=%s",(self.var_emp_code.get()))

```

```

    row=cur.fetchone()

```

```

    # print(rows)

```

```

    if row==None:

```

```

        messagebox.showerror("Error","Invalid Employee Id, please try with
another Employee ID",parent=self.root)

```

```

    else:

```

```

        op=messagebox.askyesno("Confirm","Do you really want to delete?")

```

```

        # print(op)

```

```

        if op==True:

```



```

        self.var_age.get(),
        self.var_gender.get(),
        self.var_email.get(),
        self.var_hiredlocation.get(),
        self.var_doj.get(),
        self.var_dob.get(),
        self.var_experience.get(),
        self.var_proof_id.get(),
        self.var_contact.get(),
        self.var_status.get(),
        self.txt_address.get('1.0',END),
        self.var_month.get(),
        self.var_year.get(),
        self.var_salary.get(),
        self.var_totaldays.get(),
        self.var_absents.get(),
        self.var_medical.get(),
        self.var_providentfund.get(),
        self.var_convence.get(),
        self.var_netsalary.get(),
        self.var_emp_code.get()+".txt"
    )
)
con.commit()
con.close()
file_=open('Salary_Receipt/'+str(self.var_emp_code.get())+".txt",'w')
file_.write(self.txt_salary_receipt.get('1.0',END))
file_.close()
messagebox.showinfo("Success","Record Added Successfully")
self.btn_print.config(state=NORMAL)
except Exception as ex:
    messagebox.showerror("Error",f'Error due to: {str(ex)}')

```

```
def update(self):
```

```

        if self.var_emp_code.get()==" or self.var_netsalary.get()==" or
self.var_name.get()=="":
            messagebox.showerror("Error","Employee details are required")
        else:
            try:

con=pymysql.connect(host='localhost',user='root',password='',db='ems')
            cur=con.cursor()
            cur.execute("select * from emp_salary where
e_id=%s",(self.var_emp_code.get()))
            row=cur.fetchone()
            # print(rows)
            if row==None:
                messagebox.showerror("Error","This Employee Id is invalid, try again
with valid Employee Id",parent=self.root)
            else:
                cur.execute("UPDATE `emp_salary` SET
`designation`=%s,`name`=%s,`age`=%s,`gender`=%s,`email`=%s,`hr_location`=%s
,`doj`=%s,`dob`=%s,`experience`=%s,`proof_id`=%s,`contact`=%s,`status`=%s,`ad
dress`=%s,`month`=%s,`year`=%s,`basic_salary`=%s,`total_days`=%s,`absent_day
s`=%s,`medical`=%s,`provident_fund`=%s,`convenience`=%s,`net_salary`=%s,`salary
_receipt`=%s WHERE `e_id`=%s",
                (
                    self.var_designation.get(),
                    self.var_name.get(),
                    self.var_age.get(),
                    self.var_gender.get(),
                    self.var_email.get(),
                    self.var_hiredlocation.get(),
                    self.var_doj.get(),
                    self.var_dob.get(),
                    self.var_experience.get(),
                    self.var_proof_id.get(),
                    self.var_contact.get(),
                    self.var_status.get(),

```



```

        self.txt_address.get('1.0',END),
        self.var_month.get(),
        self.var_year.get(),
        self.var_salary.get(),
        self.var_totaldays.get(),
        self.var_absents.get(),
        self.var_medical.get(),
        self.var_providentfund.get(),
        self.var_convence.get(),
        self.var_netsalary.get(),
        self.var_emp_code.get()+".txt",
        self.var_emp_code.get()
    )
)
con.commit()
con.close()
file_=open('Salary_Receipt/'+str(self.var_emp_code.get())+".txt",'w')
file_.write(self.txt_salary_receipt.get('1.0',END))
file_.close()
messagebox.showinfo("Success","Record Updated Successfully")
except Exception as ex:
    messagebox.showerror("Error",f'Error due to: {str(ex)}')

```

```

def calculate(self):
    if self.var_month.get()==" or self.var_year.get()==" or
self.var_salary.get()==" or self.var_totaldays.get()==" or
self.var_absents.get()==" or self.var_medical.get()==" or
self.var_providentfund.get()==" or self.var_convence.get()=="":
        messagebox.showerror('Error','All fields are required')
    else:
        # self.var_netsalary.set("Result")
        # 35000/31==1752
        # 31-10=21*1752
        per_day=int(self.var_salary.get())/int(self.var_totaldays.get())

```

```

work_day=int(self.var_totaldays.get())-int(self.var_absents.get())
sal_=per_day*work_day
deduct=int(self.var_medical.get())+int(self.var_providentfund.get())
addition=int(self.var_convence.get())
net_sal=sal_-deduct+addition
self.var_netsalary.set(str(round(net_sal,2)))
#=====Update the receipt=====
new_sample=f'\tCompany Name, XYZ\n\tAddress: Xyz, Floor4

```

```

-----
Employee ID\t\t: {self.var_emp_code.get()}
Salary Of\t\t: {self.var_month.get()}-{self.var_year.get()}
Generated On\t\t: {str(time.strftime("%d-%m-%Y"))}
-----

```

```

Total Days\t\t: {self.var_totaldays.get()}
Total Present\t\t: {str(int(self.var_totaldays.get())-int(self.var_absents.get()))}
Total Absent\t\t: {self.var_absents.get()}
Convence\t\t: Rs.{self.var_convence.get()}
Medical\t\t: Rs.{self.var_medical.get()}
Provident Fund\t\t: Rs.{self.var_providentfund.get()}
Gross Payment\t\t: Rs.{self.var_salary.get()}
Net Salary\t\t: Rs.{self.var_netsalary.get()}
-----

```

This is computer generated slip, not
required any signature
'''

```

self.txt_salary_receipt.delete('1.0',END)
self.txt_salary_receipt.insert(END,new_sample)
self.btn_print.config(state=NORMAL)

```

```

def check_connection(self):
    try:
        con=pymysql.connect(host='localhost',user='root',password='',db='ems')
        cur=con.cursor()
        cur.execute("select * from emp_salary")

```

```

        rows=cur.fetchall()
        # print(rows)
except Exception as ex:
    messagebox.showerror("Error",f'Error due to: {str(ex)}')

def show(self):
    try:
        con=pymysql.connect(host='localhost',user='root',password='',db='ems')
        cur=con.cursor()
        cur.execute("select * from emp_salary")
        rows=cur.fetchall()
        # print(rows)
        self.employee_tree.delete(*self.employee_tree.get_children())
        for row in rows:
            self.employee_tree.insert("",END,values=row)
        con.close()
    except Exception as ex:
        messagebox.showerror("Error",f'Error due to: {str(ex)}')

def employee_frame(self):
    self.root2=Toplevel(self.root)
    self.root2.title("Employee Management System")
    self.root2.geometry("1000x500+120+100")
    self.root2.config(bg="white")
    title=Label(self.root2,text="All Employee Details",font=("times new
roman",30,"bold"),bg="#262626",fg="white",padx=10).pack(side=TOP,fill=X)
    self.root2.focus_force()

    scrolly=Scrollbar(self.root2,orient=VERTICAL)
    scrollx=Scrollbar(self.root2,orient=HORIZONTAL)
    scrolly.pack(side=RIGHT,fill=Y)
    scrollx.pack(side=BOTTOM,fill=X)

    self.employee_tree=ttk.Treeview(self.root2,columns=('e_id', 'designation',
'name', 'age', 'gender', 'email', 'hr_location', 'doj', 'dob', 'experience', 'proof_id',

```

```

'contact', 'status', 'address', 'month', 'year', 'basic_salary', 'total_days',
'absent_days', 'medical', 'provident_fund', 'convenience', 'net_salary',
'salary_receipt'), yscrollcommand=scrolly.set, xscrollcommand=scrollx.set)
self.employee_tree.heading('e_id', text='E_Id')
self.employee_tree.heading('designation', text='Designation')
self.employee_tree.heading('name', text='Name')
self.employee_tree.heading('age', text='Age')
self.employee_tree.heading('gender', text='Gender')
self.employee_tree.heading('email', text='Email')
self.employee_tree.heading('hr_location', text='HiredLocation')
self.employee_tree.heading('doj', text='D.O.J.')
self.employee_tree.heading('dob', text='D.O.B.')
self.employee_tree.heading('experience', text='Experience')
self.employee_tree.heading('proof_id', text='Proof Id')
self.employee_tree.heading('contact', text='Contact')
self.employee_tree.heading('status', text='Status')
self.employee_tree.heading('address', text='Address')
self.employee_tree.heading('month', text='Month')
self.employee_tree.heading('year', text='Year')
self.employee_tree.heading('basic_salary', text='Basic Salary')
self.employee_tree.heading('total_days', text='Total Days')
self.employee_tree.heading('absent_days', text='Absent Days')
self.employee_tree.heading('medical', text='Medical')
self.employee_tree.heading('provident_fund', text='Provident Fund')
self.employee_tree.heading('convenience', text='Convenience')
self.employee_tree.heading('net_salary', text='Net Salary')
self.employee_tree.heading('salary_receipt', text='SalaryReceipt')
self.employee_tree['show']='headings'

```

```

self.employee_tree.column('e_id', width=100)
self.employee_tree.column('designation', width=100)
self.employee_tree.column('name', width=100)
self.employee_tree.column('age', width=100)
self.employee_tree.column('gender', width=100)

```

```
self.employee_tree.column('email',width=100)
self.employee_tree.column('hr_location',width=100)
self.employee_tree.column('doj',width=100)
self.employee_tree.column('dob',width=100)
self.employee_tree.column('experience',width=100)
self.employee_tree.column('proof_id',width=100)
self.employee_tree.column('contact',width=100)
self.employee_tree.column('status',width=100)
self.employee_tree.column('address',width=500)
self.employee_tree.column('month',width=100)
self.employee_tree.column('year',width=100)
self.employee_tree.column('basic_salary',width=100)
self.employee_tree.column('total_days',width=100)
self.employee_tree.column('absent_days',width=100)
self.employee_tree.column('medical',width=100)
self.employee_tree.column('provident_fund',width=100)
self.employee_tree.column('convenence',width=100)
self.employee_tree.column('net_salary',width=100)
self.employee_tree.column('salary_receipt',width=100)
```

```
scrollx.config(command=self.employee_tree.xview)
scrolly.config(command=self.employee_tree.yview)
self.employee_tree.pack(fill=BOTH,expand=1)
self.show()
self.root2.mainloop()
```

```
def print(self):
    file_=tempfile.mktemp(".txt")
    open(file_,'w').write(self.txt_salary_receipt.get('1.0',END))
    os.startfile(file_,'print')
```

```
root=Tk()
obj=EmployeeSystem(root)
root.mainloop()
```

Testing and Implementation

System testing is the stage of implementation, which is aimed at ensuring that the system works accurately and efficiently before live operation commences. Testing is the process of executing the program with the intent of finding errors and missing operation.

UNIT TESTING:-

Unit testing focuses first on modules, independently of one another, to locate errors. This enables, to detect errors in coding and logic that are contained within each module. The various controls are tested to ensure that each performs its action as required.

Integration Testing

Integration testing is a systematic testing to discover errors associated within the interface. The objective is to take unit tested modules and build a program structure.

USER ACCEPTANCE TESTING

User acceptance of a system is the key factor for the success of any system. The system under consideration is tested for user acceptance by constantly keeping in touch with the system users at time of developing and making changes whenever required.

Future Scope

It is easy to extend the system that we have proposed. A person could see any of the issued, unissued or all the employees according to his/her will. In future we can implement some features for “Employee Payroll Management System” project. In the system its possible to categorize salary according to attendance. Also help to provide Provident fund to the employees.

CONCLUSION

Employee Payroll Management System is a Customize and user-friendly software for Employees. It has been designed to automate, manage and look after the overall processing employees salary. It is capable of managing employee details, employee salary details, attendance details ,etc. Employee Payroll Management System is a Customize and user-friendly software for Employees which provide employees information, salary information, present and absent information.

Employee Payroll Management System is offering a maximum of stability, cost-effectiveness and usability. It provides the most flexible and adaptable standards management system software solutions for employees.

BIBLIOGRAPHY

- PROJECT WEBSITES:-
 - www.pythonproject.com
 - www.codewithharry.com
 - www.webcode.com

- REFERENCE:-
 - Python Programming For Beginners:- “ANTHONY ADAMS”
 - Python Programming:- “JOHN ZELLE”