**Index.html**

{% load static %}

<!DOCTYPE html>

<html lang="en">

<head>

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <meta charset="UTF-8">

    <!DOCTYPE html>

    <html lang="en">

    <head>

        <meta name="viewport" content="width=device-width, initial-scale=1.0">

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        <meta name="description" content="This page is a Movie Recommendation System created by Santhosh. Search for movies using the autocomplete input field, and get great movie suggestions.">

        <meta name="keywords" content="Santhosh, Portfolio, Hitchhikers Guide to Deep Learning, Computer Vision Engineer, Trellissoft, Research, Santhosh, linkedin, github, Inbox , inbox ,   twitter, inbox  twitter, medium, inbox  medium, Movie Recommendation System,

*<*meta name="twitter:title*"* content="Movie Recommendation System">

        <meta property="og:title" content="Movie Recommendation System">

        <meta property="og:description" content="This page is a Movie Recommendation System created by Santhosh. Search for movies using the autocomplete input field, and get great movie suggestions.">

        <link rel="shortcut icon" href="{% static 'logo.png' %}">

        <title>Movie Recommendation System</title>

        <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/@tabler/icons@latest/iconfont/tabler-icons.min.css">

        <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/normalize/5.0.0/normalize.min.css">

        <link rel="Stylesheet" href="https://code.jquery.com/ui/1.10.2/themes/smoothness/jquery-ui.css">

        <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css">

        <link rel='stylesheet' href='https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.5.0/css/bootstrap.min.css'>

        <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.9.1/jquery.min.js"></script>

        <script src="https://code.jquery.com/ui/1.10.2/jquery-ui.js"></script>

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

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

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

    </head>

    <body>

        <div class="cursor-dot-outline"></div>

        <div class="cursor-dot"></div>

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

        <input class="menu-icon" type="checkbox" id="menu-icon" name="menu-icon" />

        <label for="menu-icon"></label>

        <video autoplay muted loop id="myVideo">

            <source src="{% static 'production ID\_4779866.mp4' %}" type="video/mp4">

        </video>

        <script>

            var vid = document.getElementById("myVideo");

            vid.playbackRate = 0.25;

        </script>

        <div class="main-container">

            <div class="two">

                <h1><span class="add-text-background">Movie</span> Recommendation System</h1>

                <p class="subheading">Check out these great movies that we recommend for you.</p>

                <form method="POST">

                    {% csrf\_token %}

                    <div class="formcontainer">

                        <input class="input-field" type="text" id="movie\_name" name="movie\_name"

                            placeholder="Start typing to see movie suggestions..." required />

                        <script>

                            $(function () {

                                var availableTags = [

                                    {% for mmm in all\_movie\_names %}

                                    "{{ mmm }}",

                                {% endfor %}

                            ];

                            $("#movie\_name").autocomplete({

                                source: availableTags,

                                minLength: 3

                            });

                        } );

                        </script>

                        <button type="submit" class="submit-button">Search</button>

                    </div>

                </form>

                <p class="message">

                    {% if input\_provided %}

                        <div>

                            {% if not movie\_found %}

                                <p class="message\_\_result">You Searched For: <b>{{ input\_movie\_name }}</b></p>

                                {% if not recomendation\_found %}

                                    <p class="message\_\_p1">SORRY! We can not match your movie in our database.</p>

                                    <p class="message\_\_p2">As this is a demo model, only top 2.5K movies based on IMBD are present.</p>

                                {% endif %}

                            {% endif %}

                        </div>

                    {% endif %}

                </p>

            </div>

        </div>

        <script src="https://cdnjs.cloudflare.com/ajax/libs/gsap/1.20.3/TweenMax.min.js"></script>

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                            minLength: 3

                        });

                    } );

                    </script>

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                {% if input\_provided %}

                    <div>

                        {% if not movie\_found %}

                            <p class="message\_\_result">You Searched For: <b>{{ input\_movie\_name }}</b></p>

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                            {% endif %}

                        {% endif %}

                    </div>

                {% endif %}

            </p>

        </div>

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</body>

</html>

**Result.html**

{% load static %}

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    <meta property="og:description" content="This page is a Movie Recommendation System created by Santhosh. Search for movies using the autocomplete input field, and get great movie suggestions.">

    <link rel="shortcut icon" href="{% static 'logo.png' %}">

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

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

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

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        <source src="{% static 'production ID\_4779866.mp4' %}" type="video/mp4">

    </video>

    <script>

        var vid = document.getElementById("myVideo");

        vid.playbackRate = 0.25;

   </script>

    <div class="title-container">

        <h3>Movies like: {{ input\_movie\_name }}</h3>

    </div>

    <div class="main-container">

        {% if recomendation\_found %}

            {% if recomendation\_found %}

                {% for each\_movie\_dictionary in recommended\_movies %}

                    <div class="card-container">

                        <h2 class="card-header"><i class="fa fa-film"></i> {{ each\_movie\_dictionary.movie\_title }}</h2>

                        <p class="card-para">Directed By: {{ each\_movie\_dictionary.movie\_director }}</p>

                        <p class="card-para">Release Date: {{ each\_movie\_dictionary.movie\_release\_date }}</p>

                        <a target="\_blank" href="{{ each\_movie\_dictionary.google\_link }}" class="card-link">Google Search <i class="fa fa-arrow-circle-o-right"></i></a>

                    </div>

                {% endfor %}

            {% endif %}

        {% endif %}

    </div>

    <script src="https://cdnjs.cloudflare.com/ajax/libs/gsap/1.20.3/TweenMax.min.js"></script>

    <script>

        function changeCss () {

                var navElement = document.querySelector(".title-container");

                this.scrollY < 100 ? navElement.style.backgroundColor = "transparent" : navElement.style.backgroundColor = "rgba(255, 255, 255, 0.85)";

            }

        window.addEventListener("scroll", changeCss , true);

    </script>

</body>

</html>

**Views.py**

from django.shortcuts import render

import pandas as pd

import pyarrow as pa

movies\_data = pd.read\_parquet("static/top\_2k\_movie\_data.parquet")

titles = movies\_data['title']

titles\_list = titles.to\_list()

def get\_recommendations(movie\_id\_from\_db,movie\_db):

try:

sim\_scores = list(enumerate(movie\_db[movie\_id\_from\_db]))

sim\_scores = sorted(sim\_scores, key=lambda x: x[1], reverse=True)

sim\_scores = sim\_scores[1:15] ## get top 15 Recommendations

movie\_indices = [i[0] for i in sim\_scores]

output = movies\_data.iloc[movie\_indices]

output.reset\_index(inplace=True, drop=True)

response = []

for i in range(len(output)):

response.append({

'movie\_title':output['title'].iloc[i],

'movie\_release\_date':output['release\_date'].iloc[i],

'movie\_director':output['main\_director'].iloc[i],

'google\_link':"https://www.google.com/search?q=" + '+'.join(output['title'].iloc[i].strip().split()) + " (" + output['release\_date'].iloc[i].split("-")[0]+")"

})

return response

except Exception as e:

print("error: ",e)

return []

def main(request):

global titles\_list, model

if request.method == 'GET':

return render(

request,

'recommender/index.html',

{

'all\_movie\_names':titles\_list,

'input\_provided':'',

'movie\_found':'',

'recomendation\_found':'',

'recommended\_movies':[],

'input\_movie\_name':''

}

)

if request.method == 'POST':

data = request.POST

movie\_name = data.get('movie\_name') ## get movie name from the frontend input field

if movie\_name in titles\_list:

idx = titles\_list.index(movie\_name)

else:

return render(

request,

'recommender/index.html',

{

'all\_movie\_names':titles\_list,

'input\_provided':'yes',

'movie\_found':'',

'recomendation\_found':'',

'recommended\_movies':[],

'input\_movie\_name':movie\_name

}

)

model = pa.parquet.read\_table('static/demo\_model.parquet').to\_pandas()

final\_recommendations = get\_recommendations(idx,model)

if final\_recommendations:

return render(

request,

'recommender/result.html',

{

'all\_movie\_names':titles\_list,

'input\_provided':'yes',

'movie\_found':'yes',

'recomendation\_found':'yes',

'recommended\_movies':final\_recommendations,

'input\_movie\_name':movie\_name

}

)

else:

return render(

request,

'recommender/index.html',

{

'all\_movie\_names':titles\_list,

'input\_provided':'yes',

'movie\_found':'',

'recomendation\_found':'',

'recommended\_movies':[],

'input\_movie\_name':movie\_name

}

)