

Team ID	PNT2022TMID51786
Project Name	A Novel Method for Handwritten Digit Recognition System

CREATE HTML FILE

FORM PAGE(HTML):

<head>

Required meta tags

```
<link rel="stylesheet" type="text/css" href="{ { url_for('static',filename='css/style.css') } } ">
```

```
<!-- Bootstrap CSS -->
```

```
<link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.3.1/dist/css/bootstrap.min.css" integrity="sha384-
ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T"
crossorigin="anonymous">
```

```
<title>Handwritten Digit Recognition</title>
```

```

```

```
<style>
```

```
*{
```

```
margin: 0;
```

```
padding: 0;
```

```
box-sizing: border-box;
```

```
font-family: 'Poppins',sans-serif;
```

```
}

body{

    height: 100vh;

    display: flex;

    justify-content: center;

    align-items: center;

    padding: 10px;

    background: linear-gradient(135deg, #71b7e6, #9b59b6);

}

.container{

    max-width: 700px;

    margin-left: 0%;

    width: 100%;

    background-color: #fff;

    padding: 25px 30px;

    border-radius: 5px;

    box-shadow: 0 5px 10px rgba(0,0,0,0.15);

}

.container .title{

    font-size: 25px;

    font-weight: 500;

    position: relative;

}

.container .title::before{

    content: "";

    position: absolute;
```

```
left: 0;

bottom: 0;

height: 3px;

width: 30px;

border-radius: 5px;

background: linear-gradient(135deg, #71b7e6, #9b59b6);
}
```

```
.content form .user-details{

display:inline;

flex-wrap: wrap;

justify-content: space-between;

margin: 20px 0 12px 0;
}
```

```
        form .input-box span.details{

display: block;

font-weight: 500;

margin-bottom: 5px;
}
```

```
.user-details .input-box input{

height: 45px;

width: 100%;

outline: none;

font-size: 16px;

border-radius: 5px;

padding-left: 15px;

border: 1px solid #ccc;
```

```
border-bottom-width: 2px;

transition: all 0.3s ease;
}

.user-details .input-box input:focus,
.user-details .input-box input:valid{

border-color: #9b59b6;
}

form .gender-details .gender-title{

font-size: 20px;

font-weight: 500;
}

form .category{

display: flex;

width: 80%;

margin: 14px 0 ;

justify-content: space-between;
}

form .category label{

display: flex;

align-items: center;

cursor: pointer;
}

form input[type="radio"]{

display: none;
}

form .button{
```

```
height: 45px;

margin: 35px 0
}

form .button input{

height: 100%;

width: 100%;

border-radius: 5px;

border: none;

color: #fff;

font-size: 18px;

font-weight: 500;

letter-spacing: 1px;

cursor: pointer;

transition: all 0.3s ease;

background: linear-gradient(135deg, #71b7e6, #9b59b6);

}

form .button input:hover{

/* transform: scale(0.99); */

background: linear-gradient(-135deg, #71b7e6, #9b59b6);

}

@media(max-width: 584px){

.container{

max-width: 100%;

}

form .user-details .input-box{

margin-bottom: 15px;
```

```
        width: 100%;

    }

    form .category{

        width: 100%;

    }

    .content form .user-details{

        max-height: 300px;

        overflow-y: scroll;

    }

    .user-details::-webkit-scrollbar{

        width: 5px;

    }

}

@media(max-width: 459px){

    .container .content .category{

        flex-direction: column;

    }

}

</style>

</head>

<body class="bg-nav">

    <div class="container">

        <div class="title">Registration</div><br>

        <div class="content">

            <form method="post" action="/add_user">

                <div class="user-details">
```

```
<div class="input-box">

  <label>Username</label><br>

  <input type = "text" class="form-control" name="username" placeholder="Enter your name"
required>

</div>

<div class="input-box">

  <label>Email</label><br>

  <input type = "email" class="form-control" name="email" placeholder="Enter your email"
required>

</div>

<div class="input-box">

  <label>Password</label><br>

  <input type="password" class="form-control" name="password" placeholder="Enter your
password" required>

</div>

<div class="input-box">

  <label>Phone Number</label><br>

  <input type = "number" class="form-control" name="phone" placeholder="Enter your
number" required>

</div>

<div class="input-box">

  <label>Gender</label><br>

  <input type = "text" class="form-control" placeholder="Enter Male/Female/Others"
name="gender" required>

</div>

<div class="button">

  <input type="submit" class="btn btn-primary btn-block btn-lg" value="Register">
```

```
        </div>

    </div>

    <p style="text-align:center;">Already have an Account? <a href="/login"
class="reg">Login</a></h4>

    </form>

</div>

</div>

</body>
```

INDEX PAGE(HTML):

```
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

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

    <title>User Account Dropdown Menu Using Html CSS & Vanilla Javascript</title>

    <link rel="stylesheet" href="style.css">

    <link
href="https://fonts.googleapis.com/css2?family=Poppins:wght@200;300;400;600&display=swap"
rel="stylesheet">

    <link
href="https://fonts.googleapis.com/css?family=Material+Icons|Material+Icons+Outlined|Material+Ico
ns+Two+Tone|Material+Icons+Round|Material+Icons+Sharp" rel="stylesheet">

    <style>

        *{

            font-family: "poppins", sans-serif;

            margin: 0;
```



```
padding: 0;  
}
```

```
.icons-size{  
    color: white;  
    font-size: 14px;  
}
```

```
.text{  
    position: fixed;  
    right: 950px;  
    top:22px  
}
```

```
.action{  
    position: fixed;  
    right: 1450px;  
    top:20px  
}
```

```
.action .profile{  
    border-radius: 50%;  
    cursor: pointer;  
    height: 60px;  
    overflow: hidden;  
    position: relative;  
    width: 60px;  
}
```

```
.action .profile img{
```

```
    width: 100%;
```

```
    top:0;
```

```
    position: absolute;
```

```
    object-fit: cover;
```

```
    left: 0;
```

```
    height: 100%;
```

```
}
```

```
.action .menu{
```

```
    background-color:#FFF;
```

```
    box-sizing:0 5px 25px rgba(0,0,0,0.1);
```

```
    border-radius: 15px;
```

```
    padding: 10px 20px;
```

```
    position: absolute;
```

```
    left: -10px;
```

```
    width: 200px;
```

```
    transition: 0.5s;
```

```
    top: 120px;
```

```
    visibility: hidden;
```

```
    opacity: 0;
```

```
}
```

```
.action .menu.active{
```

```
    opacity: 1;
```

```
    top: 80px;
```

```
    visibility: visible;
```

```
}
```

```
.action .menu::before{  
  
    background-color:#fff;  
  
    content: " ";  
  
    height: 20px;  
  
    position: absolute;  
  
    right: 190px;  
  
    transform:rotate(45deg);  
  
    top:-5px;  
  
    width: 20px;  
  
}
```

```
.action .menu h3{  
  
    color: #555;  
  
    font-size: 16px;  
  
    font-weight: 600;  
  
    line-height: 1.3em;  
  
    padding: 20px 0px;  
  
    text-align: left;  
  
    width: 100%;  
  
}
```

```
.action .menu h3 div{  
  
    color: #818181;  
  
    font-size: 14px;  
  
    font-weight: 400;  
  
}
```

```
.action .menu ul li{  
  
    align-items: center;
```

```
border-top:1px solid rgba(0,0,0,0.05);

display: flex;

justify-content: left;

list-style: none;

padding: 10px 0px;

}
```

```
.action .menu ul li img{

    max-width: 20px;

    margin-right: 10px;

    opacity: 0.5;

    transition:0.5s

}
```

```
.action .menu ul li a{

    display: inline-block;

    color: #555;

    font-size: 14px;

    font-weight: 600;

    padding-left: 15px;

    text-decoration: none;

    text-transform: uppercase;

    transition: 0.5s;

}
```

```
.action .menu ul li:hover img{

    opacity: 1;

}
```

```
.action .menu ul li:hover a{
```

```
        color:#ff00ff;
    }

    .msg{
        position: fixed;
        right: 950px;
        left:0px;
        top:250px
    }

    .image {
        background-image: url("{ { url_for('static', filename='images/index2.jpg') } }");
        background-color: #cccccc;
        height: 753px;
        width: 1536px;
        background-position: center;
        background-repeat: no-repeat;
        background-size: cover;
    }

</style>

</head>

<body>

    <div class="image">

        <div class="action">

            <div class="profile" onclick="menuToggle();">

                

                </div>

            <div class="menu">
```

<h3>

User Account

</h3>

person

Sign-up

mode

Sign-in

</div>

</div>

<div class="text">

<h1 style="color: white;">Handwritten digit Recognisor</h1>

</div>

<div class="msg">

<h1 style="color: white;font-size: 50px;">

<pre>

Numbers

Rule

The

Universe

</pre>

```
        </h1>

    </div>

</div>

<script>

    function menuToggle(){

        const toggleMenu = document.querySelector('.menu');

        toggleMenu.classList.toggle('active')

    }

</script>

</body>
```

LOGIN PAGE(HTML):

```
<!doctype html>

<html lang="en">

    <head>

        <!-- Required meta tags -->

        <meta charset="utf-8">

        <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

        <meta http-equiv="X-UA-Compatible" content="IE=edge">

        <link rel="stylesheet" type="text/css" href="{ { url_for('static',filename='css/style.css')} }">

        <!-- Bootstrap CSS -->

        <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.3.1/dist/css/bootstrap.min.css" integrity="sha384-
ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T"
crossorigin="anonymous">

        <link
href="https://fonts.googleapis.com/css2?family=Poppins:wght@200;300;400;600&display=swap"
rel="stylesheet">
```

```
<link
href="https://fonts.googleapis.com/css?family=Material+Icons|Material+Icons+Outlined|Material+Ico
ns+Two+Tone|Material+Icons+Round|Material+Icons+Sharp" rel="stylesheet">
```

```
<title>Handwritten Digit Recognition</title>
```

```
<style>
```

```
.image {
```

```
background-image: url("{ url_for('static', filename='images/loginimg2.jpg') }");
```

```
background-color: #cccccc;
```

```
height: 753px;
```

```
background-position: center;
```

```
background-repeat: no-repeat;
```

```
background-size: cover;
```

```
position: relative;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body class="bg-nav">
```

```
<div class="image">
```

```
<div id="content" >
```

```
<div class="container">
```

```
<br><br>
```

```
<h1 style="text-align:center;">Sign In</h1>
```

```
<div class="row">
```

```
<div class="col-md-6" style="margin-left: 300px;">
```

```
<div class="card">
```

```
<div class="card-body" style="border:2px solid black">
```



```

<form class="form" method="post" action="/login_validation">

  <label>Email</label><br>

  <input type="email" class="form-control" name="email"><br>

  <label>Password</label><br>

  <input type="password" class="form-control" name="password"><br><br>

  { % if error % }

  <p style="text-align: center;"><strong>Error</strong>: { { error} }</p>

  { % endif % }

  <input type="submit" class="btn btn-primary btn-block btn-lg" value="Login">

</form>

<br>

<p style="margin-top:10px;text-align:center;">Not a member? <a
href="/register/">Create Account</a></p>

</div>

</div>

</div>

</div>

</div>

</div>

</div>

</div>

<!-- Optional JavaScript -->

<!-- jQuery first, then Popper.js, then Bootstrap JS -->

<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js" integrity="sha384-
q8i/X+965DzO0rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo"
crossorigin="anonymous"></script>

<script src="https://cdn.jsdelivr.net/npm/popper.js@1.14.7/dist/umd/popper.min.js"
integrity="sha384-

```

```
UO2eT0CpHqdSJQ6hJty5KVphtPhzWj9WO1clHTMGa3JDZwrnQq4sF86dIHNDz0W1"
crossorigin="anonymous"></script>
```

```
<script src="https://cdn.jsdelivr.net/npm/bootstrap@4.3.1/dist/js/bootstrap.min.js"
integrity="sha384-
JjSmVgyd0p3pXB1rRibZUAYoIIy6OrQ6VrjIEaFf/nJGzLxFDsf4x0xIM+B07jRM"
crossorigin="anonymous"></script>
```

```
</body>
```

```
</html>
```

HOME PAGE (HTML):

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<!-- Required meta tags -->
```

```
<meta charset="utf-8">
```

```
<meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
```

```
<link rel="stylesheet" type="text/css" href="{ { url_for('static',filename='css/style.css')} } ">
```

```
<!-- Bootstrap CSS -->
```

```
<link rel="stylesheet"
```

```
href="https://cdn.jsdelivr.net/npm/bootstrap@4.3.1/dist/css/bootstrap.min.css" integrity="sha384-
ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T"
crossorigin="anonymous">
```

```
<title>Handwritten Digit Recognition</title>
```

```
</head>
```

```
<body>
```

```
<div class="bg-nav text-light d-flex flex-column flex-md-row align-items-center p-3 px-md-4 mb-3
bg-dark border-bottom shadow-sm" >
```

```
<h5 class="my-0 mr-md-auto" style="color: black;font-weight: bolder;">Handwritten Digit
Recognisor</h5>
```

```
<a class="btn btn-outline-primary" href="/logout" style="color: whitesmoke;">Log Out</a>
```

```
</div>
```

```
<main role="main">
```

```
<section class="album py-3 text-center">
```

```
<form action="/predictpage" method="post">
```

```
<div class="button">
```

```
<input type="submit" class="btn btn-primary btn-block btn-lg" value="Proceed to recognise the  
handwritten digits">
```

```
</div>
```

```
</form>
```

```
</section>
```

```
<div class="jumbotron py-8 bg-dark">
```

```
<div class="container">
```

```
<div class="row">
```

```
<div class="card mb-2 shadow-sm">
```

```
<div class="card-body" style="border:5px solid black;">
```

```
<h3 style="text-align: center;">Description</h3><br>
```

```
<p class="card-text" style="font-size: 20px;">The handwritten digit recognition is the ability  
of computers to recognize human handwritten digits.
```

It is a hard task for the machine because handwritten digits are not perfect, vary from person-to-person and can be made with many different flavors.

The handwritten digit recognition is the solution to this problem which uses the image of a digit and recognizes the digit present in the image.</p>

```
</div>
```

```
</div><br><br>
```

```
</div>
```

```
</div>
```

</div>

</main>

<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js" integrity="sha384-q8i/X+965DzO0rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo" crossorigin="anonymous"></script>

<script src="https://cdn.jsdelivr.net/npm/popper.js@1.14.7/dist/umd/popper.min.js" integrity="sha384-UO2eT0CpHqdSJQ6hJty5KVphtPhzWj9WO1clHTMGa3JDZwrnQq4sF86dIHNDz0W1" crossorigin="anonymous"></script>

<script src="https://cdn.jsdelivr.net/npm/bootstrap@4.3.1/dist/js/bootstrap.min.js" integrity="sha384-JjSmVgyd0p3pXB1rRibZUAYoIIy6OrQ6VrjIEaFf/nJGzLxFDsf4x0xIM+B07jRM" crossorigin="anonymous"></script>

</body>

</html>

HOME PAGE (CSS):

.bg-nav

{

background: #e704c9; /* fallback for old browsers */

background: -webkit-linear-gradient(to right, #E5E5BE, #db0ac2); /* Chrome 10-25, Safari 5.1-6 */

background: linear-gradient(to right, #E5E5BE, #f104b6); /* W3C, IE 10+/ Edge, Firefox 16+, Chrome 26+, Opera 12+, Safari 7+ */

}

.row{

margin-top:80px;

}

PREDICT PAGE (HTML):

```
<!DOCTYPE html>

<html lang="en">

  <head>

    <!-- Required meta tags -->

    <meta charset="utf-8">

    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

    <link rel="stylesheet" type="text/css" href="{{
url_for('static',filename='css/style.css')}}">

    <!-- Bootstrap CSS -->

    <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.3.1/dist/css/bootstrap.min.css" integrity="sha384-
ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T"
crossorigin="anonymous">

    <title>Handwritten Digit Recognition</title>

  </head>

  <body>

    <div class="bg-nav text-light d-flex flex-column flex-md-row align-items-center p-3 px-md-4 mb-3
bg-dark border-bottom shadow-sm" >

      <h5 class="my-0 mr-md-auto" style="color: black;font-weight: bolder;">Handwritten Digit
Recognisor</h5>

      <a class="btn btn-outline-primary" href="/logout" style="color: whitesmoke;">Log Out</a>

    </div>

    <main role="main">

      <section class="album py-3 text-center">

        <form action="/predictpage" method="post">

          <div class="button">
```

```
<input type="submit" class="btn btn-primary btn-block btn-lg" value="Proceed to recognise the  
handwritten digits">
```

```
</div>
```

```
</form>
```

```
</section>
```

```
<div class="jumbotron py-8 bg-dark">
```

```
<div class="container">
```

```
<div class="row">
```

```
<div class="card mb-2 shadow-sm">
```

```
<div class="card-body" style="border:5px solid black;">
```

```
<h3 style="text-align: center;">Description</h3><br>
```

```
<p class="card-text" style="font-size: 20px;">The handwritten digit recognition is the ability  
of computers to recognize human handwritten digits.
```

It is a hard task for the machine because handwritten digits are not perfect, vary from person-to-person and can be made with many different flavors.

The handwritten digit recognition is the solution to this problem which uses the image of a digit and recognizes the digit present in the image.</p>

```
</div>
```

```
</div><br><br>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</main>
```

```
<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js" integrity="sha384-  
q8i/X+965DzO0rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo"  
crossorigin="anonymous"></script>
```

```
<script src="https://cdn.jsdelivr.net/npm/popper.js@1.14.7/dist/umd/popper.min.js"  
integrity="sha384-
```

UO2eT0CpHqdSJQ6hJty5KVphtPhzWj9WO1clHTMGa3JDZwrnQq4sF86dIHNDz0W1"
crossorigin="anonymous"></script>

<script src="https://cdn.jsdelivr.net/npm/bootstrap@4.3.1/dist/js/bootstrap.min.js"
integrity="sha384-
JjSmVgyd0p3pXB1rRibZUAYoIIy6OrQ6VrjIEaFf/nJGzLxFDsf4x0xIM+B07jRM"
crossorigin="anonymous"></script>

</body>

</html>