Functional Requirements:-

- 1) To Maintain, Update Database.
- 2) To send greetings text message over SMS,-Whats-app,Email.
- 3) To send Image, videos greeting over SMS, Whats-app, Email.

Non- Functional Requirements:-

- 1) Deploy this as cloud service.
- 2) Support Mobility
- 3) Support web interface
- 4) Send Festival Message

<u>List of Software, python packages used in this Project.</u>

- > Python 3.9
- MySQL
- Pywhatkit: It is used for sending message over whatsapp.
- Smtplib: It is library that is used for sending email.
- Imghdr:- Determine the type of an image.

FEATURES I HAVE IMPLEMENTED:

- > I have added all function requirements.
- > It supports Mobility.
- It also send festival message

```
from datetime import date
import Medium as M
import mysql.connector
import os
#It's version 2
#Because i've created database on cloud.
today = date.today() # To get Today's Date.
db=mysql.connector.connect(host="sql6.freesqldatabase.com",user="sql6582218",p
asswd="KNAZUQReNL",database="sql6582218")
cursor=db.cursor()
print('-----Birthday Service and Festival-------
-----')
def showData():
  cursor.execute('SELECT * FROM Data')
  data = cursor.fetchall()
  for d in data:
   print(d)
  #cursor.execute('SELECT * FROM Festivals')
  #data = cursor.fetchall()
  #for d in data:
   # print(d)
def getData():
  global Email ID
 global Month
  global Name
  global Number
  global Holiday
  global Date
  Holiday, Date = [],[]
  Email ID, Month, Name, Number = [],[],[],[]
  #To get Birthday's table data
  cursor.execute('SELECT * FROM Data')
  data = cursor.fetchall()
 for d in data:
    Email ID += [d[1]]
```

```
Month+=[(str(d[3])).split('-')]
    Name += [d[0]]
    Number += [d[2]]
    #print(d)
  #To get Festival's table data
  cursor.execute('SELECT * FROM Festivals')
  data = cursor.fetchall()
  for d in data:
    Holiday += [d[0]]
    Date += [(str(d[1])).split('-')]
def checkBirthdayToday():
  getData()
  for i in range(len(Month)):
    for j in range(len(Month[i])):
      if Month[i][j]==str(today.month) and Month[i][j-1]==str(today.day):
         print("List of Person's who have birthday today!")
         print(Name[i])
         M.sendMail(Name[i],Email ID[i]) #This will send Mail to the person
         M.sendWTPM(Name[i][j],Number[i]) #This will send Whatsapp Message to
the person
def checkFestivalToday():
  getData()
  for i in range(len(Date)):
    for j in range(len(Date[i])):
      if str(today.month) == Date[i][j] and str(today.day) == Date[i][j-1]:
         for filename in os.listdir('.'):
           if filename.startswith(Holiday[i]):
             Text = open(Holiday[i]+".txt")
             Text = Text.read()
                                        #Read or stored content of Holiday[i] to Text
variable.
             Photo = open(Holiday[i]+".png")
             # The for loop will send emails to all present in table of Data.
             for mail in Email ID:
               M.sendFM(Text,Photo.name,mail)
             # The for loop will send Whatsapp Message to all present in table of
Data.
```

for Number in Number:
 M.sendFMWT(Number,Photo.name,Text)
Photo.close() # Closed opened file

checkFestivalToday() # Festival Function Called
checkBirthdayToday() # Birthday Function Called

```
from email.message import EmailMessage # It provides creating or modifying
structured messages.
import imghdr # The imghdr module determines the type of image
import os
from PIL import Image #PIL is Python Image Library
import pywhatkit
import smtplib
import urllib.request # request module defines functions and classes which help in
opening URLs
msg = EmailMessage()
Sender Mail = "hbd.service.01@gmail.com"
password = "hfsuwibmkiqtdmvm"
def sendMail(Name, Reciver Mail):
  server = smtplib.SMTP('smtp.gmail.com',587) #Created gmail's server, and
connected to gmail API
  # Adding transfer layered security
  server.starttls()
  server.login(Sender_Mail,password) # Email, App password are inserted.
  msg['Subject'] = 'Testing of HBD Service!'
  msg['From'] = Sender Mail
  msg['To'] = Reciver_Mail
  msg.set content(f'Happy birthday {Name}!\nl hope all your birthday wishes and
dreams come true.')
  urllib.request.urlretrieve('https://thumbs.dreamstime.com/b/colorful-happy-
birthday-cupcakes-candles-spelling-148323072.jpg',"HBD.jpg")
  with open('HBD.jpg','rb') as f:
    file data = f.read()
    file type = imghdr.what(f.name)
    file name = f.name
  msg.add attachment(file data,maintype='image',subtype=file type,filename=
file name)
  server.send message(msg)
```

server.quit()

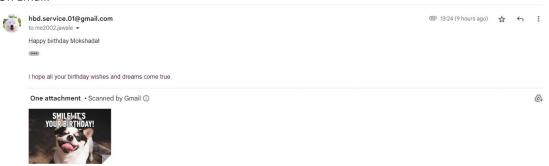
def sendWTPM(Name, Number):

```
img = 'B1.jpg'
  body = f'Happy birthday {Name}!\nI hope all your birthday wishes and dreams
come true.'
  pywhatkit.sendwhats image(Number,img,body,15,False,3)
#FM: Festival Message
def sendFM(Text,Photo,Reciver Mail):
  server = smtplib.SMTP('smtp.gmail.com',587) #Created gmail's server, and
connected to gmail API
  # Adding transfer layered security
  server.starttls()
  server.login(Sender_Mail,password) # Email, App password are inserted.
  msg['Subject'] = 'Testing of Festival Service!'
  msg['From'] = Sender Mail
  msg['To'] = Reciver_Mail
  msg.set content(f'{Text}')
  with open(Photo,'rb') as f:
    file_data = f.read()
    file_type = imghdr.what(f.name)
    file name = f.name
  msg.add attachment(file data,maintype='image',subtype=file type,filename=
file name)
  server.send_message(msg)
  server.quit()
def sendFMWT(Number,Photo,Text):
  body = f'{Text}'
  pywhatkit.sendwhats image(Number,Photo,body,15,False,3)
```

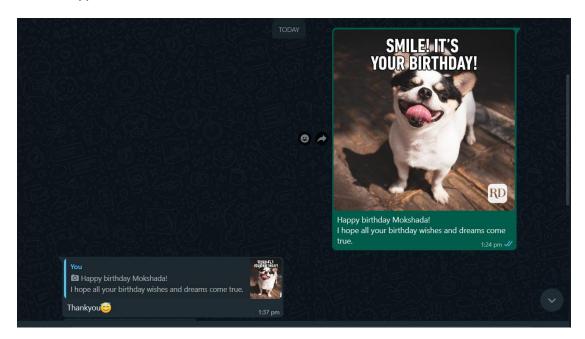
1) OutPut:-

Birthday Message:-

On Email:-



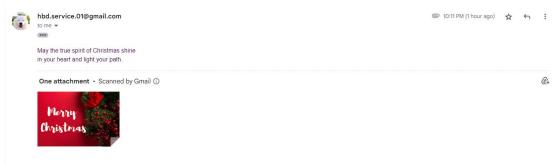
On Whatsapp:-



2) Festival Wisher:-

To test Festival Wisher, I updated Christmas date to today's date.

On Email



On WhatsApp:-

I Have tested this for single Person

