**Source Code**

**User side views.py**

# Create your views here.

from django.shortcuts import render, HttpResponse

from django.contrib import messages

from .forms import UserRegistrationForm

from .models import UserRegistrationModel

from django.conf import settings

import os

import pandas as pd

# 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/UserHomePage.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/UserHomePage.html', {})

def viewDataSet(request):

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

df = pd.read\_csv(path, encoding="ISO-8859-1")

df = df[['source', 'user\_name', 'FinalLabel', 'text', 'user\_followers\_count']]

# print(df.head())

df = df.to\_html(index=None)

return render(request, 'users/viewTweetDataset.html', {'data': df})

def userMachineLearning(request):

from .utility import mlprocessings

cr\_lg = mlprocessings.start\_logisticRegression()

cr\_nb = mlprocessings.start\_naivebayes()

cr\_svm = mlprocessings.start\_svm()

cr\_rnn = mlprocessings.start\_recurrentNeurals()

return render(request, 'users/MlResults.html', {'cr\_lg': cr\_lg, 'cr\_nb': cr\_nb, 'cr\_svm': cr\_svm, 'cr\_rnn': cr\_rnn})

def start\_test\_predictions(request):

if request.method == 'POST':

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

import os

import pandas as pd

from django.conf import settings

from sklearn.feature\_extraction.text import CountVectorizer

import pickle

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

path1 = os.path.join(settings.MEDIA\_ROOT, 'FinalDataSet.csv')

path = os.path.join(settings.MEDIA\_ROOT, 'fakenews.alex')

df = pd.read\_csv(path1, encoding="ISO-8859-1")

df.shape

df['FinalLabel'] = df.FinalLabel.map({'REAL': 1, 'FAKE': 0})

X\_train, X\_test, y\_train, y\_test = train\_test\_split(df['text'],

df['FinalLabel'],

random\_state=42)

# Instantiate the CountVectorizer method

count\_vector = CountVectorizer(stop\_words='english', lowercase=True)

training\_data = count\_vector.fit\_transform(X\_train)

# Transform testing data and return the matrix. Note we are not fitting the testing data into the CountVectorizer()

testing\_data = count\_vector.transform(X\_test)

test = count\_vector.transform([tweets])

model = pickle.load(open(path, 'rb'))

pred = model.predict(test)

if pred[0] == 1:

msg = 'REAL'

else:

msg = 'FAKE'

print("===>", pred)

return render(request, 'users/test\_pred.html', {'tweet': tweets, 'msg': msg})

else:

return render(request, 'users/test\_pred.html', {})

**Base.html:**

{% load static %}

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

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

<title>fake news</title>

<meta name="description" content="Free Bootstrap Theme by BootstrapMade.com">

<meta name="keywords" content="free website templates, free bootstrap themes, free template, free bootstrap, free website template">

<link rel="stylesheet" type="text/css" href="https://fonts.googleapis.com/css?family=Open+Sans|Raleway|Candal">

<link rel="stylesheet" type="text/css" href="{% static 'css/font-awesome.min.css' %}">

<link rel="stylesheet" type="text/css" href="{% static 'css/bootstrap.min.css' %}">

<link rel="stylesheet" type="text/css" href="{% static 'css/style.css' %}">

</head>

<body id="myPage" data-spy="scroll" data-target=".navbar" data-offset="60">

<section id="banner" class="banner">

<div class="bg-color">

<nav class="navbar navbar-default navbar-fixed-top">

<div class="container">

<div class="col-md-12">

<div class="navbar-header">

<button type="button" class="navbar-toggle" data-toggle="collapse" data-target="#myNavbar">

<span class="icon-bar"></span>

<span class="icon-bar"></span>

<span class="icon-bar"></span>

</button>

</div>

<div class="collapse navbar-collapse navbar-right" id="myNavbar">

<ul class="nav navbar-nav">

<li class=""><a href="{% url 'index' %}">Home</a></li>

<li class=""><a href="{% url 'UserLogin' %}">User</a></li>

<li class=""><a href="{% url 'AdminLogin' %}">Admin</a></li>

<li class=""><a href="{% url 'UserRegister' %}">Register</a></li>

</ul>

</div>

</div>

</div>

</nav>

<div class="container">

<div class="row">

<div class="banner-info">

<div class="banner-logo text-center">

</div>

<div class="banner-text text-center">

<h1 class="white">FAKE news</h1>

{% block contents %}

<!-- <h3 style="color:white"> helloo</h3> -->

{% endblock %}

<!-- <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod <br>tempor incididunt ut labore et dolore magna aliqua.</p>

<a href="#contact" class="btn btn-appoint">Make an Appointment.</a> -->

</div>

<div class="overlay-detail text-center">

<a href="#service"><i class="fa fa-angle-down"></i></a>

</div>

</div>

</div>

</div>

</div>

</section>

<footer id="footer">

<div class="footer-line">

<div class="container">

<div class="row">

<div class="col-md-12 text-center">

© Copyright Alex Corporation. All Rights Reserved

<div class="credits">

<!--

All the links in the footer should remain intact.

You can delete the links only if you purchased the pro version.

Licensing information: https://bootstrapmade.com/license/

Purchase the pro version with working PHP/AJAX contact form: https://bootstrapmade.com/buy/?theme=Medilab

-->

<!-- Designed by <a href="https://bootstrapmade.com/">BootstrapMade.com</a> -->

</div>

</div>

</div>

</div>

</div>

</footer>

<!-- /footer -->

<script src="{% static 'js/jquery.min.js' %}"></script>

<script src="{% static 'js/jquery.easing.min.js' %}"></script>

<script src="{% static 'js/bootstrap.min.js' %}"></script>

<script src="{% static 'js/custom.js' %}"></script>

<script src="{% static 'contactform/contactform.js' %}"></script>

</body>

</html>

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

{% load static %}

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

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

<title>FAKE NEWS</title>

<meta name="description" content="Free Bootstrap Theme by BootstrapMade.com">

<meta name="keywords" content="free website templates, free bootstrap themes, free template, free bootstrap, free website template">

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<span class="icon-bar"></span>

<span class="icon-bar"></span>

</button>

<h1 class="white">MACHINE LEARNING IN FAKE NEWS</h1>

</div>

<div class="collapse navbar-collapse navbar-right" id="myNavbar">

<ul class="nav navbar-nav">

<li class=""><a href="{% url 'AdminHome' %}">Home</a></li>

<li class=""><a href="{% url 'RegisterUsersView' %}">User Details</a></li>

<li class=""><a href="{% url 'adminResults' %}">Results</a></li>

<li class=""><a href="{% url 'index' %}">Logout</a></li>

</ul>

</div>

</div>

</div>

</nav>

<div class="container">

<div class="row">

<div class="banner-info">

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</div>

<div class="banner-text text-center">

{% block contents %}

{% endblock %}

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© Copyright Alex Corporation. All Rights Reserved

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</div>

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</div>

</div>

</footer>

<script src="{% static 'js/jquery.min.js' %}"></script>

<script src="{% static 'js/jquery.easing.min.js' %}"></script>

<script src="{% static 'js/bootstrap.min.js' %}"></script>

<script src="{% static 'js/custom.js' %}"></script>

<script src="{% static 'contactform/contactform.js' %}"></script>

</body>

</html>

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

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

{% block contents %}

<section id="intro">

<div class="intro-text">

<p>

<h3 align="center" style="color:white;">View RegisterUser Details</h3>

</p>

<br>

<table class="table table-bordered bg-light text-dark">

<thead>

<tr style="color:red;font-weight:bold;">

<th>S.No</th>

<th>Name</th>

<th>Login ID</th>

<th>Mobile</th>

<th>Email</th>

<th>Locality</th>

<th>Status</th>

<th>Activate</th>

</tr>

</thead>

<tbody>

{% for i in data %}

<tr style="color: white">

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

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

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

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

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

**Index.html:**

{% extends 'base.html' %}

{% load static %}

{% block contents %}

<h3 style="color:white">Role of machine learning in fakenews</h3>

{% endblock %}