

COMPUTER SCIENCE (083)

News Website



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

Particulars of Student

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Contents

- A. Certificate
- B. Acknowledgments
- C. Main Report
 - Introduction
- D. Hardware and Software requirements
- E. Outputs with Corresponding Coding
- F. References

CERTIFICATE

This is to certify that the Python project entitled __, submitted by **Rishab Nair** , **Grade 12 (Roll No. 17638217)** is the bonafide work of the student (as per the guidelines of the CBSE) completed under my guidance for the session 2022-23.

NAME: Rishab Nair

ROLL NO: 11

CLASS:12-F

Ms. Gulroop Kaur

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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 in order 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

```
1  import streamlit as st
2
3  import requests
4
5  import mysql.connector as c;
6
7  con = c.connect(host='localhost', user='root', password='RISHAB', database='project')
8  cur = con.cursor()
9
10
11
12  def main():
13      global category
14      st.title('News app')
15
16      menu=['Home','Login','SignUp']
17      choice=st.sidebar.selectbox('Menu',menu)
18
19      if choice == 'Home':
20          st.subheader("Home")
21          '''This news app was createad as a way to help create a personalized environment
22          by the user; where the user can choose the category of news to be displayed'''
23
24      elif choice=="Login":
25          st.subheader("Login")
26
27          username= st.sidebar.text_input("User name")
28          password=st.sidebar.text_input("Password",type='password')#verify whether user exists
29          usn=str(username)
30
31          if st.sidebar.button("Login"):
32              log="select password from login where username=(%s)"
33              cur.execute(log,(usn,))#check table name
34              pur=cur.fetchone()
35              pwd=pur[0]
36              if password==pwd:
37                  st.success("Logged in")
```

```

37         st.success("Logged in ")
38         c='select category from login where username=(%s) '
39         cur.execute(c,(usn,))
40         cat=cur.fetchone()
41         act=cat[0]
42         tac=act.lower()
43
44
45
46         url=f"https://newsapi.org/v2/top-headlines?country=us&category={tac}&apiKey=5f4b6487c3c7456b85263b1f8579bb93"
47         r = requests.get(url)
48         r = r.json()
49         articles = r['articles']
50         for article in articles:
51             st.header(article['title'])
52             st.write(article['publishedAt'])
53             if (article['author']):
54                 st.write(article['author'])
55             st.write(article['source']['name'])
56             st.write(article['description'])
57             st.write(article['url'])
58             st.image(article['urlToImage'])
59
60
61         else:
62             st.warning("Incorrect Username/Password")
63
64     elif choice=="SignUp":
65         st.subheader("Create a New Account")
66         new_user=st.text_input("Username")
67         new_password=st.text_input("Password",type='password')
68         category=['Business','Entertainment','General','Health','Science','Sports','Technology']
69         new_genre=st.selectbox('News select Category',category)
70
71         if st.button("SignUp"): #check for similar usernames
72             sig='select username from login '
73
74             cur.execute(sig)

```

```

74             cur.execute(sig)
75             un=cur.fetchall()
76             if len(un)==0:
77                 ins="insert into login values(%s,%s,%s)"
78                 ud=(new_user,new_password,new_genre)
79                 cur.execute(ins,ud)
80                 con.commit()
81                 st.success("The account has been created")
82                 st.info("Go to login menu to login ")
83
84
85             elif len(un)>0:
86                 for i in un:
87                     if new_user!=i[0]:
88                         ins="insert into login values(%s,%s,%s)"
89                         ud=(new_user,new_password,new_genre)
90                         cur.execute(ins,ud)
91                         con.commit()
92
93                     st.success("The account has been created")
94                     st.info("Go to login menu to login ")
95                 else:
96                     st.warning("Username already exists, please use a different username")
97

```



Menu

Home



Home

Login

SignUp



News app

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

Made with Streamlit

×

Menu

SignUp

News app

Create a New Account

Username

D

Password

D

News select Category

General

SignUp

The account has been created

Go to login menu to login

×

Menu

SignUp

News app

Create a New Account

Username

A

Password

•

News select Category

Science

SignUp

Username already exists, please use a different username

×

Menu

Login

User name

D

Password

D

Login

News app

Login

Logged in

Starbucks earnings beat expectations as consumers spend more in its U.S. stores - CNBC

2022-11-03T19:31:01Z

Amelia Lucas

CNBC

Shares of Starbucks have fallen nearly 28% this year, dragging its market value down to \$97.11 billion.

<https://www.cnbc.com/2022/11/03/starbucks-sbux-q4-2022-earnings.html>

×

Menu

Login

User name

D

Password

D

Login

Powerball jackpot is \$1.5 billion before Saturday drawing - The Washington Post

2022-11-03T19:20:00Z

Justine McDaniel

The Washington Post

The next drawing could produce a big winner - or see the jackpot grow again.

<https://www.washingtonpost.com/nation/2022/11/03/powerball-jackpot-drawing-billion/>



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-1ulkQ

<https://www.youtube.com/watch?v=ydpoMxwWNA8>

https://www.youtube.com/watch?v=eJk_ySnVLmU

Synopsis

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