# **COMPUTER SCIENCE (083)**

# **News Website**



(as per the guidelines of CBSE for the session 2022-23)

#### **Particulars of Student**

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Roll No: 11

Class: 12 F

#### Particulars of the Teacher

Name: GULROOP KAUR

**Designation:** PGT, COMPUTER SCIENCE

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# **CERTIFICATE**

This is t	o certify that the P	ython project	entitled	, submitted by .	Rishab
<u>Nair</u> ,	Grade 12 (Roll No.	<u> 17638217</u>	) is the bo	nafide work of th	ne student
(as per	the guidelines of the	CBSE) complet	ted under m	ny guidance for th	he session
2022-23					

NAME: Rishab Nair

**ROLL NO: 11** 

CLASS:12-F

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Ms. Gulroop Kaur PGT Computer Science

## **ACKNOWLEDGEMENTS**

I am delighted to write these lines, and offer my heartfelt gratitude to all those who assisted me in accomplishing this project.

Our school's peaceful atmosphere served as an excellent guidance for planning the project, and also boosted our productivity and creativity. It was an honour to be mentored by Ms. Gulroop Kaur.

Also thanks to all our School Staff who have supported and encouraged me along the way. This project would not have been possible without your guidance and assistance.

Thanks to all my classmates who helped us during the development of this project with their constructive criticism, suggestions and advice throughout.

# MAIN REPORT:

### **INTRODUCTION:**

#### **PROBLEM:**

The rise of social media has facilitated a bigger problem- the rise of misinformation. In order to tackle this dilemma, I took it upon myself to come up with a solution that although, uses a small interface, has sufficient information one might need while browsing the desirable information. I wanted to present this news in a clear, concise format and have it be the latest data available inorder to further improve this interface, I decided to bifurcate the information according to the multitude of relevant categories such as business, technology, general and many more. Thus, making it more convenient for the user to access the desired data.

#### Features:

My project was made using streamlit, in a website format.

On the first page, the user gets a home screen with a detailed explanation of how the site functions and a dropdown select menu at the left hand side wherein they can select whether to sign up or login. The articles include a heading, the date of publication, the author, a brief summary as well as a link to view the full article.

The type of articles received is chosen by the user; ranging from business to technology. The user can choose any category of article provided in the program

# HARDWARE AND SOFTWARE REQUIREMENTS

#### Hardware:

System Type: 64-bit operating system, x64-based processor

**BIOS:** Default System BIOS

Processor: Intel(R) Core(TM) i5-10300H CPU @ 2.50GHz 2.50 GHz

Memory: 8gb RAM

Software:

Operating System: Windows 11 Home Single Language

Version: 21H2

**OS Build: 22000.1098** 

**DirectX Version:** DirectX 12

IDLE: Visual Studio Code

Version: 2021.2.2

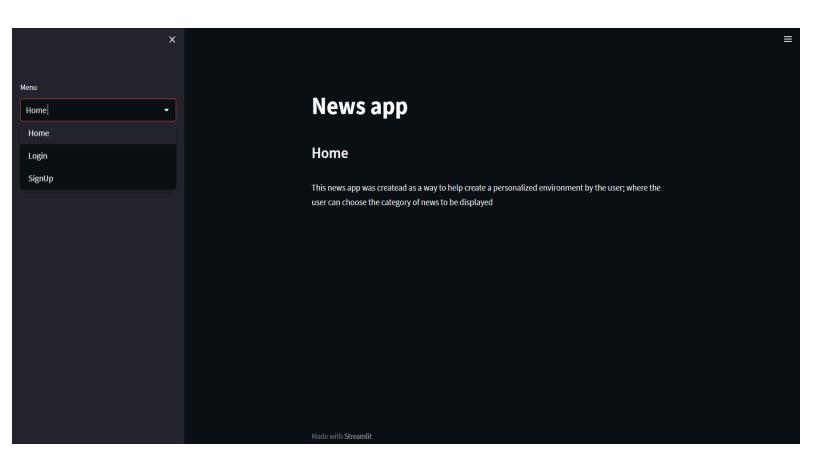
• **Build:** 212.5080.64

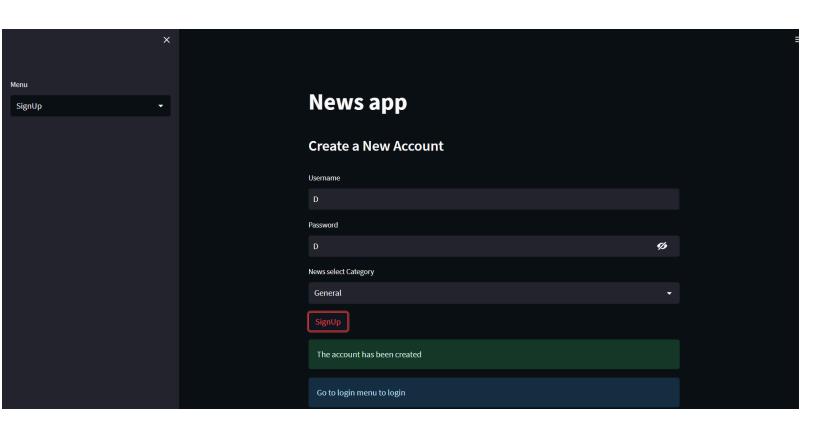
# **OUTPUTS AND CODING**

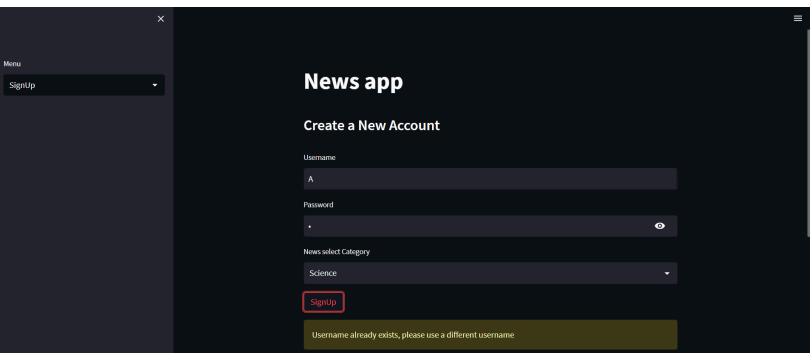
```
import streamlit as st
import requests
import mysql.connector as c;
con = c.connect(host='localhost', user='root', password='RISHAB', database='project')
cur = con.cursor()
def main():
   global category
   st.title('News app')
   menu=['Home','Login','SignUp']
   choice=st.sidebar.selectbox('Menu',menu)
   if choice =='Home':
       st.subheader("Home")
       '''This news app was createad as a way to help create a personalized environment
       by the user; where the user can choose the category of news to be displayed'"
   elif choice=="Login":
       st.subheader("Login")
       username= st.sidebar.text_input("User name")
       password=st.sidebar.text_input("Password",type='password')#verify whether user exists
       usn=str(username)
       if st.sidebar.button("Login"):
           log="select password from login where username=(%s)"
           cur.execute(log,(usn,))#check table name
           pur=cur.fetchone()
           pwd=pur[0]
           if password==pwd:
               st.success("Logged in")
```

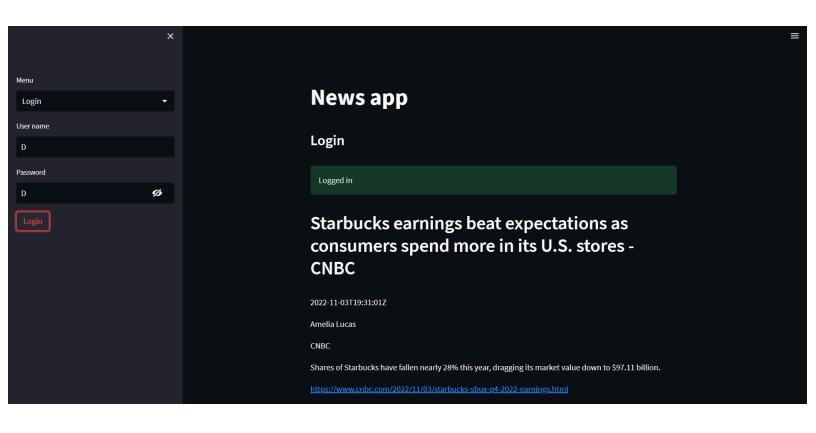
```
cur.execute(c,(usn,))
                   cat=cur.fetchone()
                   act=cat[0]
                   tac=act.lower()
                   url=f"https://newsapi.org/v2/top-headlines?country=us&category={tac}&apiKey=5f4b6487c3c7456b85263b1f8579bb93"
                   r = requests.get(url)
                   r = r.json()
                   articles = r['articles']
                   for article in articles:
                       st.header(article['title'])
                       st.write(article['publishedAt'])
                       if (article['author']):
                           st.write(article['author'])
                       st.write(article['source']['name'])
                       st.write(article['description'])
                       st.write(article['url'])
st.image(article['urlToImage'])
                   st.warning("Incorrect Username/Password")
       elif choice=="SignUp":
           st.subheader("Create a New Account")
           new_user=st.text_input("Username")
           new_password=st.text_input("Password",type='password')
           category=['Business','Entertainment','General','Health','Science','Sports','Technology']
           new_genre=st.selectbox('News select Category',category)
           if st.button("SignUp"): #check for similar usernames
               sig='select username from login '
                cur.execute(sig)
                  cur.execute(sig)
                  un=cur.fetchall()
                  if len(un)==0:
                      ud=(new_user,new_password,new_genre)
                      cur.execute(ins,ud)
                      con.commit()
                      st.success("The account has been created")
                      st.info("Go to login menu to login ")
                  elif len(un)>0:
                   for i in un:
                        if new user!=i[0]:
                          ud=(new user,new password,new genre)
                          cur.execute(ins,ud)
                          con.commit()
                          st.success("The account has been created")
                          st.info("Go to login menu to login ")
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```

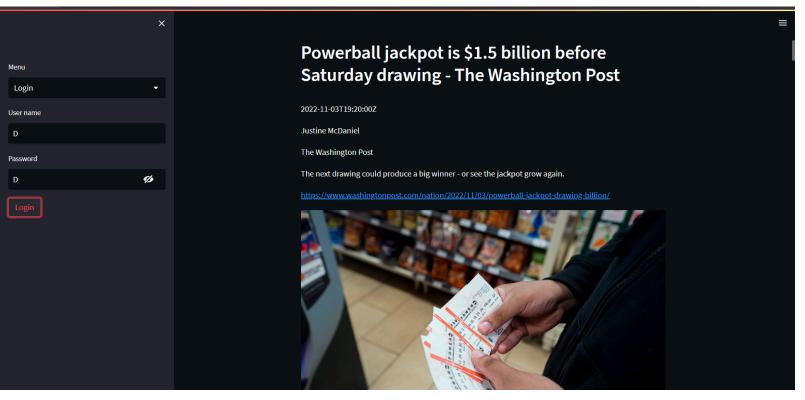
st.warning("Username already exists, please use a different username")











# CODE:

```
import streamlit as st
import requests
import mysql.connector as c;
con = c.connect(host='localhost', user='root', password='password',
database='project')
cur = con.cursor()
def main():
   global category
   st.title('News app')
   menu=['Home','Login','SignUp']
```

```
choice=st.sidebar.selectbox('Menu',menu)
   if choice =='Home':
       st.subheader("Home")
       '''This news app was createad as a way to help create a
personalized environment
       by the user; where the user can choose the category of news
to be displayed'''
   elif choice=="Login":
       st.subheader("Login")
       username= st.sidebar.text input("User name")
       password=st.sidebar.text_input("Password",type='password')
       usn=str(username)
       if st.sidebar.button("Login"):
           log="select password from login where username=(%s)"
           cur.execute(log, (usn,))
           pur=cur.fetchone()
```

```
pwd=pur[0]
           if password==pwd:
               st.success("Logged in")
               c='select category from login where username=(%s) '
               cur.execute(c,(usn,))
               cat=cur.fetchone()
               act=cat[0]
               tac=act.lower()
url=f"https://newsapi.org/v2/top-headlines?country=us&category={tac
}&apiKey=5f4b6487c3c7456b85263b1f8579bb93"
               r = requests.get(url)
               r = r.json()
               articles = r['articles']
               for article in articles:
                   st.header(article['title'])
                   st.write(article['publishedAt'])
```

```
if (article['author']):
                       st.write(article['author'])
                   st.write(article['source']['name'])
                   st.write(article['description'])
                   st.write(article['url'])
                   st.image(article['urlToImage'])
           else:
               st.warning("Incorrect Username/Password")
  elif choice=="SignUp":
       st.subheader("Create a New Account")
       new_user=st.text_input("Username")
       new password=st.text input("Password", type='password')
category=['Business','Entertainment','General','Health','Science','
Sports','Technology']
      new genre=st.selectbox('News select Category', category)
```

```
if st.button("SignUp"):
    sig='select username from login '
    cur.execute(sig)
    un=cur.fetchall()
    if len(un) == 0:
       ins="insert into login values(%s, %s, %s)"
       ud= (new_user, new_password, new_genre)
       cur.execute(ins,ud)
       con.commit()
       st.success("The account has been created")
       st.info("Go to login menu to login ")
    elif len(un)>0:
     for i in un:
         if new user!=i[0]:
           ins="insert into login values(%s,%s,%s)"
           ud=(new_user,new_password,new_genre)
```

```
cur.execute(ins,ud)

con.commit()

st.success("The account has been created")

st.info("Go to login menu to login ")

else:

st.warning("Username already exists, please use a different username")
```

# REFERENCES

https://www.youtube.com/watch?v=HU\_kd-1ulk

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<a href="https://www.youtube.com/watch?v=ydpoMxwW">https://www.youtube.com/watch?v=ydpoMxwW</a>
<a href="https://www.youtube.com/watch?v=ydpoMxwW">NA8</a>

https://www.youtube.com/watch?v=eJk\_ySnVLm
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# Synopsis

To make a user-friendly interface to access the desired news.