**SOURCE CODE**

**User side views.py**

from django.shortcuts import render

from django.conf import settings

from django.http import HttpResponse

from django.contrib import messages

from .forms import UserRegistrationForm

from .models import UserRegistrationModel

import pandas as pd

import numpy as np

# Create your views here.

def UserRegisterActions(request):

if request.method == 'POST':

form = UserRegistrationForm(request.POST)

if form.is\_valid():

print('Data is Valid')

form.save()

messages.success(request, 'You have been successfully registered')

form = UserRegistrationForm()

return render(request, 'UserRegistrations.html', {'form': form})

else:

messages.success(request, 'Email or Mobile Already Existed')

print("Invalid form")

else:

form = UserRegistrationForm()

return render(request, 'UserRegistrations.html', {'form': form})

def UserLoginCheck(request):

if request.method =='POST':

loginid=request.POST.get('loginid')

pswd=request.POST.get('pswd')

print("Login ID = ", loginid, ' Password = ', pswd)

try:

check = UserRegistrationModel.objects.get(

loginid=loginid, password=pswd)

status = check.status

print('Status is = ', status)

if status == "activated":

request.session['id'] = check.id

request.session['loggeduser'] = check.name

request.session['loginid'] = loginid

request.session['email'] = check.email

print("User id At", check.id, status)

return render(request, 'users/userhome.html', {})

else:

messages.success(request, 'Your Account Not at activated')

return render(request, 'userlogin.html')

except Exception as e:

print('Exception is ', str(e))

pass

messages.success(request, 'Invalid Login id and password')

return render(request, 'userlogin.html', {})

def UserHome(request):

return render(request, 'users/userhome.html', {})

def viewData(request):

import pandas as pd

from django.conf import settings

import os

path=os.path.join(settings.MEDIA\_ROOT,'AAPL.csv')

df=pd.read\_csv(path)

df=df.to\_html

path = os.path.join(settings.MEDIA\_ROOT,'IBM.csv')

auto\_df = pd .read\_csv(path)

auto\_df = auto\_df.to\_html

return render(request, 'users/userviewdata.html', {'data': df, "auto":auto\_df})

def viewData1(request):

import pandas as pd

from django.conf import settings

import os

path=os.path.join(settings.MEDIA\_ROOT,'BTC-Daily.csv')

df=pd.read\_csv(path)

df=df.to\_html

path = os.path.join(settings.MEDIA\_ROOT,'oil.csv')

auto\_df = pd .read\_csv(path)

auto\_df = auto\_df.to\_html

return render(request, 'users/userviewdata.html', {'data': df, "auto":auto\_df})

def EdaAnalysis(request):

return render(request, "users/eda\_images.html", {})

def AAPLML(request):

from .algorithms import AlgorithmUtility

accuracy, recall, f1score = AlgorithmUtility.calc\_random\_forest()

accuracy1, recall1, f1score1 = AlgorithmUtility.calc\_naive\_bayes\_classifier()

print("====",accuracy)

print("====", accuracy1)

return render(request, 'users/AAPL.html',

{'accuracy': accuracy, "recall": recall, "f1score": f1score,'accuracy1': accuracy1, "recall1": recall1, "f1score1": f1score1})

def OilML(request):

from .algorithms import AlgorithmUtility1

accuracy, recall, f1score = AlgorithmUtility1.calc\_random\_forest()

accuracy1, f1score1 = AlgorithmUtility1.calc\_naive\_bayes\_classifier()

print("====", accuracy)

print("====", accuracy1)

return render(request, 'users/Oil.html',

{'accuracy': accuracy,"recall": recall, "f1score": f1score,'accuracy1': accuracy1, "f1score1": f1score1})

def ANNML(request):

import pandas as pd

from sklearn.model\_selection import train\_test\_split

from django.conf import settings

from sklearn.metrics import precision\_score

from sklearn.metrics import recall\_score

from sklearn.metrics import f1\_score

from sklearn.metrics import accuracy\_score

from sklearn.metrics import confusion\_matrix

path = settings.MEDIA\_ROOT + "//" + "IBM.csv"

df = pd.read\_csv(path)

X = df.iloc[:, :-1].values # indipendent variable

y = df.iloc[:, -1].values # Dependent variable

X\_train, X\_test, y\_train, y\_test = train\_test\_split(X, y, train\_size=0.2, random\_state=0)

# Visualize training history

from tensorflow.keras.models import Sequential

from tensorflow.keras.layers import Dense

import matplotlib.pyplot as plt

import numpy as np

# load pima indians dataset

# dataset = np.loadtxt("pima-indians-diabetes.csv", delimiter=",")

# split into input (X) and output (Y) variables

# X = dataset[:, 0:8]

# Y = dataset[:, 8]

# create model

model = Sequential()

model.add(Dense(1, input\_dim=5, activation='relu'))

model.add(Dense(1, activation='relu'))

model.add(Dense(1, activation='sigmoid'))

# Compile model

model.compile(loss='binary\_crossentropy', optimizer='adam', metrics=['accuracy'])

# Fit the model

history=model.fit(X\_train, y\_train, epochs=100, validation\_data=(X\_test, y\_test))

# list all data in history

print(history.history.keys())

# summarize history for accuracy

plt.plot(history.history['accuracy'])

plt.plot(history.history['val\_accuracy'])

plt.title('model accuracy')

plt.ylabel('accuracy')

plt.xlabel('epoch')

plt.legend(['train', 'test'], loc='upper left')

plt.show()

# summarize history for loss

plt.plot(history.history['loss'])

plt.plot(history.history['val\_loss'])

plt.title('model loss')

plt.ylabel('loss')

plt.xlabel('epoch')

plt.legend(['train', 'test'], loc='upper left')

plt.legend()

return render(request,'users/ann.html',{})

**Base.html:**

{% load static %}

<!DOCTYPE html>

<html>

<head>

<title>Securities and Cryptocurrency</title>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1">

<link rel="stylesheet" href="https://www.w3schools.com/w3css/4/w3.css">

<style>

body {font-family: "Times New Roman", Georgia, Serif;}

h1, h2, h3, h4, h5, h6 {

font-family: "Playfair Display";

letter-spacing: 6px;

}

</style>

</head>

<body>

<!-- Navbar (sit on top) -->

<div class="w3-top">

<div class="w3-bar w3-green w3-padding w3-card" style="letter-spacing:4px;">

<a href="#home" class="w3-bar-item w3-button">Securities and Cryptocurrency</a>

<!-- Right-sided navbar links. Hide them on small screens -->

<div class="w3-right w3-hide-small">

<ul>

<a href="{% url 'index' %}" class="w3-bar-item w3-button">Home</a>

<a href="{% url 'AdminLogin' %}"class="w3-bar-item w3-button">Admin</a>

<a href="{% url 'UserLogin' %}" class="w3-bar-item w3-button">User </a>

<a href="{% url 'UserRegister' %}" class="w3-bar-item w3-button">Registration</a>

</ul>

</div>

</div>

</div>

<!-- Header -->

<header class="w3-display-container w3-content w3-wide" style="max-width:5000px;min-width:1500px" id="home">

<img class="w3-image" src="/w3images/hamburger.jpg" alt="Hamburger Catering" width="1600" height="800">

<div class="w3-display-bottomleft w3-padding-large w3-opacity">

<h1 class="w3-xxlarge">Le Catering</h1>

</div>

</header>

<!-- Page content -->

<div class="w3-content" style="max-width:2000px">

<!-- About Section -->

<div class="w3-row w3-padding-64" id="about">

<div class="w3-col m6 w3-padding-large w3-hide-small">

</div>

</div>

</div>

<!-- Menu Section -->

{%block contents%}

{%endblock%}

<!-- Footer -->

<div>

<footer class="w3-center w3-light-gray w3-padding-32">

<p>Powered by: <a href="https://www.w3schools.com/w3css/default.asp" title="Ameeruddin" target="\_blank" class="w3-hover-text-green">Ameeruddin</a></p>

</footer>

</div>

</body>

</html>

**Index.html:**

{%extends 'base.html'%}

{% load static %}

{%block contents%}

<head>

<link rel="stylesheet" href="assets/css">

</head>

<div class="page-header">

<div class= "container">

<div class="row">

<div class="col-12">

<h3 align="center" style="color:rgb(233, 25, 25)">securities and cryptocurrency</h3>

<p>

</p>

</div>

<div class="col-12">

</div>

</div>

</div>

</div>

{%endblock%}

**Admin side admin\_base.html:**

{% load static %}

<!DOCTYPE html>

<html>

<head>

<title>Securities and Cryptocurrency</title>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1">

<link rel="stylesheet" href="https://www.w3schools.com/w3css/4/w3.css">

<style>

body {font-family: "Times New Roman", Georgia, Serif;}

h1, h2, h3, h4, h5, h6 {

font-family: "Playfair Display";

letter-spacing: 6px;

}

</style>

</head>

<body>

<!-- Navbar (sit on top) -->

<div class="w3-top">

<div class="w3-bar w3-green w3-padding w3-card" style="letter-spacing:4px;">

<a href="#home" class="w3-bar-item w3-button">Securities and Cryptocurrency</a>

<!-- Right-sided navbar links. Hide them on small screens -->

<div class="w3-right w3-hide-small">

<ul>

<a href="{% url 'AdminHome' %}"class="w3-bar-item w3-button">Home</a>

<a href="{% url 'RegisterUsersView' %}" class="w3-bar-item w3-button">User Details</a>

<a href="{% url 'admin\_forecasting' %}" class="w3-bar-item w3-button">forecasting</a>

<a href="{% url 'index' %}" class="w3-bar-item w3-button">Logout</a>

</ul>

</div>

</div>

</div>

<!-- Header -->

<header class="w3-display-container w3-content w3-wide" style="max-width:5000px;min-width:1500px" id="home">

<img class="w3-image" src="/w3images/hamburger.jpg" alt="Hamburger Catering" width="1600" height="800">

<div class="w3-display-bottomleft w3-padding-large w3-opacity">

<h1 class="w3-xxlarge">Le Catering</h1>

</div>

</header>

<!-- Page content -->

<div class="w3-content" style="max-width:2000px">

<!-- About Section -->

<div class="w3-row w3-padding-64" id="about">

<div class="w3-col m6 w3-padding-large w3-hide-small">

</div>

</div>

</div>

<!-- Menu Section -->

{%block contents%}

{%endblock%}

<!-- Footer -->

<div>

<footer class="w3-center w3-light-gray w3-padding-32">

<p>Powered by: <a href="https://www.w3schools.com/w3css/default.asp" title="Ameeruddin" target="\_blank" class="w3-hover-text-green">Ameeruddin</a></p>

</footer>

</div>

</body>

</html>

**Admin side view\_registered\_users.html:**

{% extends 'admins/adminbase.html'%}

{%block contents%}

<section id="intro">

<div class="intro-text">

<p><h2 align="center" style="font-weight:bold;">View RegisterUser Details</h2></p>

<table align="center" class="table table-bordered bg-light text-dark" border="1" bgcolor="pink">

<thead style="color:brown;">

<tr>

<th>S.No</th>

<th>Name</th>

<th>Login ID</th>

<th>Mobile</th>

<th>Email</th>

<th>password</th>

<th>Locality</th>

<th>Status</th>

<th>Activate</th>

</tr>

</thead>

<tbody>

{% for i in data %}

<tr style="color: Black">

<td>{{forloop.counter}}</td>

<td>{{i.name}}</td>

<td>{{i.loginid}}</td>

<td>{{i.mobile}}</td>

<td>{{i.email}}</td>

<td>{{i.password}}</td>

<td>{{i.locality}}</td>

<td>{{i.status}}</td>

{% if i.status == 'waiting' %}

<td><a class="btn-link" href="/ActivaUsers/?uid={{ i.id }}"

style="color:DARKBLUE">Activate</a></td>

{% else %}

<td> Activated</td>

{% endif %}

</tr>

{% endfor %}

</tbody>

</table>

</div>

</section>

{%endblock%}