

VIRTUAL OFFICE



A COMPUTER SCIENCE PROJECT REPORT

Submitted by

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OVERVIEW OF PYTHON

Python is a high-level, interpreted, interactive and object-oriented scripting language. Python is designed to be highly readable. It uses English keywords frequently whereas the other languages use punctuations. It has fewer syntactical constructions than other languages.

- **Python is Interpreted** – Python is processed at runtime by the interpreter. You do not need to compile your program before executing it. This is similar to PERL and PHP.
- **Python is Interactive** – You can actually sit at a Python prompt and interact with the interpreter directly to write your programs.
- **Python is Object-Oriented** – Python supports Object-Oriented style or technique of programming that encapsulates code within objects.
- **Python is a Beginner's Language** – Python is a great language for the beginner-level programmers and supports the development of a wide range of applications from simple text processing to WWW browsers to games.

History of Python

Python was developed by Guido van Rossum in the late eighties and early nineties at the National Research Institute for Mathematics and Computer Science in the Netherlands.

- Python is derived from many other languages, including ABC, Modula-3, C, C++, Algol-68, SmallTalk, and Unix shell and other scripting languages.
- Python is copyrighted. Like Perl, Python source code is now available under the GNU General Public License (GPL).
- Python is now maintained by a core development team at the institute, although Guido van Rossum still holds a vital role in directing its progress.
- Python 1.0 was released in November 1994. In 2000, Python 2.0 was released. Python 2.7.11 is the latest edition of Python 2.
- Meanwhile, Python 3.0 was released in 2008. Python 3 is not backward compatible with Python 2. The emphasis in Python 3 had been on the removal of duplicate programming constructs and modules so that "There should be one -- and preferably only one -- obvious way to do it." Python 3.5.1 is the latest version of Python 3.

Python Features

Python's features include –

- **Easy-to-learn** – Python has few keywords, simple structure, and a clearly defined syntax. This allows a student to pick up the language quickly.
- **Easy-to-read** – Python code is more clearly defined and visible to the eyes.
- **Easy-to-maintain** – Python's source code is fairly easy-to-maintain.
- **A broad standard library** – Python's bulk of the library is very portable and cross-platform compatible on UNIX, Windows, and Macintosh.
- **Interactive Mode** – Python has support for an interactive mode which allows interactive testing and debugging of snippets of code.
- **Portable** – Python can run on a wide variety of hardware platforms and has the same interface on all platforms.
- **Extendable** – You can add low-level modules to the Python interpreter. These modules enable programmers to add to or customize their tools to be more efficient.
- **Databases** – Python provides interfaces to all major commercial databases.
- **GUI Programming** – Python supports GUI applications that can be created and ported to many system calls, libraries and windows systems, such as Windows MFC, Macintosh, and the X Window system of Unix.
- **Scalable** – Python provides a better structure and support for large programs than shell scripting.

Apart from the above-mentioned features, Python has a big list of good features. A, few are listed below –

- It supports functional and structured programming methods as well as OOP.
- It can be used as a scripting language or can be compiled to byte-code for building large applications.
- It provides very high-level dynamic data types and supports dynamic type checking.



ABSTRACT

- This Software Brings You a Feeling of Working and Going Inside a Real Office and Can be Used as a Alternative for all those IT Workers who are Working inside their House due to Covid-19 .
- It has Different Sections and Roles like Employee, Project Manager, Interviewer, Client and the Boss of the Office.
- Each and Every Section is Given A Specific Role And Specific Function and many more Interesting and Real Life Applications Things.
- This Software Also gives You a Knowledge of the Things Happening Inside The Big Offices and the Power of Each and Every Role.



SYSTEM REQUIREMENTS

Windows:

- Microsoft Windows 10/8/7/Vista/2003/XP (incl.64-bit)
- RAM: 1 GB minimum / 2 GB recommended
- Minimum Screen Resolution: 1024x768
- Python 3.5 or higher, Jython, PyPy or IronPython

Mac:

- Mac OS X 10.8 or higher
- 1 GB RAM minimum / 2 GB RAM recommended
- Python 3.5 or higher, Jython, PyPy or IronPython

Linux:

- 512 MB RAM minimum, 1 GB RAM recommended
- 1024x768 minimum screen resolution
- Python 3.5 or higher, Jython, PyPy or IronPython



DICTIONARIES USED

- Office**

Includes All Workers Inside the Office

Key : (Office ID , Password)

Value : [Name, Years of Experience, Salary, Status]

- Off_Emp**

Includes All Employees Working in the Office

Key : (Office ID, Password)

Value : [Name, Years of Experience, Salary, Status]

- Off_Pm**

Includes All Project Managers Working in the Office

Key : (Office ID, Password)

Value : [Name, Years of Experience, Salary, Status, Successful Projects]

- Off_Client**

Includes All Clients Working in the Office

Key : (Office ID, Password)

Value : [Name, Years of Experience, Salary, Status]

- **Off_Interviewer**
Includes All Interviewers Working in the Office

Key : (Office ID, Password)

Value : [Name, Years of Experience, Salary, Status]

- **Interview**
Includes All Candidates Who sent the Application Form

Key : Length of The Dictionary + 1

Value : [Name, Address, Designation, Phone Number,

**Resume, Years Of Experience, Date Of
Birth]**

- **New_Project**
Includes All New Projects Created by the Client

Key : Length of the Dictionary + 1

Value : [Name of the Project, No. Employees

Required, Estimated Time]

- **Look_Prg**
Includes All Employees Who are Looking for a Project

Key : Office ID of the Employee

Value : [Name, Years of Experience]

- **Query**
Includes All Queries Submitted by the Workers in the Office

Key : (Office ID, Password)
Value : [Name, Queries]

- **Project**
Includes All Projects Been Handled By Each and Every Project Manager

Key : Project Name
Value : [Name, Team Members, Estimated Time]

- **Submit_Prg**
Includes All Projects that are Submitted by the Project Managers to the Clients

Key : Project Name
Value : [Name, Team Members, Estimated Time]

- **Resig**
Includes All Resignation Letters Sent to the Boss by the Workers

Key : (Office ID, Password)
Value : [Name, Reason for Resignation]

- **Food**
Includes All the Food Items In the Food Canteen

Key : Item Name
Value : (Flavour , Price)

MODULES

- Sound Module
- Random Module

SOURCE CODE

```
startup = -1
L = [(5555, 'Hello'), (1012, 'admin@123'), (3101, 'Viswa5')]
project = {}
submit_prg = {}
a = 2
resig = {}
query = {}
food = {"Pizza": [("Cheese", 150), ("Panner", 175), ("Mushroom", 200)], "Burger": [("Veg", 125), ("Zinger", 190)],
        "Cakes": [("Blackforest", 75), ("Choco Truffle", 80)],
        "Milkshake": [("Chocolate", 50), ("Vanilla", 40), ("Strawberry", 45)],
        "Beverages": [("Coffee", 30), ("Tea", 25)]}
Office = {(1, "THEBOSS"): ["*****", 25, 10000000.0, "Boss"],
           (1012, "admin@123"): ["Sachin", 10, 25000.0, "Employee"],
           (1013, "bvm999"): ["Abinav", 9, 15000.0, "Employee"],
           (3965, "Helo"): ["Rajesh", 12, 50000.0, "Interviewer"],
           (5663, "LM\bwhu"): ["Gowtham", 6, 21000.0, "Interviewer"],
           (9092, "y]UeuQsd"): ["Parasu", 11, 35000.0, "Interviewer"],
           (2873, "zaNzOfsf"): ["Vimal", 10, 28000.0, "Interviewer"],
           (3101, "Viswa5"): ['viswajit ram', 2, 10000.0, 'Employee'],
           (5555, "Hello"): ["Shagil", 10, 50000.0, "Project Manager"],
           (1111, "Happy"): ["Selva", 15, 100000.0, "Client"],
           (1234, "ueghuweh"): ["Yashwanth", 12, 50000.0, "Project Manager", 0],
           (3645, "ifheihwg"): ["Akhil", 15, 50000.0, "Project Manager", 0],
           (9876, "sudhjefe"): ["Bharathi", 10, 50000.0, "Project Manager", 0],
           (7645, "Copy"): ["Atlee", 10, 50000.0, "Project Manager", 0],
           (7652, "jegjghweg"): ["Suresh", 23, 100000.0, "Client"],
           (4657, "udjhjfjds"): ["Dinesh", 20, 100000.0, "Client"],
           (8992, "XsmYQbGM"): ['Vedha', 4, 10000.0, "Employee"],
           (8693, "NSwzbHX"): ['Pranav', 2, 10000.0, "Employee"],
           (7302, 'T^qPXAUq'): ['Ankit', 3, 10000.0, "Employee"],
           (4808, 'pyJnojdjm'): ['Guna', 4, 10000.0, 'Employee'],
           (6095, 'qGitS^zz'): ['Salman', 3, 10000.0, 'Employee']}
interview = {1: ['Mukesh', 'Kodambakkam,2nd Cross Street Chennai', 'Project Manager', 8778575342, 'MBA,BA', 'L', "10-12-1999"],
             2: ['Gopinath', 'Pallikaranai , Grace United Chennai', 'Pt Teacher', 767657867, 'PHD', 'L', "3", "15-3-1996"]}
new_project={1: ['Delivery', 2,'2 weeks' ], 2: ['Walmart',15 , '1 month']}
Off_Emp = {(1012, "admin@123"): ["Sachin", 5, 10000.0, "Employee"],
            (1013, "bvm999"): ["Abinav", 9, 10000.0, "Employee"],
            (3101, "Viswa5"): ['viswajit ram', 2, 10000.0, 'Employee'],
            (8992, "XsmYQbGM"): ['Vedha', 4, 10000.0, "Employee"]}
```

SOURCE CODE

```
(8693, 'NSwzbHX']): ['Pranav', 2, 10000.0, "Employee"],  
(7302, 'T^qPXAUq'): ['Ankit', 3, 10000.0, "Employee"],  
(4808, 'pyJnojdm'): ['Guna', 4, 10000.0, 'Employee'],  
(6095, 'qGitS^zz'): ['Salman', 3, 10000.0, 'Employee']}  
  
Off_Interviewer = {(3965, "Hello"): ["Rajesh", 12, 50000.0, "Interviewer"],  
                   (5663, "LM\\bwhu"): ["Gowtham", 6, 21000.0, "Interviewer"],  
                   (9092, "y]UeuQsd"): ["Parasu", 11, 35000.0, "Interviewer"],  
                   (2873, "zaNzOfs"): ["Vimal", 10, 28000.0, "Interviewer"]}  
  
Off_Pm = {(5555, "Hello"):[ "Shagil",10,50000.0,"Project Manager",0],  
           (1234, "ueghuweh"):[ "Yashwanth",12,50000.0,"Project Manager",0],  
           (3645, "ifheihwge"):[ "Akhil",15,50000.0, "Project Manager",0],  
           (9876, "sudhjefe"):[ "Bharathi",10,50000.0, "Project Manager",0],  
           (7645, "Copy"):[ "Atlee",10,50000.0, "Project Manager",0]}  
  
Off_Client = {(1111, "Happy"):[ "Selva",15,100000.0, "Client"],  
               (7652, "jegjghweg"):[ "Suresh",23,100000.0, "Client"],  
               (4657, "udjhjfjds"):[ "Dinesh",20,100000.0, "Client"]}
```

```
look_prg = {(1012): [ "Sachin", 10],  
            (1013): [ "Abinav", 9]}  
  
b = len(interview)  
while startup != 0:  
    print("*****\t Office Lobby\t *****")  
    print("Press # to Go and Get Application Form ")  
    print("Press @ to Go into The Office ")  
    print("Press X to Exit the Office ")  
    choice = input()  
    if choice == "#":  
        b = len(interview)  
        print("*****\t Application Form \t *****")  
        name = input("Name : ")  
        dob = input("Date of Birth : ")  
        address = input("Address : ")  
        desi = input("Designation : ")  
        ph = int(input("Phone Number : "))  
        resume = input("Resume : ")  
        ex = int(input("Years Of Experience : "))  
        add = input("Additional Info : ")  
        interview[b + 1] = [name, address, desi, ph, resume, add, ex, dob]
```

SOURCE CODE

```
print("Application form Sent Successfully !! ")
startup = 1
elif choice == "@":
    t = ()
    ID = int(input("Office ID : "))
    pwd = input("Password :")
    t += (ID, pwd)
if t in Office:
    print("Welcome Back ", Office[t][0], " !!!!")
    print("***** Inside the Office *****")
    print("G => General ")
    print("E=> To Enter Employee Room ")
    print("I => To Enter Interviewer Room ")
    print("C => To Enter Client Room ")
    print("P => To Enter Project Manager Room")
    print("B => To Enter Boss Office ")
    print("$ => To Enter Food Canteen ")
    print("X => To Get Back to the Lobby ")
    ch = input("Enter your Choice : ")
    while ch != "X":
        if ch == "E":
            e_ch = 0

print("***** Employee room *****")
while e_ch != 5:
    print("1.Look for a Project")
    print("2.View Your Profile")
    print("3.Look for Other's Profile")
    print("4. Resign Work ")
    print("5.Exit the Office")
    e_ch = int(input("Enter Your Choice : "))
    if e_ch == 1:
        print("Notified to All Project Managers !!")
        print("Soon You will Be Working in a Project !! ")
        look_prg[t[0]] = [Off_Emp[t][0],Off_Emp[t][1]]
    elif e_ch == 2:
        print("ID : ", t[0])
        print("Password : ",t[1])
        print("*Note : Meant to be Confidential !! ")
        print("Name: ", Off_Emp[t][0])
        print("Years of Experience: ", Off_Emp[t][1])
        print("Salary: ", Off_Emp[t][2])
        print("Status: ", Off_Emp[t][3])
    elif e_ch == 3:
        search = int(input("Enter the ID to be Searched : "))
```

SOURCE CODE

```
for i in Office:
    if search == i[0]:
        print("ID : ", search)
        print("Name: ", Office[i][0])
        print("Years of Experience: ", Office[i][1])
        print("Status: ", Office[i][3])
        break
    else:
        print("Office ID not Found !!")
elif e_ch == 4 :
    print("Resignation Letter ")
    name = input("Name : ")
    print("Reason : ")
    reason = input()
    resig[t]=[name,reason]
    print("Letter Sent to Boss !! ")
else:
    print(" You are Now Back in the Lobby !!!")
    break

elif ch == "I":
    i_ch = 0

if t in Off_Interviewer:
    print("***** \t Interviewer Room \t *****")
    while i_ch != 4:
        print("1. View All Candidates ")
        print("2. Select a Candidate ")
        print("3. Check No. of Waiting Applicants ")
        print("4. Exit the Office ")
        i_ch = int(input("Enter Your Choice : "))
    if i_ch == 1:
        print("SNO. \t \t Name \t Designation \t Resume")
        for i in interview:
            print(i, "\t", end="\t")
            print(interview[i][0], end="\t")
            print(interview[i][2], end="\t")
            print(interview[i][4])
    elif i_ch == 2:
        inp = int(input("Enter the SNo. of the Candidate : "))
        if inp in interview:
            print("Name : ", interview[inp][0])
            print("Designation : ", interview[inp][2])
            print("Resume : ", interview[inp][4])
            print("A.Accept or R.Reject ")
```

SOURCE CODE

```
ar = input()
if ar == "A":
    strt = -1
    while strt != 0:
        t1 = ()
        import random

        ID = random.randint(1000, 9999)
        s = ""
        for i in range(8):
            a = random.randint(65, 122)
            s += chr(a)
        pwd = s
        t1 += (ID, pwd)
        if t1 in Off_Emp:
            strt = 1
        else:
            strt = 0
    sal = float(input("Enter Salary : "))
    status = input("Enter Status : ")
    Office[t1] = [interview[inp][0], interview[inp][6], sal, status]
    if status == "Employee":


        Off_Emp[t1] = [interview[inp][0], interview[inp][6], sal, status]
    elif status == "Project Manager":
        count = 0
        Off_Pm[t1] = [interview[inp][0], interview[inp][6], sal, status, count]
    elif status == "Client":
        Off_Client[t1] = [interview[inp][0], interview[inp][6], sal, status]
    print("Notified To the Candidate And Added to the Office !!!")
    if inp in interview:
        del interview[inp]
    elif ar == "R":
        if inp in interview:
            del interview[inp]
        print("Candidate Rejected !! ")
    elif i_ch == 3:
        print("No. of Waiting Applicants : ", len(interview))
    else:
        startup = 1
        break
else:
    print("Only Interviewers Are Permitted Into this Room !!!! ")
    print("You are Now Back in the Lobby !! ")
    pass
```

SOURCE CODE

```
break
elif ch == "C":
    if t in Off_Client :
        print("*****\t Client Room \t *****")
        c_ch=0
    while c_ch!=4 :
        a = len(new_project)
        print("1.Create New Project ")
        print("2.Delete a Project")
        print("3.Examine All Completed Projects ")
        print("4.Exit the Office ")
        c_ch = int(input("Enter Your Choice : "))
        if c_ch == 1:
            c_name=input("Enter the Project Name : ")
            c_count=int(input("No Employees required : "))
            c_time=input("Enter the Estimated time : ")
            a = a + 1
            new_project[a]=[c_name,c_count,c_time]
            print("The Project has been Created Successfully !!!")
            print("Notified To Project Managers !! ")
        elif c_ch == 2:
            name1=input("Enter the Project Name to be Deleted : ")

for i in new_project :
    if new_project[i][0]==name1 :
        del new_project[i]
        print("Deleted Successfully !!")
        break
    else:
        print("Project Name not Found !!!")
elif c_ch == 3:
    L = []
    print("All Completed Projects :")
    for i in submit_prg :
        print("Project Name : ",i)
    examine = input("Enter the Project Name to Examine : ")
    if examine in submit_prg :
        print("Project Name : ",examine)
        print("Project Manager Handled : ",submit_prg[examine][0])
        pm = submit_prg[examine][0]
        print("Team Members : ",end = "")
        for k in submit_prg[examine][1]:
            L += k
            print(k,end = ", ")
        print(" ")
```

SOURCE CODE

```
print("Estimated Time : ",submit_prg[examine][2])
for i in submit_prg :
    if i == examine :
        del submit_prg[examine]
        break
result = input("S.Success or F.Failure ")
if result == "S" :
    print("2 Points Increased for the Project Manager for this Successfull Project !!! ")
    for i in Off_Pm :
        if Off_Pm[i][0]==pm :
            Off_Pm[i][4]+=2
    else :
        print("-2 Points Deducted for the Project Manager for this Unsuccessfull Project !!!! ")
        for i in Off_Pm :
            if Off_Pm[i][0]==pm :
                Off_Pm[i][4]=-2
    else :
        print("You Are Now Back in the Lobby !! ")
        break
else :
    print("Only Clients Are Permitted Into this Room !!! ")
    print("You are Now Back in the Lobby !! ")

break

elif ch == "P":
    if t in Off_Pm:
        print("***** \t Project Manager Room \t *****")
        p_ch=0
    while p_ch!=4 :
        print("1.Available Projects")
        print("2.Select a New Project")
        print("3.Status Of Current Project")
        print("4.Exit the Office")
        p_ch=int(input("Enter Your Choice :"))
        if p_ch==1:
            print("All Projects Available :")
            for i in new_project:
                print("Project No.",i)
                print("Project Name : ",new_project[i][0])
                print("Employees Required : ",new_project[i][1])
                print("Estimated Time : ",new_project[i][2])
                print()
        elif p_ch==2:
```

SOURCE CODE

```
for status in project :
    if project[status][0]==Off_Pm[t][0]:
        Go = 1
        print("You are Already In a Project !! ")
        break
    else :
        Go = 0
if Go == 0 :
    enter=input("Enter the Project Name to Select : ")
    for i in new_project:
        if new_project[i][0]==enter:
            print("You Have Selected Project Name : ",enter)
            print("Employees Required : ",new_project[i][1])
            print("Estimated Time : ",new_project[i][2])
            project[enter]=[Off_Pm[t][0],[],new_project[i][1],new_project[i][2]]
    for j in new_project :
        if new_project[j][0]==enter:
            del new_project[j]
            break
elif p_ch == 3 :
    for status in project :
        if project[status][0]==Off_Pm[t][0]:
            Go = 1
            break
        else :
            Go = 0
            print("No Current Projects Handling !! ")
    if Go == 1 :
        for i in project :
            if project[i][0] == Off_Pm[t][0]:
                print("Current Project : ",i)
                a = i
                print("Team Members : ",project[i][1])
                b = project[i][1]
                print("No. of Team Members Required : ",project[i][2])
                print("Estimated Time : ",project[i][3])
                c = project[i][3]
                break
        if project[i][2]!= len(project[i][1]):
            print("**Note : No. of Team Members Not Met !!! ")
            print("Press A to Add Members ")
            chumma = input()
            if chumma == "A" :
                print("Available Employees ")
```

SOURCE CODE

```
print()
print("ID\tName\tExperience")
for k in look_prg :
    print(k,end = "\t")
    print(look_prg[k][0],end = "\t")
    print(look_prg[k][1])
for j in range(project[i][2]):
    print("Team Member No.",j+1)
    ids = int(input("Enter the Office ID of the Employee : "))
    for h in Off_Emp :
        if ids == h[0]:
            project[i][1]+=[Off_Emp[h][0]]
            print("Added To Project !! ")
            break
    for b in look_prg :
        if b == ids :
            del look_prg[b]
            break
    else :
        print("ID Not Found !!! ")
else :
```

```
print(" Submit the Project to Client (Y or N) ")
Pm_choice = input()
if Pm_choice == "Y" :
    submit_prg[a]=[Off_Pm[t][0],b,c]
    print("Sent To the Client Successfully !!! ")
    for i in project :
        if i == a :
            del project[i]
            break
        else :
            continue

    else :
        print("You are Now Back in the Lobby !!! ")
        break
else :
    print("Only Project Managers Are Permitted Into this Room !!!! ")
    print("You are Now Back in the Lobby !! ")
    break

elif ch == "B":
    if t == (1,"THEBOSS"):
```

SOURCE CODE

```
pas = input("Enter The Most Secured Password : ")
if pas == "%^%*U58788989":
    b_ch = 0
    while b_ch != 7 :
        print("$$$$$$$$$$$$ THE BOSS $$$")
        print("1. View Query Sheet ")
        print("2. Update Top Workers List ")
        print("3. Increament & Decrement in Salaries ")
        print("4. Sack a Person from Office ")
        print("5. Leading Project Managers ")
        print("6. View Resignation Letters ")
        print("7. To Get Back To Your Rolls Royce ")
        b_ch = int(input("Enter Your Choice : "))
    if b_ch == 1 :
        print("Queries ")
        for i in query :
            print("ID : ",i)
            print("Name : ",query[i][0])
            print("Query : ",query[i][1])
            print()
    elif b_ch == 2 :
        L = []
        print("Best Project Manager of this Month ")
        enter = int(input("Enter the Office ID : "))
        for i in Off_Pm :
            if i[0]==enter :
                print("ID : ",i[0])
                print("Pass : ",i[1])
                print("Name : ",Off_Pm[i][0])
                print("Years Of Experience : ",Off_Pm[i][1])
                print("Salary : ",Off_Pm[i][2])
                print("Status : ",Off_Pm[i][3])
                print("Successfull Projects : ",Off_Pm[i][4])
                print("A. Add or R. Reject ")
                boss = input()
                if boss == "A" :
                    L +=[i]
                else :
                    L +=[None]
                    break
            else :
                print("ID not Found !! ")
        print("Best Employee of this Month ")
        enter = int(input("Enter the Office ID : "))
```

SOURCE CODE

```
for i in Off_Emp :
    if i[0]==enter:
        print("ID : ",i[0])
        print("Pass : ",i[1])
        print("Name : ",Off_Emp[i][0])
        print("Years Of Experience : ",Off_Emp[i][1])
        print("Salary : ",Off_Emp[i][2])
        print("Status : ",Off_Emp[i][3])
        print("A.Add or R.Reject")
        boss = input()
        if boss == "A" :
            L +=[i]
        else :
            L +=[None]
        break
print("Discovered Youth of this Month ")
enter = int(input("Enter the Office ID : "))
for i in Off_Emp :
    if i[0]==enter:
        print("ID : ",i[0])
        print("Pass : ",i[1])
        print("Name : ",Off_Emp[i][0])

print("Years Of Experience : ",Off_Emp[i][1])
print("Salary : ",Off_Emp[i][2])
print("Status : ",Off_Emp[i][3])
print("A.Add or R.Reject")
boss = input()
if boss == "A" :
    L +=[i]
else :
    L +=[None]
break
else :
    print("ID not Found !! ")
elif b_ch == 3 :
    enter = int(input("Enter the ID of the Person to be Searched : "))
    for i in Office :
        if i[0]==enter:
            print("ID : ",i[0])
            print("Pass : ",i[1])
            print("Name : ",Office[i][0])
            print("Years Of Experience : ",Office[i][1])
            print("Salary : ",Office[i][2])
            print("Status : ",Office[i][3])
```

SOURCE CODE

```
print("I.Increase or D.Decrease")
boss = input()
if boss == "I" :
    per = int(input("Enter the Percent of Increment : "))
    a = (per/100)*Office[i][2]
    Office[i][2]+=a
    print("Increased Salary of ",Office[i][0],"to ---> ",Office[i][2])
else :
    per = int(input("Enter the Percent of Decrement : "))
    a = (per/100)*Office[i][2]
    Office[i][2]-=a
    print("Decreased Salary of ",Office[i][0],"to ---> ",Office[i][2])
break

elif b_ch == 4 :
    enter = int(input("Enter the Office ID of the Person : "))
    for i in Office :
        if i[0]==enter:
            print("ID : ",i[0])
            print("Pass : ",i[1])
            print("Name : ",Office[i][0])
            print("Years Of Experience : ",Office[i][1])



print("Salary : ",Office[i][2])
print("Status : ",Office[i][3])
d = Office[i][3]
break

print("Are you Sure You Wanna Sack this Person ? (Y or N)")
boss = input()
if boss == "Y" :
    for k in Office :
        if k[0]==enter :
            del Office[k]
            break
    if d == "Employee" :
        for k in Off_Emp :
            if k[0]==enter :
                del Off_Emp[k]
                break
    elif d == "Project Manager" :
        for k in Off_Pm :
            if k[0]==enter :
                del Off_Pm[k]
                break
```

SOURCE CODE

```
elif d == "Client" :
    for k in Off_Client :
        if k[0]==enter :
            del Off_Client[k]
            break
elif d == "Interviewer" :
    for k in Off_Interviewer:
        if k[0]==enter :
            del Off_Interviewer[k]
            break
    print("Person Sacked !!!")
else :
    print("Aborted ")

elif b_ch == 5 :
    lead = []
    for i in Off_Pm :
        lead +=[Off_Pm[i][4]]
    for i in range(len(lead)):
        t = i
        for j in range(i+1,len(lead)):
            if lead[j]>lead[t]:
                t = j
                lead[i],lead[t]=lead[t],lead[i]
    eq = []
    for i in range(len(lead)):
        print("No. ",i+1)
        for j in Off_Pm :
            if Off_Pm[j][4]==lead[i]:
                if Off_Pm[j][0] not in eq :
                    print("ID : ",j[0])
                    print("Name : ",Off_Pm[j][0])
                    print("Successfull Projects : ",Off_Pm[j][4])
                    eq +=[Off_Pm[j][0]]
                    break
                else :
                    continue
    elif b_ch == 6 :
        print("Resignation Letters : ")
        print()
        for i in resig :
            print("ID : ",i[0])
            print("Name : ",resig[i][0])
            print("Reason : ",resig[i][1])
```

SOURCE CODE

```
        print()
else :
    print("Back in Your Luxurious Rolls Royce To Home $$$ ")
    break

else:
    print("Only One Man THE BO$$ Is Allowed in this Room !!! ")
    print("You are Now Back in the Lobby !!! ")
    break

elif ch == "G" :
    print("***** \t General \t *****")
    g_ch=0
    while g_ch != 4 :
        print("1. Query Sheet ")
        print("2. Check Top Workers List ")
        print("3. View a Profile ")
        print("4. Exit the Office ")
        g_ch = int(input("Enter Your Choice : "))
        if g_ch == 1 :
            print("\\\\\\\\\\\\\\\\\\\\\ \t Query Sheet \t ////////////// ")
            print("Name : ",Office[t][0])

print("Your Queries : ")
Query = input()
query[t]=[Office[t][0],Query]
print("Query Sent to The Boss !!! ")
elif g_ch == 2 :
    print("||||||| Top Workers Of the Month |||||")
    print("***** Best Project Manager *****")
    print("ID : ",L[0][0])
    print("Name : ",Off_Pm[L[0]][0])
    print("Successfull Projects : ",Off_Pm[L[0]][4])
    print("***** Best Employee *****")
    print("ID : ",L[1][0])
    print("Name : ",Off_Emp[L[1]][0])
    print("***** Discovered Youth *****")
    print("ID : ",L[2][0])
    print("Name : ",Off_Emp[L[2]][0])
elif g_ch == 3 :
    search = int(input("Enter the ID to be Searched : "))
    for i in Office:
        if search == i[0]:
            print("ID : ", search)
            print("Name: ", Office[i][0])
```

SOURCE CODE

```
        print("Years of Experience: ", Office[i][1])
        print("Status: ", Office[i][3])
        break
    else:
        print("Office ID not Found !!!")

else :
    print("You Are Now Back in the Lobby !!! ")
    break
elif ch == "$":
    print("*****\t Food Canteen \t *****")
    print("Available Foods : ")
    for i in food:
        print(i)
    print()
    print("Enter the Respective Food To Go Thru : ")
    print("Or Press X To Go Back To Lobby ")
    f = input()
    if f in food:
        print("Item", "\t", "Price")
        for i in food[f]:
            print(i[0], "\t", i[1])

item = input("Enter the Item : ")
qty = int(input("Enter the Quantity : "))
for i in food[f]:
    if i[0] == item:
        pr = i[1]
        break
print("You ate ", qty, "Delicious", item, " ", f, "for : ₹", pr * qty)
elif f == "X":
    break
else:
    print("Food Item Not Available !!! ")
else:
    startup = 1
    t = ()
else:
    print("Invalid Credentials !! ")
startup = 1
elif choice == "X":
    startup = 0
else:
    print("Thank You !! ")
```

OUTPUT

```
VIRTUAL OFFICE
*****
***** Office Lobby *****

Press # to Go and Get Application Form
Press @ to Go into The Office
Press X to Exit the Office
#
***** Application Form *****
Name : Selva Karthik
Date of Birth : 30-10-2004
Address : sajncosubvoudsjbvodshflkanflkdnckl
Designation : Project Manager
Phone Number : 123456789
Resume : Btech and Masters in CS
Years Of Experience : 3
Additional Info : -
Application form Sent Successfully !!
***** Office Lobby *****
Press # to Go and Get Application Form
Press @ to Go into The Office
Press X to Exit the Office
@
Office ID : 3965
Password :Hello
Welcome Back Rajesh !!
***** Inside the Office *****
G => General
E=> To Enter Employee Room
I => To Enter Interviewer Room
C => To Enter Client Room
P => To Enter Project Manager Room
B => To Enter Boss Office
$ => To Enter Food Canteen
X = > To Get Back to the Lobby
Enter your Choice : I
***** Interviewer Room *****
1. View All Candidates
2. Select a Candidate
3. Check No. of Waiting Applicants
4. Exit the Office
Enter Your Choice : 1
SNO. Name Designation Resume
1 Mukesh' Project Manager' MBA, BA
2 Gopinath' Pt Teacher' PHD
3 Selva Karthik' Project Manager' Btech and Masters in CS
1. View All Candidates
2. Select a Candidate
3. Check No. of Waiting Applicants
4. Exit the Office
Enter Your Choice : 2
Enter the SNo. of the Candidate : 3
Name : Selva Karthik
Designation : Project Manager
Resume : Btech and Masters in CS
A.Accept or R.Reject
A
Enter Salary : 10000
Enter Status : Employee
Credentials of Newly Added Candidate : [(4974, '\\^dvSztX'), 'Selva Karthik', 3, 10000.0, 'Employee']
Notified To the Candidate And Added to the Office !!!
1. View All Candidates
2. Select a Candidate
3. Check No. of Waiting Applicants
4. Exit the Office
Enter Your Choice : 3
No. of Waiting Applicants : 2
1. View All Candidates
2. Select a Candidate
3. Check No. of Waiting Applicants
4. Exit the Office
Enter Your Choice : 4
```

```

***** Office Lobby *****
Press # to Go and Get Application Form
Press @ to Go into The Office
Press X to Exit the Office
@
Office ID : 5555
Password :Hello
Welcome Back Shagil !!!!
***** Inside the Office *****
G => General
E=> To Enter Employee Room
I => To Enter Interviewer Room
C => To Enter Client Room
P => To Enter Project Manager Room
B => To Enter Boss Office
$ => To Enter Food Canteen
X = > To Get Back to the Lobby
Enter your Choice : P
***** Project Manager Room *****
1.Available Projects
2.Select a New Project
3.Status Of Current Project
4.Exit the Office
Enter Your Choice :1
All Projects Available :
Project No. 1
Project Name : Delivery
Employees Required : 2
Estimated Time : 2 weeks

Project No. 2
Project Name : Walmart
Employees Required : 15
Estimated Time : 1 month

1.Available Projects
***** Project Manager Room *****
1.Available Projects
2.Select a New Project
3.Status Of Current Project
4.Exit the Office
Enter Your Choice :2
Enter the Project Name to Select : Delivery
You Have Selected Project Name : Delivery
Employees Required : 2
Estimated Time : 2 weeks
1.Available Projects
2.Select a New Project
3.Status Of Current Project
4.Exit the Office
Enter Your Choice :3
Current Project : Delivery
Team Members : []
No. of Team Members Required : 2
Estimated Time : 2 weeks
>Note : No. of Team Members Not Met !!!
Press A to Add Members
A
Available Employees

ID      Name   Experience
1012    Sachin 10
1013    Abinav 9
Team Member No. 1
Enter the Office ID of the Employee : 1012
Added To Project !!
Team Member No. 2
Enter the Office ID of the Employee : 1013
Added To Project !!
1.Available Projects
2.Select a New Project
3.Status Of Current Project
4.Exit the Office
Enter Your Choice :3
Current Project : Delivery
Team Members : ['Sachin', 'Abinav']
No. of Team Members Required : 2
Estimated Time : 2 weeks
Submit the Project to Client (Y or N)
Y
Sent To the Client Successfully !!!
1.Available Projects
2.Select a New Project
3.Status Of Current Project
4.Exit the Office
Enter Your Choice :4
You are Now Back in the Lobby !!!
***** Office Lobby *****
Press # to Go and Get Application Form
Press @ to Go into The Office
Press X to Exit the Office
@
Office ID : 1111
Password :Happy
Welcome Back Selva !!!!
***** Inside the Office *****
G => General

```

```

G => General
E => To Enter Employee Room
I => To Enter Interviewer Room
C => To Enter Client Room
P => To Enter Project Manager Room
B => To Enter Boss Office
$ => To Enter Food Canteen
X = > To Get Back to the Lobby
Enter your Choice : C
***** Client Room *****
1.Create New Project
2.Delete a Project
3.Examine All Completed Projects
4.Exit the Office
Enter Your Choice : 1
Enter the Project Name : SAP-AC
No Employees required : 1
Enter the Estimated time : 10 days
The Project has been Created Successfully !!
Notified To Project Managers !!
1.Create New Project
2.Delete a Project
3.Examine All Completed Projects
4.Exit the Office
Enter Your Choice : 3
All Completed Projects :
Project Name : Delivery
Enter the Project Name to Examine : Delivery
Project Name : Delivery
Project Manager Handled : Shagil
Team Members : Sachin, Abinav,
Estimated Time : 2 weeks
5.Success or F.Failure S
2 Points Increased for the Project Manager for this Successfull Project !!!
1.Create New Project
2.Delete a Project
3.Examine All Completed Projects
4.Exit the Office
***** Office Lobby *****
Press # to Go and Get Application Form
Press @ to Go into The Office
Press X to Exit the Office
@
Office ID : 1012
Password :admin@123
Welcome Back Sachin !!!! 
***** Inside the Office *****
G => General
E=> To Enter Employee Room
I => To Enter Interviewer Room
C => To Enter Client Room
P => To Enter Project Manager Room
B => To Enter Boss Office
$ => To Enter Food Canteen
X = > To Get Back to the Lobby
Enter your Choice : G
***** General *****
1.Query Sheet
2.Check Top Workers List
3.View a Profile
4.Exit the Office
Enter Your Choice : 1
/\\//\\//\\//\\//\\/      Query Sheet      /\\//\\//\\//\\//\\//\\/
Name : Sachin
Your Queries :
Increase my Salary by 3% please.
Query Sent to The Boss !!!
1.Query Sheet
2.Check Top Workers List
3.View a Profile
4.Exit the Office
Enter Your Choice : 4
You Are Now Back in the Lobby !!!
***** Office Lobby *****
Press # to Go and Get Application Form
Press @ to Go into The Office
Press X to Exit the Office

```

```
@
Office ID : 1
Password :THEBOSS
Welcome Back ***** !!!!!
***** Inside the Office *****
G => General
E=> To Enter Employee Room
I => To Enter Interviewer Room
C => To Enter Client Room
P => To Enter Project Manager Room
B => To Enter Boss Office
$ => To Enter Food Canteen
X = > To Get Back to the Lobby
Enter your Choice : B
Enter The Most Secured Password : Valimai Update
$$$$$$$$$$ THE BOSS $$$$$$$$$
1.View Query Sheet
2. Update Top Workers List
3. Increment & Decrement in Salaries
4. Sack a Person from Office
5. Leading Project Managers
6. View Resignation Letters
7. To Get Back To Your Rolls Royce
Enter Your Choice : 1
Queries
ID : (1012, 'admin@123')
Name : Sachin
Query : Increase my Salary by 3% please.

$$$$$$$$$$ THE BOSS $$$$$$$$$
1.View Query Sheet
2. Update Top Workers List
3. Increment & Decrement in Salaries
4. Sack a Person from Office
5. Leading Project Managers
6. View Resignation Letters
7. To Get Back To Your Rolls Royce
Enter Your Choice : 3
Enter the ID of the Person to be Searched : 1012
ID : 1012
Pass : admin@123
Name : Sachin
Years Of Experience : 10
Salary : 25000.0
Status : Employee
1.Increase or D.Decrease
I
Enter the Percent of Increment : 3
Increased Salary of Sachin to ---> 25750.0
$$$$$$$$$$ THE BOSS $$$$$$$$$
1.View Query Sheet
2. Update Top Workers List
3. Increment & Decrement in Salaries
4. Sack a Person from Office
5. Leading Project Managers
6. View Resignation Letters
7. To Get Back To Your Rolls Royce
Enter Your Choice : 7
Back in Your Luxurious Rolls Royce To Home $$
```

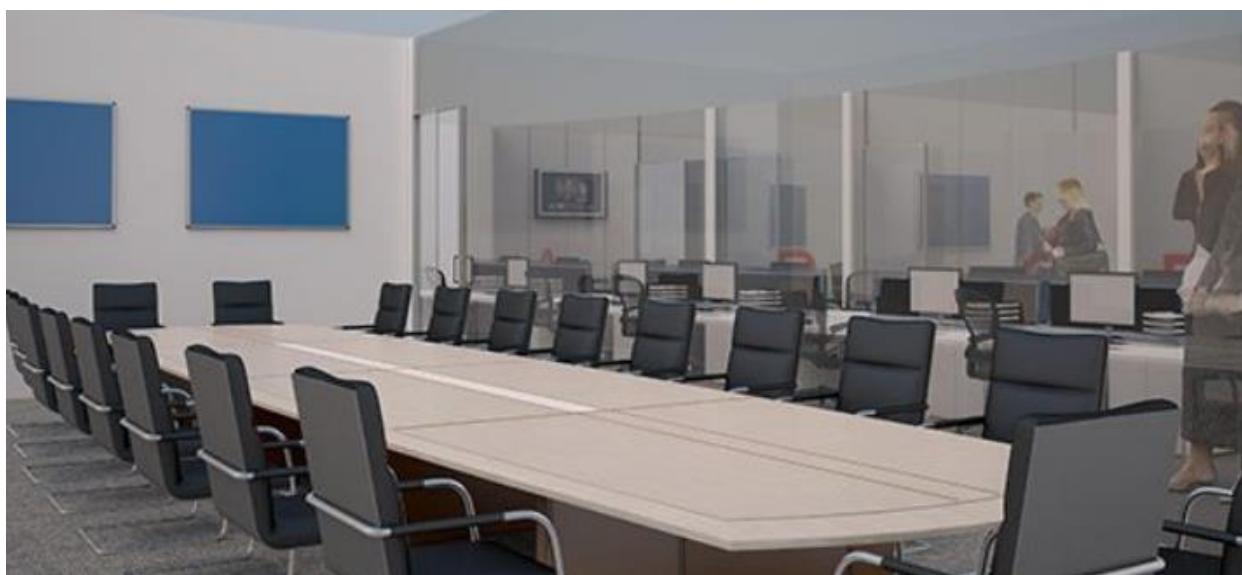
CONCLUSION

- This Software Performs all the Functions and Works that the Workers Inside the Office have.
- This Software is very Useful And can be used as a Virtual Office in Terms Especially During the Covid-19 Situations.
- This Software also Helps in Keeping in Track of all the Workers.



SHORTCOMINGS AND FUTURE ENHANCEMENTS

This Software Can be Extended to much Higher Versions by adding few elements like Including the Time the IT Consultant enters the Office and tells him the Time he can leave, adding more Roles Inside the Office, Graphics Shall be Enhanced like the Things Inside the Office to be more Realistic and many more Interesting Content Ahead.



BIBLIOGRAPHY / WEBLIOGRAPHY

None.