The Yenepoya Institute of Arts, Science, Commerce and Management

A Constituent Unit of Yenepoya (Deemed to be University)

V Semester - BCA/BSc - BCA502P Progressive Web Apps

LAB PROGRAMS

PART A

Program No: 1

Program statement: Create a webpage to manage personal details like name, class, qualifications, photo, address etc., using tables and other suitable HTML tags.

```
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="UTF-8">
 <title>Personal Details</title>
 <style>
  body {
   font-family: Arial, sans-serif;
   background-color: #f4f8fc;
   margin: 30px;
  .container {
   width: 600px;
   margin: auto;
   background-color: #ffffff;
   padding: 20px;
   border-radius: 10px;
   box-shadow: 0 0 10px rgba(0,0,0,0.1);
  }
  h2 {
   text-align: center;
```

```
color: #2c3e50;
  }
  table {
   width: 100%;
   border-collapse: collapse;
   margin-top: 20px;
  }
  td {
   padding: 10px;
   vertical-align: top;
  }
  th {
   text-align: left;
   padding: 10px;
   background-color: #e3eaf1;
   color: #333;
  img {
   width: 120px;
   height: 120px;
   border-radius: 10px;
   object-fit: cover;
  .address-box {
   background-color: #f0f0f0;
   padding: 10px;
   border-radius: 6px;
 </style>
</head>
```

```
<body>
<div class="container">
 <h2>Personal Details</h2>
 Name
  Unknown
  <img src="https://via.placeholder.com/120" alt="Profile Photo">
  Class
  Unknown
 >
  Qualification
  Unknown
 >
  Email
  unknown@example.com
 >
  Phone
  +91 XXXXXXXXXXX
 >
  Address
```

```
        <div class="address-box">
            Unknown Address,<br>
            City, State – PINCODE
            </div>

            </div>

            </div>
            </body>
            </html>
```

<u>Program statement:</u> Design a structured web page using page layout techniques that displays hyperlinks for each subject in your current semester. Each subject link should open its respective subject page in a new tab when clicked. (Note: The subject pages can be empty.)

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<title>My Semester Subjects</title>
<style>

* {

box-sizing: border-box;

margin: 0;

padding: 0;
}

body {

font-family: Arial, sans-serif;

background: #f0f4f8;
```

```
min-height: 100vh;
 display: flex;
 flex-direction: column;
}
header {
 background-color: #007BFF;
 color: white;
 padding: 20px 0;
 text-align: center;
main {
 flex: 1;
 display: flex;
justify-content: center;
 align-items: center;
 padding: 40px;
.subject-list {
 background-color: white;
 padding: 30px 50px;
 border-radius: 12px;
 box-shadow: 0 4px 8px rgba(0,0,0,0.1);
 text-align: center;
}
h2 {
 margin-bottom: 30px;
 color: #333;
}
ul {
 list-style-type: none;
```

```
padding: 0;
  }
  li {
   margin: 15px 0;
  }
  a {
   text-decoration: none;
   color: white;
   background-color: #007BFF;
   padding: 12px 24px;
   border-radius: 8px;
   font-size: 18px;
   display: inline-block;
   transition: background-color 0.3s;
  a:hover {
   background-color: #0056b3;
  }
  footer {
   background-color: #017575;
   color: white;
   text-align: center;
   padding: 15px;
  }
 </style>
</head>
<body>
 <!-- Header Section -->
 <header>
  <h1>My College Portal</h1>
```

```
</header>
 <!-- Main Content -->
 <main>
  <div class="subject-list">
   <h2>Subjects in My Current Semester</h2>
   <u1>
    <a href="pwa.html" target="_blank">Progressive Web Apps (PWA)</a>
    <a href="se.html" target=" blank">Software Engineering (SE)</a>
   </div>
 </main>
 <!-- Footer Section -->
 <footer>
  © 2025 My University | Department of Computer Science
 </footer>
</body>
</html>
pwa.html
<!DOCTYPE html>
<html>
<head>
  <title>RegNoProgram2</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      background: #fff9e6;
      color: #333;
      text-align: center;
      padding: 50px;
```

```
h1 {
    color: #ff9900;
}
</style>
</head>
<body>
    <h1>Progressive Web Apps (PWA)</h1>
    This page is under development.
</body>
</html>
```

<u>Program statement:</u> Create an HTML page using frames with two vertical sections. The left frame has links (About Us, Our Services, Contact Us), and the right frame displays the linked content. Create separate HTML pages for each link.

Index.html

```
<!DOCTYPE html>
<html>
<head>
    <title>Home Page with Frames</title>
</head>
<frameset cols="30%, 70%">
    <frame src="navi.html" name="leftFrame">
    <frame src="about.html" name="rightFrame">
    <noframes>
        <body>Your browser does not support frames.</body>
    </noframes>
</frameset>
```

```
</html>
```

<u>navi.html</u>

```
<!DOCTYPE html>
<html>
<head>
  <title>Menu</title>
  <style>
    body {
       font-family: Arial, sans-serif;
       background-color: #e3f2fd;
       padding: 20px;
    }
    a {
       display: block;
       margin: 10px 0;
       text-decoration: none;
       color: #0d47a1;
       font-weight: bold;
    }
    a:hover {
       color: #1565c0;
  </style>
</head>
<body>
  <h3>Navigation</h3>
```

```
<a href="about.html" target="rightFrame">About Us</a>
  <a href="services.html" target="rightFrame">Our Services</a>
  <a href="contact.html" target="rightFrame">Contact Us</a>
</body>
</html>
about.html
<!DOCTYPE html>
<html>
<head>
  <title>About Us</title>
  <style>
    body {
      background-color: #f9fbe7;
      font-family: Arial, sans-serif;
      padding: 20px;
      color: #33691e;
  </style>
</head>
<body>
  <h1>About Us</h1>
  Ye are a team of professionals dedicated to delivering quality web
solutions.
</body>
</html>
```

• Similarly, create service.html and contact.html

<u>Program statement:</u> Develop and demonstrate the usage of inline, internal and external style sheet using CSS

```
<!DOCTYPE html>
<html>
<head>
  <title>CSS Types Demo</title>
  <!-- Internal CSS -->
  <style>
    h1 {
      color: darkblue;
      text-align: center;
    .internal-style {
      color: green;
      font-size: 18px;
  </style>
  <link rel="stylesheet" type="text/css" href="styles.css">
</head>
<body>
  This paragraph uses inline
CSS.
  <h1>This heading uses internal CSS.</h1>
  This paragraph is styled using internal CSS.
  This paragraph is styled using external CSS.
</body>
</html>
styles.css
.external-style {
  color: blue;
```

```
font-style: italic;
  font-size: 16px;
}
Program No: 5
Program statement: Design a Horizontal Dropdown menu inside the Navigation
bar by using CSS.
<!DOCTYPE html>
<html>
<head>
<style>
. menu-btn \ \{
      background-color: #040008;
      color: white;
      padding: 16px;
      font-weight: bolder;
      font-family: "Segoe UI", Tahoma, Geneva, Verdana, sans-serif;
      border: none;
.dropdown-menu {
      position: relative;
      display: inline-block;
}
.menu-content {
      display: none;
      position: absolute;
      background-color: #3ff360;
      min-width: 110px;
      z-index: 1;
}
nav {
      background-color: #017575;
.links,
```

```
.links-hidden {
      display: inline-block;
      color: rgb(255, 255, 255);
      padding: 8px 12px;
      text-decoration: none;
      font-size: 12px;
.links-hidden {
      display: block;
.links {
      display: inline-block;
.links-hidden:hover,
.links:hover {
      transform: scale(1.2);
.dropdown-menu:hover .menu-content {
      display: block;
</style>
</head>
<body>
      <nav>
            <a class="links" href="#">Home</a>
            <a class="links" href="#">Services</a>
            <a class="links" href="#">Products</a>
            <div class="dropdown-menu">
                  <button class="menu-btn">Dropdown
                        <i class="fa fa-caret-down"></i>
                  </button>
                  <div class="menu-content">
                         <a class="links-hidden" href="#">Contact Us</a>
                        <a class="links-hidden" href="#">Visit Us</a>
```

```
<a class="links-hidden" href="#">About Us</a>
</div>
</div>
</nav>
</body>
</html>
```

<u>Program statement:</u> Write an HTML page that contains a selection box with a list of 5 countries. When the user selects a country, its capital should be printed next to the list. Add CSS to customize the properties of the font of the capital (color, bold and font size).

```
<html>
<head>
<title>capitals of countries</title>
<style>
p{
      color:red;
      font-weight:bold;
      font-size:50;
</style>
<script>
      function capital()
            var cunt=document.forms["frm1"].country.value;
            var capital=" Please select any country ";
            if( cunt=="india")
            {
                   capital="NEW DELHI";
```

```
}
           if( cunt=="china")
                 capital="BEIJING";
           if( cunt=="pakistan")
            {
                 capital="ISLAMABAD";
           if( cunt=="bangladesh")
                 capital="DHAKA";
           if( cunt=="japan")
                 capital="TOKYO";
           if( cunt=="select")
                 capital="Please select any country";
           document.getElementById("capt").innerHTML=capital;\\
</script>
</head>
<body>
<form name="frm1">
```

```
<br/>br/>
<center>
Select a Country: <select name="country" onchange="capital()">
<option value="select">--SELECT--</option>
<option value="india">INDIA</option>
<option value="china">CHINA</option>
<option value="pakistan">PAKISTAN</option>
<option value="bangladesh">BANGLADESH</option>
<option value="japan">JAPAN</option>
</select>
<br/>>
<br/>>
<fort color="green" size="6">Capital is :</fort> 
</center>
</form>
</body>
</html>
```