# 220962446 – Week5 – Homework

Question) Develop a simple web page to reproduce the given Captcha. Upon match, suitable message has to be displayed. If there is a mismatch for more than 3 times, TextBox has to be disabled.  
  
Code)

**Base.html**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

    <title>Captcha Verification</title>

    <style>

        body {

            font-family: Arial, sans-serif;

            text-align: center;

            margin: 50px;

        }

        .captcha-box {

            display: inline-block;

            padding: 10px;

            background: #f2f2f2;

            font-size: 24px;

            font-weight: bold;

            letter-spacing: 2px;

            user-select: none;

        }

        .disabled {

            background: #ddd;

            cursor: not-allowed;

        }

    </style>

</head>

<body>

    {% block content %}{% endblock %}

</body>

</html>

**Captcha.html**

{% extends 'base.html' %}

{% block content %}

    <h2>Captcha Verification</h2>

    <div id="captcha">{{ captcha }}</div>

    <input type="text" id="userInput" placeholder="Enter Captcha">

    <button onclick="validateCaptcha()">Submit</button>

    <p id="message"></p>

    <script>

        function validateCaptcha() {

            fetch("{% url 'validate\_captcha' %}", {

                method: "POST",

                headers: { "Content-Type": "application/x-www-form-urlencoded", "X-CSRFToken": "{{ csrf\_token }}" },

                body: "captcha\_input=" + encodeURIComponent(document.getElementById("userInput").value)

            })

            .then(res => res.json())

            .then(data => {

                document.getElementById("message").innerText = data.message;

                if (data.status === 'disabled') document.getElementById("userInput").disabled = true;

            });

        }

    </script>

{% endblock %}

**Views.py**

import random

import string

from django.shortcuts import render

from django.http import JsonResponse

def generate\_captcha():

    return ''.join(random.choices(string.ascii\_uppercase + string.digits, k=5))

def captcha\_page(request):

    request.session['captcha'] = generate\_captcha()

    request.session['attempts'] = 0

    return render(request, 'captcha.html', {'captcha': request.session['captcha']})

def validate\_captcha(request):

    if request.method == "POST":

        user\_input = request.POST.get('captcha\_input', '').strip()

        if request.session.get('attempts', 0) >= 3:

            return JsonResponse({'status': 'disabled', 'message': ' Too many failed attempts.'})

        if user\_input == request.session.get('captcha', ''):

            return JsonResponse({'status': 'success', 'message': ' Captcha Matched!'})

        request.session['attempts'] += 1

        return JsonResponse({'status': 'error', 'message': f' Incorrect! {3 - request.session["attempts"]} attempts left.'})

**Output**

**A screenshot of a computer

AI-generated content may be incorrect.**