REPORT

CUSTOMER MANAGEMENT SYSTEM

(Project Name-CustomerConnect<-->)

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Introduction

CustomerConnect is a comprehensive Customer Management System (CMS) designed to streamline and enhance interactions between businesses and their customers. It provides a centralized platform for both the business and the customer as well by managing and analysing customer data, setting communication between the two and helping customers to give valuable feedbacks and clear their concerns.

Objective

- Efficiently manage customer information and interactions.
- Provide a common interaction for both the businesses and the customer.
- Enhance customer satisfaction and retention.
- ♣ Improve communication channels between the business and its customers.
- Provide analytics and insights for better decision-making.
- Streamline sales and marketing processes.

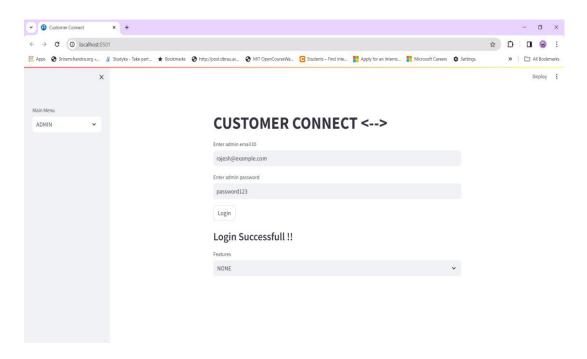
Features

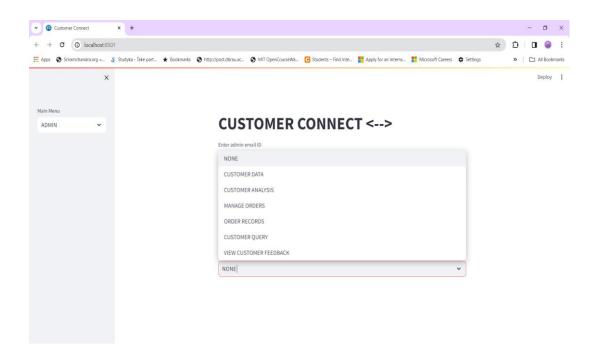
HOME PAGE:



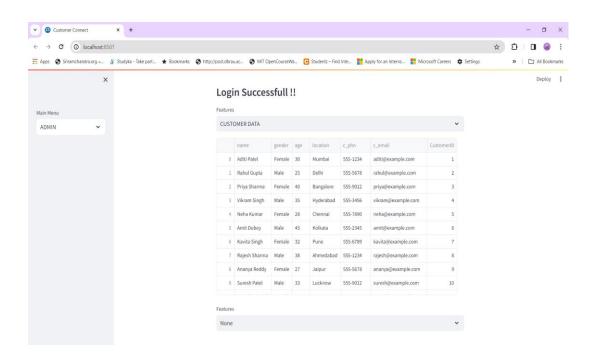
> FOR ADMIN:

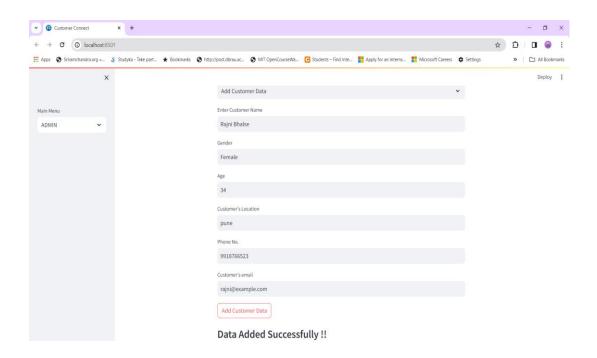
ADMIN LOGIN

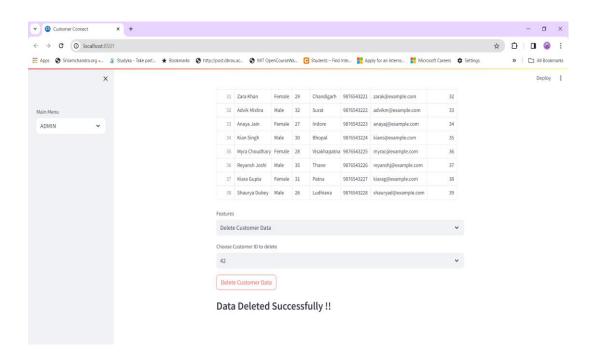




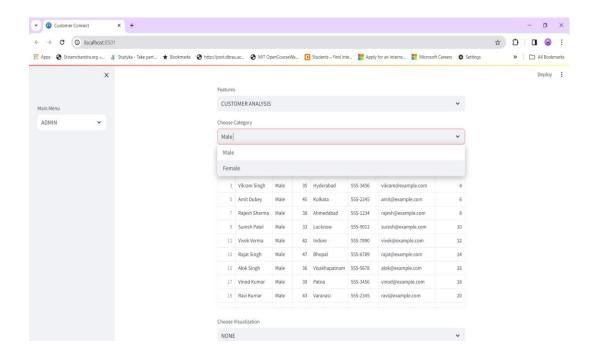
CUSTOMER DATA

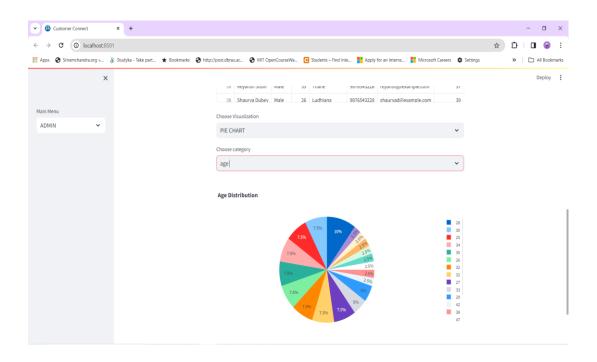


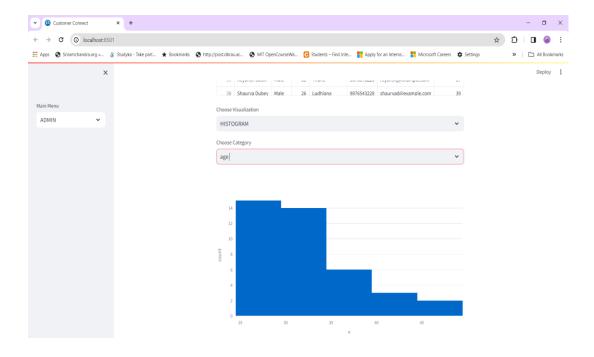




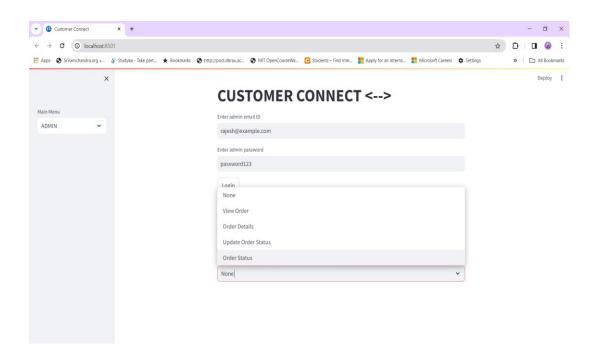
CUSTOMER ANALYSIS



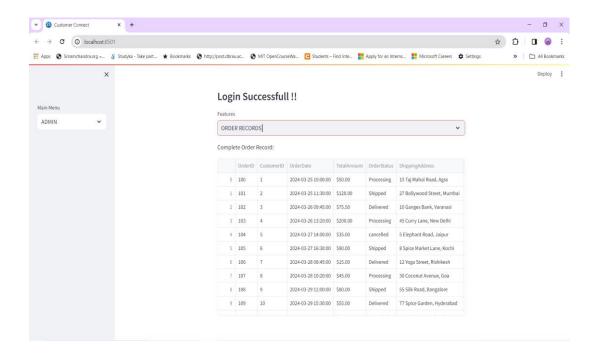




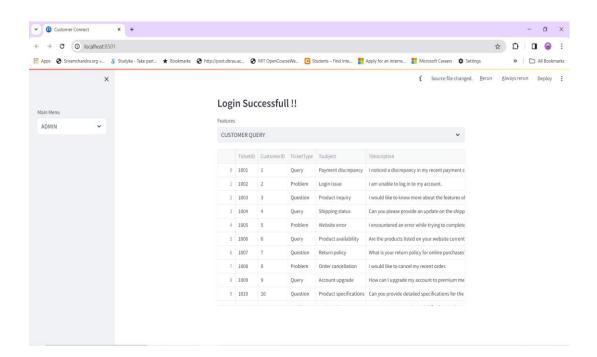
MANAGE ORDERS



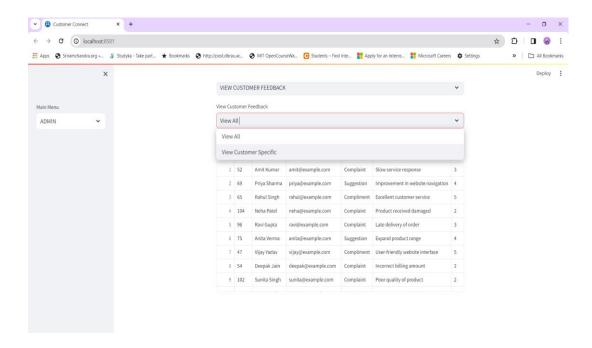
ORDER RECORDS



CUSTOMER QUERY

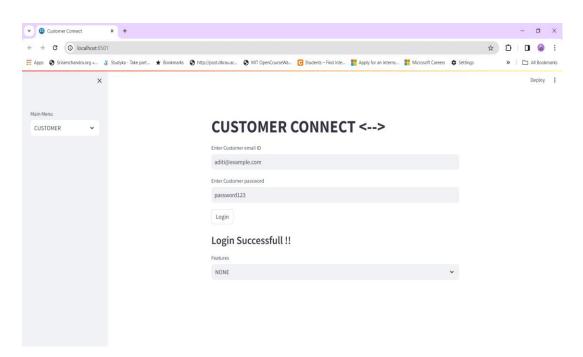


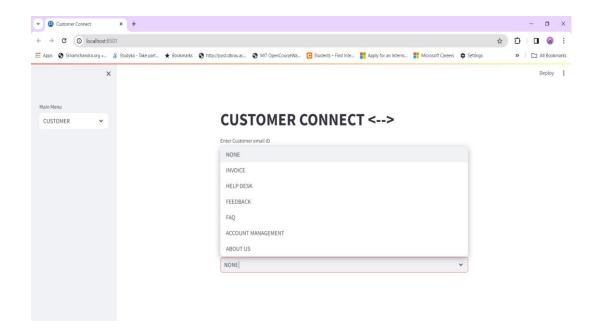
VIEW CUSTOMER FEEDBACK



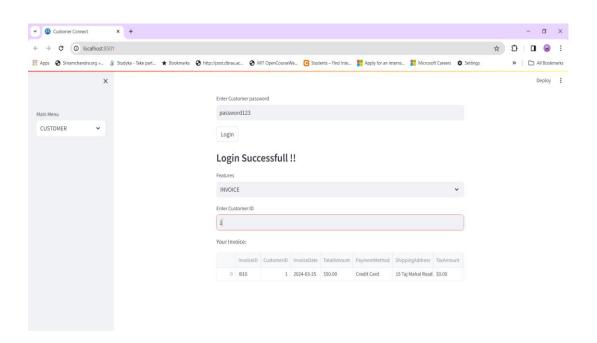
> FOR CUSTOMERs:

CUSTOMER LOGIN

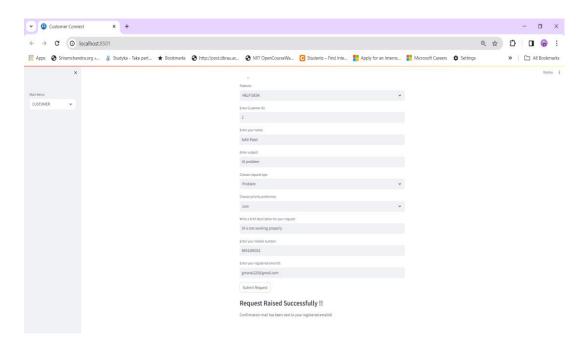




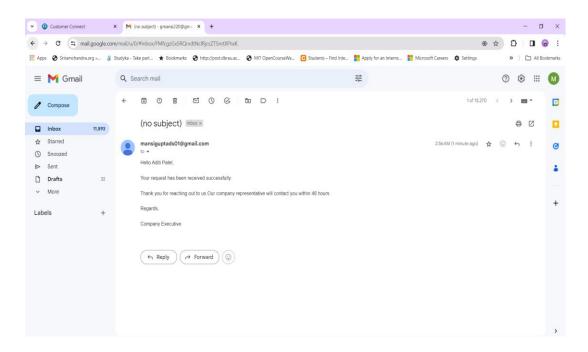
• INVOICE



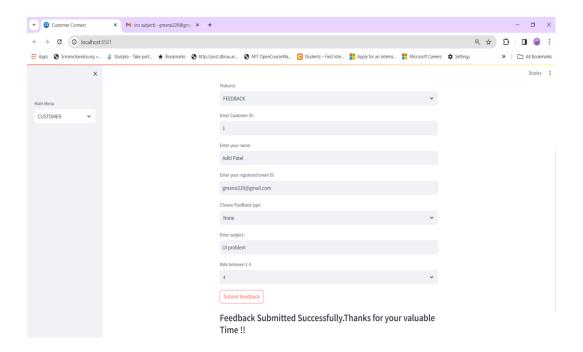
• HELP DESK (customers gets a response mail in return)



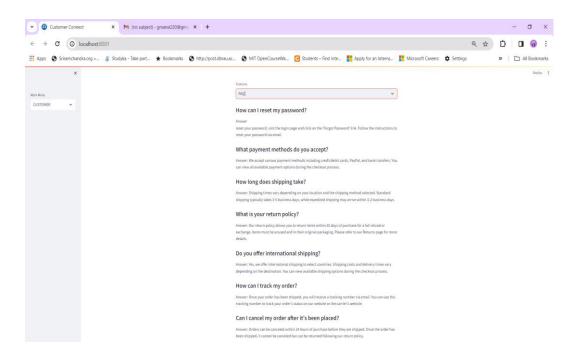
Email received in response of submitting a request to the company-



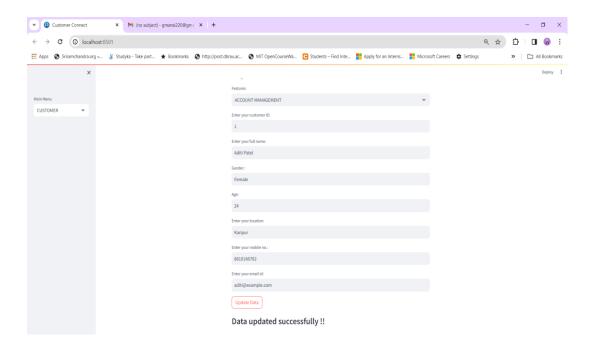
FEEDBACK



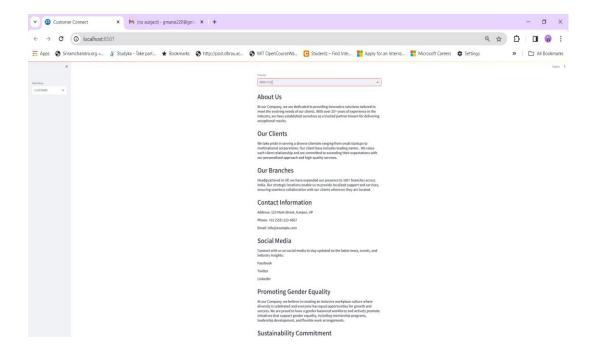
FAQ



ACCOUNT MANAGEMENT



ABOUT US



Technology Used

Programming Languages: Python (including libraries like pandas, datetime etc.) for backend development. HTML, CSS for frontend.

Databases: MySQL, for storing customer data.

Frameworks: Streamlit, for web development.

Communication: SMTP (Simple Mail Transfer Protocol), for email communication.

Analytics Tools: Plotly Express Library

CODE:

```
import mysql.connector
import streamlit as st
import pandas as pd
import datetime
import plotly.express as px
import smtplib

def sendEmail(to,content):
    server=smtplib.SMTP('smtp.gmail.com',587)
    server.ehlo()
    server.starttls()
    server.login('mansiguptads01@gmail.com','**********')
    server.sendmail('mansiguptads01@gmail.com',to,content)
    server.close()
```

st.set_page_config(page_title="Customer Management System",page_icon="https://tse4.mm.bing.net/th?id=OIP.IJDftVMr58wdM1kn6ZWvkwHaHa&pid=Api&P=0&h=220")

```
st.title("CUSTOMER MANAGEMENT SYSTEM")
choice=st.sidebar.selectbox("Main Menu",("HOME","ADMIN","CUSTOMER"))
if(choice=="HOME"):
  # Set a background image
  background_image = 'https://png.pngtree.com/background/20210711/original/pngtree-
business-desktop-meeting-background-picture-image 1090184.jpg'
  # Use HTML and CSS to set the background image
  st.markdown(
    f"""
    <style>
      .stApp {{
        background-image: url('{background_image}');
        background-size: cover;
    </style>
    111111
  unsafe_allow_html=True
elif(choice=="ADMIN"):
  if "islogin" not in st.session_state:
    st.session_state['islogin']=False
    aid=st.text input("Enter admin email ID")
    pwd=st.text input("Enter admin password")
    btn=st.button("Login")
    if btn:
    mydb=mysql.connector.connect(host="localhost",user="root",password="mansi@1234",d
    atabase="cms")
    c=mydb.cursor()
    c.execute("select * from adminData")
    data=c.fetchall()
    for k in data:
      if (k[6]==aid and k[5]==pwd):
        st.session_state['islogin']=True
        break
    if not st.session_state['islogin']:
      st.subheader("Incorrect ID or Passwowrd")
  if st.session_state['islogin']:
    st.subheader("Login Successfull !!")
      choice2=st.selectbox("Features",("NONE","CUSTOMER DATA", "CUSTOMER ANALYSIS",
 "MANAGE ORDERS", "ORDER RECORDS", "CUSTOMER QUERY", "VIEW CUSTOMER
 FEEDBACK"))
```

```
if(choice2=="CUSTOMER DATA"):
       mydb=mysql.connector.connect(host="localhost",user="root",password="mansi@123
       4",database="cms")
      c=mvdb.cursor()
      c.execute("select * from custData")
      mydata=c.fetchall()
      mycolumns=c.column names
      df=pd.DataFrame(data=mydata,columns=mycolumns)
      st.dataframe(df)
      choice3=st.selectbox("Features",("None","Add Customer Data","Delete Customer
Data"))
      if(choice3=="Add Customer Data"):
         cname=st.text_input("Enter Customer Name")
         gender = st.text input("Gender")
         age= st.text input("Age")
         loc= st.text_input("Customer's Location")
         phn= st.text_input("Phone No.")
         cemail= st.text_input("Customer's email")
         btn2=st.button("Add Customer Data")
         if btn2:
           mydb=mysgl.connector.connect(host="localhost",user="root",password="mansi@
           1234",database="cms")
           c=mvdb.cursor()
           c.execute("insert into custData(name,gender,age,location,c_phn,c_email)
values(%s,%s,%s,%s,%s,%s)",(cname,gender,age,loc,phn, cemail))
           mydb.commit()
           st.subheader("Data Added Successfully !!")
      elif(choice3=="Delete Customer Data"):
         mydb=mysql.connector.connect(host="localhost",user="root",password="mansi@12"
         34",database="cms")
         c=mydb.cursor()
         c.execute("select * from custData")
         mydata=c.fetchall()
         mycolumns=c.column_names
         df=pd.DataFrame(data=mydata,columns=mycolumns)
         cid=st.selectbox("Choose Customer ID to delete",df['CustomerID'])
         btn2=st.button("Delete Customer Data")
         if btn2:
           mydb=mysgl.connector.connect(host="localhost",user="root",password="mansi@
           1234",database="cms")
           c=mydb.cursor()
           c.execute("delete from custData where CustomerID=%s",(cid,))
           mvdb.commit()
           st.subheader("Data Deleted Successfully !!")
      elif(choice2=="MANAGE ORDERS"):
```

```
choice3=st.selectbox("Features",("None","View Order","Order Details","Update Order
Status", "Order Status"))
      if(choice3=="View Order"):
        c_id=st.text_input("Enter Customer ID")
         mydb=mysql.connector.connect(host="localhost",user="root",password="mansi@12
         34",database="cms")
        c=mydb.cursor()
        c.execute("select ItemsOrdered from orderDetails where CustomerID= %s",(c_id,))
        mydata=c.fetchall()
        mycolumns=c.column_names
        df=pd.DataFrame(data=mydata,columns=mycolumns)
        st.write("Items Ordered:")
        st.dataframe(df)
      elif(choice3=="Order Details"):
        c_id=st.text_input("Enter Customer ID")
         mydb=mysql.connector.connect(host="localhost",user="root",password="mansi@12
         34",database="cms")
        c=mydb.cursor()
        c.execute("select * from orderDetails where CustomerID= %s",(c id,))
        mydata=c.fetchall()
        mycolumns=c.column_names
        df=pd.DataFrame(data=mydata,columns=mycolumns)
        st.write("Complete Order Details:")
        st.dataframe(df)
      elif(choice3=="Order Status"):
        c_id=st.text_input("Enter Customer ID")
         mydb=mysql.connector.connect(host="localhost",user="root",password="mansi@12
         34",database="cms")
        c=mydb.cursor()
        c.execute("select OrderStatus from orderDetails where CustomerID= %s",(c_id,))
        mydata=c.fetchall()
        mycolumns=c.column names
        df=pd.DataFrame(data=mydata,columns=mycolumns)
        st.write("Status of the Order is:")
        st.dataframe(df)
      elif(choice3=="Update Order Status"):
        c id=st.text input("Enter Customer ID")
         mydb=mysql.connector.connect(host="localhost",user="root",password="mansi@12
         34",database="cms")
        c=mydb.cursor()
        st.write("Current Order Status:")
        c.execute("select OrderStatus from orderDetails where CustomerID= %s",(c_id,))
        mydata=c.fetchall()
        mycolumns=c.column_names
        df=pd.DataFrame(data=mydata,columns=mycolumns)
        st.dataframe(df)
        st.write("Updated Order Status:")
```

```
o_stat=st.text_input("Enter Updated Order Status")
         btn2=st.button("Update Order Status")
         if btn2:
           mydb=mysql.connector.connect(host="localhost",user="root",password="mansi@
           1234",database="cms")
           c=mvdb.cursor()
           c.execute("update orderDetails set OrderStatus=%s where CustomerID=
%s",(o_stat,c_id))
           mydb.commit()
           st.subheader("Status Updated Successfully !!")
    elif(choice2=="VIEW CUSTOMER FEEDBACK"):
       c=st.selectbox("View Customer Feedback",("View All","View Customer Specific"))
       if(c=="View AII"):
         mydb=mysql.connector.connect(host="localhost",user="root",password="mansi@12
         34",database="cms")
         c=mydb.cursor()
         c.execute("select * from feedback")
         mydata=c.fetchall()
         mycolumns=c.column names
         df=pd.DataFrame(data=mydata,columns=mycolumns)
         st.dataframe(df)
       else:
         c_id=st.text_input("Enter Customer ID")
         mydb=mysql.connector.connect(host="localhost",user="root",password="mansi@12
         34",database="cms")
         c=mydb.cursor()
         c.execute("select * from feedback where c id= %s",(c id,))
         mydata=c.fetchall()
         mycolumns=c.column_names
         df=pd.DataFrame(data=mydata,columns=mycolumns)
         st.dataframe(df)
    elif(choice2=="ORDER RECORDS"):
       st.write("Complete Order Record:")
       mydb=mysql.connector.connect(host="localhost",user="root",password="mansi@123
       4",database="cms")
       c=mydb.cursor()
       c.execute("select * from orderDetails")
       mydata=c.fetchall()
       mycolumns=c.column names
       df=pd.DataFrame(data=mydata,columns=mycolumns)
       st.dataframe(df)
    elif(choice2=="CUSTOMER QUERY"):
       mydb=mysql.connector.connect(host="localhost",user="root",password="mansi@123
       4",database="cms")
```

```
c=mydb.cursor()
       c.execute("select * from HelpDesk")
       mydata=c.fetchall()
       mycolumns=c.column names
       df=pd.DataFrame(data=mydata,columns=mycolumns)
       st.write("Items Ordered:")
       st.dataframe(df)
     elif(choice2=="CUSTOMER ANALYSIS"):
       df=pd.read_csv("Customer Analysis.csv")
       c=st.selectbox("Choose Category",("Male","Female"))
       df2=df[df['gender']==c]
       st.dataframe(df2)
       choice3=st.selectbox("Choose Visualization",("NONE","PIE CHART","HISTOGRAM"))
       if(choice3 == "HISTOGRAM"):
         k=st.selectbox("Choose Category",("gender","age","location"))
         if k:
           fig=px.histogram(x=df[k])
           st.plotly chart(fig)
       elif(choice3 == "PIE CHART"):
         c=st.selectbox("Choose category",("age","gender","location"))
         if(c=="age"):
           # Pie chart for 'age' column
           age_counts = df['age'].value_counts()
           fig_age = px.pie(values=age_counts, names=age_counts.index, title='Age
Distribution')
           st.plotly chart(fig age)
         elif(c=="gender"):
           # Pie chart for 'gender' column
           gender counts = df['gender'].value counts()
           fig gender = px.pie(values=gender counts, names=gender counts.index,
title='Gender Distribution')
           st.plotly_chart(fig_gender)
         elif(c=="location"):
           # Pie chart for 'location' column
           location counts = df['location'].value counts()
           fig_location = px.pie(values=location_counts, names=location_counts.index,
title='Location Distribution')
           st.plotly chart(fig location)
elif(choice=="CUSTOMER"):
  if "islogin" not in st.session state:
    st.session state['islogin']=False
  aid=st.text input("Enter Customer email ID")
  pwd=st.text_input("Enter Customer password")
  btn=st.button("Login")
  if btn:
    mydb=mysql.connector.connect(host="localhost",user="root",password="mansi@1234",d
    atabase="cms")
    c=mydb.cursor()
```

```
c.execute("select * from custCredentials")
    data=c.fetchall()
    for k in data:
      if (k[1]==aid and k[2]==pwd):
        st.session_state['islogin']=True
        break
    if not st.session state['islogin']:
      st.subheader("Incorrect ID or Passwowrd")
  if st.session_state['islogin']:
    st.subheader("Login Successfull !!")
    choice2=st.selectbox("Features",("NONE","INVOICE", "HELP DESK", "FEEDBACK", "FAQ",
"ACCOUNT MANAGEMENT", "ABOUT US"))
    if(choice2=="INVOICE"):
         c_id=st.text_input("Enter Customer ID")
         mydb=mysql.connector.connect(host="localhost",user="root",password="mansi@12"
         34",database="cms")
         c=mydb.cursor()
         c.execute("select * from invoice where CustomerID= %s",(c id,))
         mvdata=c.fetchall()
         mycolumns=c.column_names
         df=pd.DataFrame(data=mydata,columns=mycolumns)
         st.write("Your Invoice:")
         st.dataframe(df)
    elif(choice2=="HELP DESK"):
       c id=st.text input("Enter Customer ID:")
       cname = st.text_input("Enter your name:")
       sub= st.text input("Enter subject:")
       Ttype=st.selectbox("Choose request type",("None","Query", "Problem","Question"))
       Ptype=st.selectbox("Choose priority preference",("None","High", "Medium","Low"))
       Tdesc=st.text input("Write a brief description for your request:")
       cust_phn=st.text_input("Enter your mobile number:")
       c emailID=st.text input("Enter your registered email ID:")
       btn2=st.button("Submit Request")
       if btn2:
         content="Hello" + cname + ",\n\nYour request has been received
successfully.\n\nThank you for reaching out to us.Our company representative will contact you
within 48 hours.\n\nRegards,\n\nCompany Executive"
         to=c emailID
         sendEmail(to,content)
         mydb=mysql.connector.connect(host="localhost",user="root",password="mansi@12
         34",database="cms")
         c=mydb.cursor()
         c.execute("insert into custHelpDesk
values(%s,%s,%s,%s,%s,%s,%s,%s)",(c_id,cname,sub,Ttype,Ptype,Tdesc, cust_phn, c_emailID))
         mydb.commit()
         st.subheader("Request Raised Successfully !!\nConfirmation mail has been sent to
your registered emailid!")
```

```
elif(choice2=="FEEDBACK"):
       c_id=st.text_input("Enter Customer ID:")
       cname = st.text input("Enter your name:")
       c_emailID=st.text_input("Enter your registered email ID:")
       Ftype=st.selectbox("Choose Feedback type",("None","Suggestion",
"Compliment", "Complaints"))
       sub= st.text input("Enter subject:")
       rating=st.selectbox("Rate between 1-5",("1","2","3","4","5"))
       btn2=st.button("Submit Feedback")
       if btn2:
         mydb=mysgl.connector.connect(host="localhost",user="root",password="mansi@12"
         34",database="cms")
         c=mydb.cursor()
         c.execute("insert into feedback values(%s,%s,%s,%s,%s,%s,%s)",(c_id,cname,
c emailID, Ftype, sub, rating))
         mydb.commit()
         st.subheader("Feedback Submitted Successfully.Thanks for your valuable Time!!")
    elif(choice2=="ACCOUNT MANAGEMENT"):
       c id=st.text input("Enter your customer ID:")
       cname=st.text input("Enter your full name:")
       gen = st.text_input("Gender:")
       age= st.text_input("Age:")
       loc= st.text_input("Enter your location:")
       c phn= st.text input("Enter your mobile no.:")
       c email= st.text input("Enter your email id:")
       btn2=st.button("Update Data")
       if btn2:
         mydb=mysql.connector.connect(host="localhost",user="root",password="mansi@12
         34",database="cms")
         c=mydb.cursor()
          c.execute("update custdata set
         name=%s,gender=%s,age=%s,location=%s,c_phn=%s,c_email=%s where
         customerID=%s",(cname, gen ,age,loc,c_phn,c_email,c_id))
         mydb.commit()
         st.subheader("Data updated successfully !!")
    elif(choice2=="FAQ"):
       st.markdown("<h4>How can I reset my password?", unsafe allow html=True)
       st.write("Answer:To reset your password, visit the login page and click on the 'Forgot
       Password' link. Follow the instructions to reset your password via email.")
       st.markdown("<h4>What payment methods do you accept?",
       unsafe allow html=True)
       st.write("Answer: We accept various payment methods including credit/debit cards,
       PayPal, and bank transfers. You can view all available payment options during the
       checkout process.")
       st.markdown("<h4>How long does shipping take?", unsafe_allow_html=True)
       st.write("Answer: Shipping times vary depending on your location and the shipping
       method selected. Standard shipping typically takes 3-5 business days, while expedited
       shipping may arrive within 1-2 business days.")
```

st.markdown("<h4> What is your return policy?", unsafe_allow_html=True) st.write("Answer: Our return policy allows you to return items within 30 days of purchase for a full refund or exchange. Items must be unused and in their original packaging. Please refer to our Returns page for more details.")

st.markdown("<h4> Do you offer international shipping?", unsafe_allow_html=True) st.write("Answer: Yes, we offer international shipping to select countries. Shipping costs and delivery times vary depending on the destination. You can view available shipping options during the checkout process.")

st.markdown("<h4>How can I track my order?", unsafe_allow_html=True)

st.write("Answer: Once your order has been shipped, you will receive a tracking number via email. You can use this tracking number to track your order's status on our website or the carrier's website.")

st.markdown("<h4> Can I cancel my order after it's been placed?", unsafe_allow_html=True)

st.write("Answer: Orders can be canceled within 24 hours of purchase before they are shipped. Once the order has been shipped, it cannot be canceled but can be returned following our return policy.")

st.markdown("<h4> Are your products eco-friendly?", unsafe_allow_html=True)

st.write("Answer: We strive to offer environmentally friendly products whenever possible. Look for eco-friendly labels on our product pages or contact customer support for more information on specific products.")

st.markdown("<h4>How can I contact customer support?", unsafe_allow_html=True)

st.write("Answer: You can contact our customer support team via email at support@example.com or by phone at +1 (800) 123-4567. Our support team is available Monday through Friday from 9:00 AM to 5:00 PM.")

st.markdown("<h4> Do you offer discounts for bulk orders?", unsafe_allow_html=True) st.write("Answer: Yes, we offer discounts for bulk orders. Please contact our sales team at sales@example.com for pricing and further assistance.")

elif(choice2=="ABOUT US"):

st.markdown("<h2>About Us", unsafe_allow_html=True)

st.markdown("<h5>At our Company, we are dedicated to providing innovative solutions tailored to meet the evolving needs of our clients. With over 20+ years of experience in the industry, we have established ourselves as a trusted partner known for delivering exceptional results.", unsafe_allow_html=True)

st.markdown("<h2>Our Clients", unsafe_allow_html=True)

st.markdown("<h5>We take pride in serving a diverse clientele ranging from small startups to multinational corporations. Our client base includes leading names . We value each client relationship and are committed to exceeding their expectations with our personalized approach and high-quality services.", unsafe_allow_html=True)

st.markdown("<h2>Our Branches", unsafe allow html=True)

st.markdown("<h5>Headquartered in UP, we have expanded our presence to 100+ branches across India. Our strategic locations enable us to provide localized support and services, ensuring seamless collaboration with our clients wherever they are located.", unsafe allow html=True)

st.markdown("<h2>Contact Information", unsafe_allow_html=True)

st.markdown("<h5>Address: 123 Main Street, Kanpur, UP", unsafe_allow_html=True)

st.markdown("<h5>Phone: +91 (555) 123-4567", unsafe_allow_html=True)

st.markdown("<h5>Email: info@example.com", unsafe_allow_html=True)

st.markdown("<h2>Social Media", unsafe_allow_html=True)

st.markdown("<h5>Connect with us on social media to stay updated on the latest news, events, and industry insights:", unsafe_allow_html=True)

st.markdown("<h5>Facebook", unsafe_allow_html=True)
st.markdown("<h5>Twitter", unsafe_allow_html=True)
st.markdown("<h5>LinkedIn", unsafe_allow_html=True)
st.markdown("<h2>Promoting Gender Equality", unsafe_allow_html=True)
st.markdown("<h5>At our Company, we believe in creating an inclusive workplace
culture where diversity is celebrated and everyone has equal opportunities for growth
and success. We are proud to have a gender-balanced workforce and actively promote
initiatives that support gender equality, including mentorship programs, leadership
development, and flexible work arrangements.", unsafe_allow_html=True)
st.markdown("<h2>Sustainability Commitment", unsafe_allow_html=True)
st.markdown("<h5>As part of our corporate responsibility efforts, we are committed to
sustainability and environmental stewardship. We strive to minimize our
environmental footprint by implementing eco-friendly practices throughout our
operations and supporting initiatives that contribute to a more sustainable future.",
unsafe_allow_html=True)