

```
from flask import Flask, render_template, request, flash, redirect, url_for, session
from newsapi import NewsApiClient
import ibm_db
import requests
from flask_sqlalchemy import SQLAlchemy
```

```
app = Flask(__name__)
app.app_context().push()
```

```
app.config['DEBUG'] = True
app.config['SQLALCHEMY_DATABASE_URI'] = 'sqlite:///weather.db'
```

```
db = SQLAlchemy(app)
```

```
class City(db.Model):
    id = db.Column(db.Integer, primary_key=True)
    name = db.Column(db.String(50), nullable=False)
```

```
app.secret_key='a'
```

```
connection = ibm_db.connect("DATABASE=bludb ; HOSTNAME=54a2f15b-5c0f-46df-8954-7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud; PORT= 32733; SECURITY=SSL;
```

```
SSLServerertificate=/Users/pradeep/PycharmProjects/Flask SQLite/certificate.crt; UID=ssr73017;  
PWD=zQUhCA8HIIVl8nxT;"", " " )
```

```
@app.route('/')
```

```
def index():
```

```
    return render_template('index.html')
```

```
@app.route('/register', methods=['GET', 'POST'])
```

```
def register():
```

```
    if request.method == 'POST':
```

```
        try:
```

```
            username = request.form['username']
```

```
            mail = request.form['mail']
```

```
            contact = request.form['contact']
```

```
            password = request.form['password']
```

```
            query = "INSERT INTO USERS VALUES(?,?,?,?)"
```

```
            stmt = ibm_db.prepare(connection, query)
```

```
            ibm_db.bind_param(stmt, 1, username)
```

```
            ibm_db.bind_param(stmt, 2, mail)
```

```
            ibm_db.bind_param(stmt, 3, contact)
```

```
            ibm_db.bind_param(stmt, 4, password)
```

```
            ibm_db.execute(stmt)
```

```
            flash("Registered Successfully", "success")
```

```
        except:
```

```
            flash("Error in Insert Operation", "danger")
```

```
    finally:
```

```
        return redirect(url_for("index"))

    con.close()

return render_template('register.html')
```

```
@app.route('/login', methods=['GET', 'POST'])
def login():
    global userid

    if request.method == "POST":
        username = request.form['username']
        password = request.form['password']
        query = "SELECT * FROM USERS where username=? and password=?"
        stmt = ibm_db.prepare(connection, query)
        ibm_db.bind_param(stmt, 1, username)
        ibm_db.bind_param(stmt, 2, password)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)

        if account:
            session['Loggedin'] = True
            session['id'] = account['USERNAME']
            session['username'] = account['USERNAME']
            return redirect("/news")
        else:
            flash("Oops Username and Password Mismatch", "danger")
            return redirect(url_for("index"))
```

```
@app.route("/news")

def home():

    api_key = '25560f3cf53c433c9807c60595b373a6'

    newsapi = NewsApiClient(api_key=api_key)

    top_headlines = newsapi.get_top_headlines(sources="bbc-news")
    all_articles = newsapi.get_everything(sources="bbc-news")

    t_articles = top_headlines['articles']
    a_articles = all_articles['articles']

    news = []
    desc = []
    img = []
    p_date = []
    url = []

    for i in range(len(t_articles)):

        main_article = t_articles[i]

        news.append(main_article['title'])
        desc.append(main_article['description'])
        img.append(main_article['urlToImage'])
        p_date.append(main_article['publishedAt'])
        url.append(main_article['url'])

    contents = zip(news, desc, img, p_date, url)
```

```
news_all = []
```

```
desc_all = []
```

```
img_all = []
```

```
p_date_all = []
```

```
url_all = []
```

```
for j in range(len(a_articles)):
```

```
    main_all_articles = a_articles[j]
```

```
    news_all.append(main_all_articles['title'])
```

```
    desc_all.append(main_all_articles['description'])
```

```
    img_all.append(main_all_articles['urlToImage'])
```

```
    p_date_all.append(main_all_articles['publishedAt'])
```

```
    url_all.append(main_article['url'])
```

```
all = zip(news_all, desc_all, img_all, p_date_all, url_all)
```

```
return render_template('home.html', contents=contents, all=all)
```

```
@app.route('/weather', methods=['GET', 'POST'])
```

```
def weather():
```

```
    if request.method == 'POST':
```

```
        new_city = request.form.get('city')
```

```
        if new_city:
```

```
            new_city_obj = City(name=new_city)
```

```
            db.session.add(new_city_obj)
```

```
db.session.commit()
```

```
cities = City.query.all()
```

```
url =  
'http://api.openweathermap.org/data/2.5/weather?q={}&units=imperial&appid=2a78921b9bffcab5e47  
1564c6a553385'
```

```
weather_data = []
```

```
for city in cities:
```

```
    r = requests.get(url.format(city.name)).json()
```

```
    weather = {  
        'city': city.name,  
        'temperature': r['main']['temp'],  
        'description': r['weather'][0]['description'],  
        'icon': r['weather'][0]['icon'],  
    }
```

```
    weather_data.append(weather)
```

```
return render_template('weather.html', weather_data=weather_data)
```

```
@app.route('/logout')
```

```
def logout():
```

```
    session.clear()
```

```
return redirect(url_for("index"))
```

```
if __name__ == '__main__':
```

```
    app.run(debug=True)
```

