SVKM’s NMIMS

MPSTME

Computer Engineering Department (MCA SEM I)

Web Programming

Lab Manual

**Experiment No. 07**

**PART B**

**B.1 Software Code written by student:**

**1.**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

    <title>Document</title>

    <link rel="stylesheet" href="bootstrap.min.css">

    <script src="bootstrap.bundle.min.js"></script>

</head>

<body>

    <div class="container" id="cont"></div>

        <div class="jumbotron">

            <h1>Welcome to My Online Tutoring Classes!</h1>

            <p>Learn HTML, CSS, and JavaScript from scratch in an interactive and engaging way. Join us to enhance your coding skills and build amazing projects.</p>

            <a class="btn btn-primary" href="#" role="button">Enroll Now</a>

        </div>

        <div class="row">

            <div class="col-md-4">

                <h2>HTML Course</h2>

                <p>Master the basics of HTML to create the structure of web pages. You'll learn about elements, attributes, and how to use semantic HTML for better accessibility.</p>

                <div class="dropdown">

                    <button class="btn btn-secondary dropdown-toggle" type="button" id="dropdownMenuButton" data-bs-toggle="dropdown">

                        More Info

                    </button>

                    <ul class="dropdown-menu" labelledby="dropdownMenuButton">

                        <li><a class="dropdown-item" href="#">Syllabus</a></li>

                        <li><a class="dropdown-item" href="#">Join a Class</a></li>

                    </ul>

                </div>

            </div>

            <div class="col-md-4">

                <h2>CSS Course</h2>

                <p>Learn to style web pages using CSS. This course covers selectors, properties, responsive design, and layout techniques to make your sites visually appealing.</p>

                <div class="dropdown">

                    <button class="btn btn-secondary dropdown-toggle" type="button" id="dropdownMenuButton" data-bs-toggle="dropdown">

                        More Info

                    </button>

                    <div class="dropdown-menu" labelledby="dropdownMenuButton">

                        <a class="dropdown-item" href="#">Syllabus</a>

                        <a class="dropdown-item" href="#">Join a Class</a>

                    </div>

                </div>

            </div>

            <div class="col-md-4">

                <h2>JavaScript Course</h2>

                <p>Dive into the world of programming with JavaScript. Learn about variables, functions, DOM manipulation, and event handling to create dynamic web experiences.</p>

                <div class="dropdown">

                    <button class="btn btn-secondary dropdown-toggle" type="button" id="dropdownMenuButton" data-bs-toggle="dropdown">

                        More Info

                    </button>

                    <div class="dropdown-menu" labelledby="dropdownMenuButton">

                        <a class="dropdown-item" href="#">Syllabus</a>

                        <a class="dropdown-item" href="#">Join a Class</a>

                    </div>

                </div>

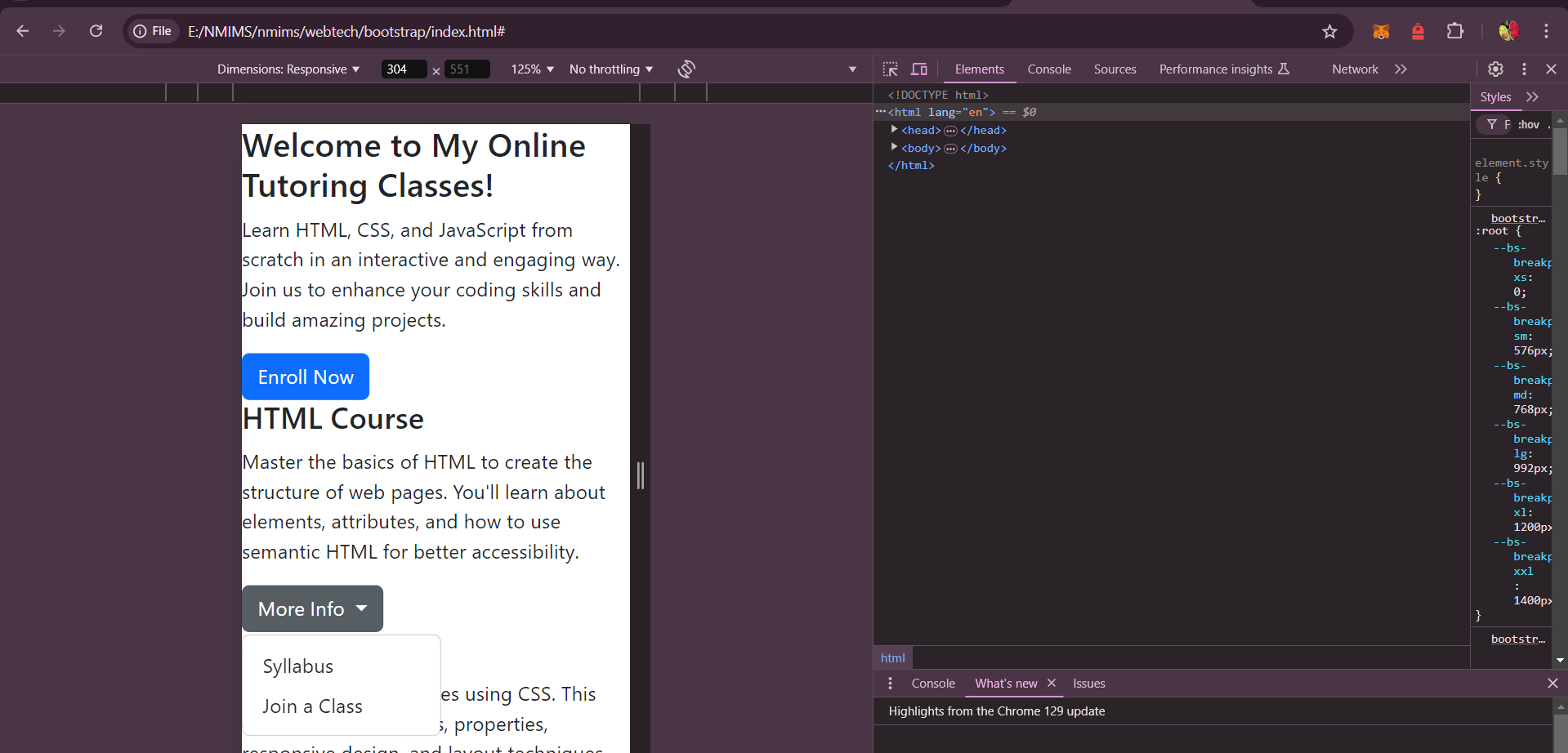
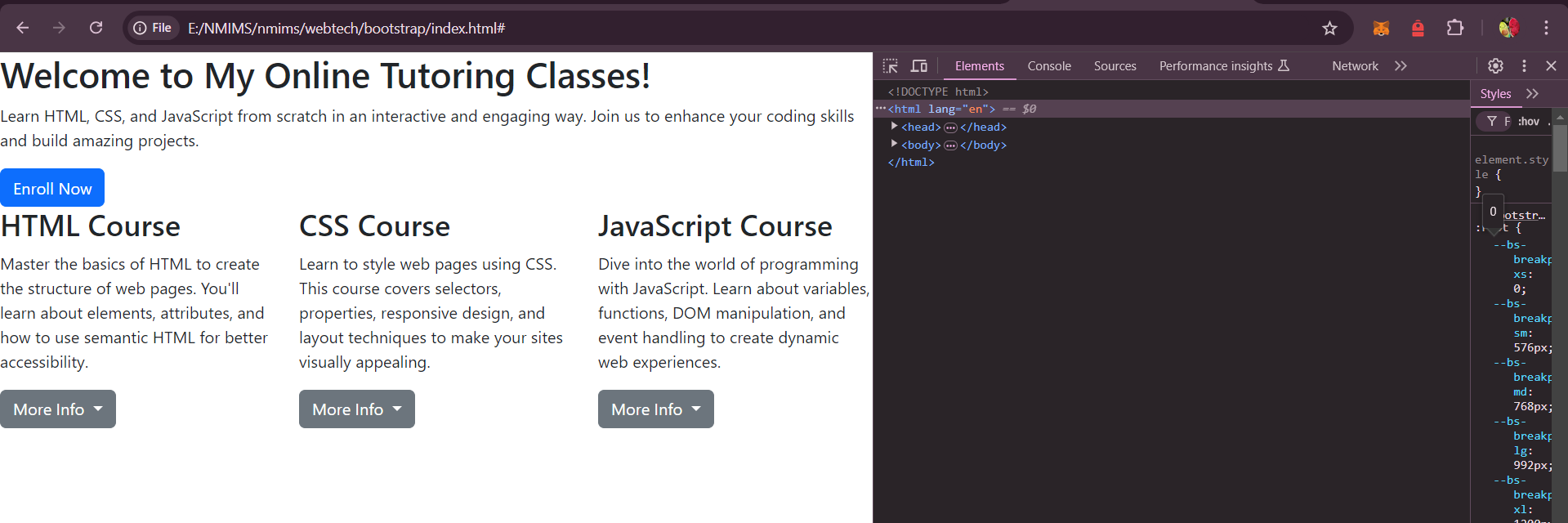
            </div>

        </div>

    </div>

</body>

</html>

****

**2.**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

    <title>Document</title>

    <link rel="stylesheet" href="bootstrap.min.css">

    <script src="bootstrap.bundle.min.js"></script>

    <style>

        .phone-image {

            height: 500px; /\* Fixed height \*/

            object-fit: cover; /\* Cover the area without distortion \*/

        }

    </style>

</head>

<body>

    <div class="container mt-5"></div>

        <h1 class="text-center">Buy Your New Phone</h1>

        <div class="row">

            <!-- Phone 1 -->

            <div class="col-md-4 text-center mb-4">

                <div class="card">

                    <img src="phone1.jfif" class="card-img-top phone-image" alt="Phone 1">

                    <div class="card-body">

                        <h5 class="card-title">Phone Model 1</h5>

                        <p class="card-text">$699</p>

                        <a href="#" class="btn btn-primary">Buy Now</a>

                    </div>

                </div>

            </div>

            <!-- Phone 2 -->

            <div class="col-md-4 text-center mb-4">

                <div class="card">

                    <img src="phone2.jfif" class="card-img-top phone-image" alt="Phone 2">

                    <div class="card-body">

                        <h5 class="card-title">Phone Model 2</h5>

                        <p class="card-text">$799</p>

                        <a href="#" class="btn btn-primary">Buy Now</a>

                    </div>

                </div>

            </div>

            <!-- Phone 3 -->

            <div class="col-md-4 text-center mb-4">

                <div class="card">

                    <img src="phone3.jpg" class="card-img-top phone-image" alt="Phone 3">

                    <div class="card-body">

                        <h5 class="card-title">Phone Model 3</h5>

                        <p class="card-text">$899</p>

                        <a href="#" class="btn btn-primary">Buy Now</a>

                    </div>

                </div>

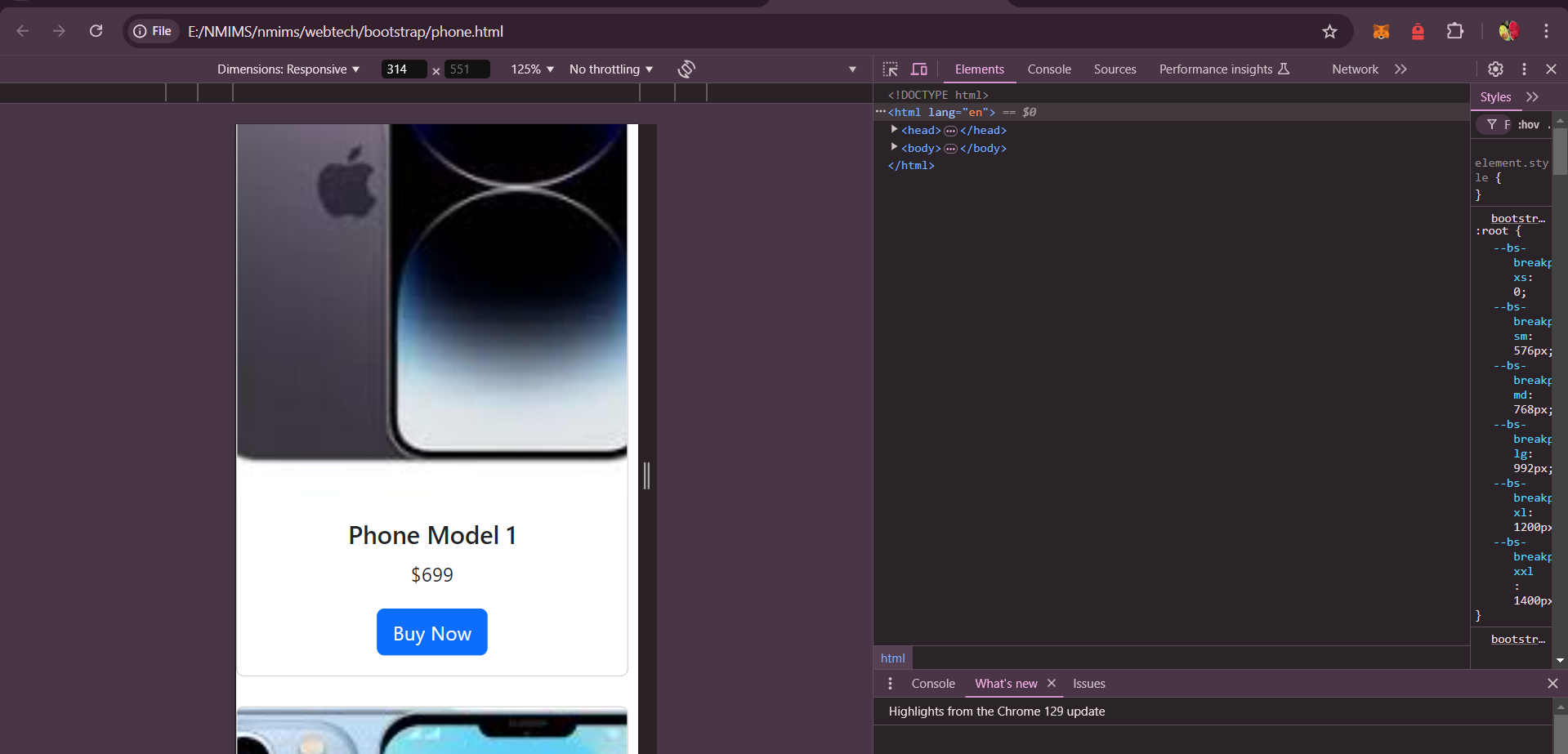
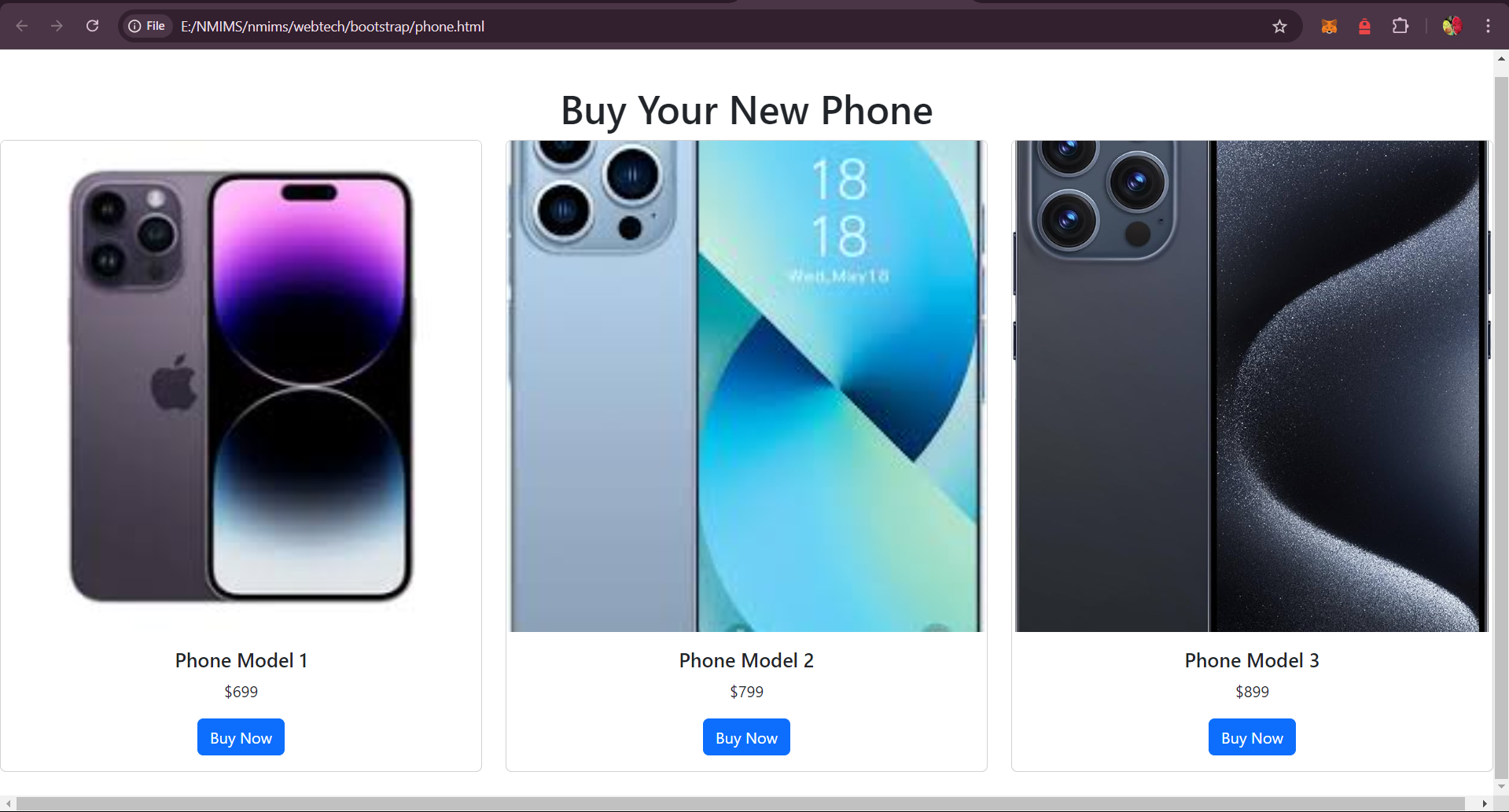
            </div>

        </div>

    </div>

</body>

</html>



3.

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

    <title>Document</title>

    <link rel="stylesheet" href="bootstrap.min.css">

    <script src="bootstrap.bundle.min.js"></script>

    <style>

        .table.blue-background {

            background-color: #113964 !important;

        }

        .table.red-background {

            background-color: #9a3a42 !important;

        }

    </style>

</head>

<body>

    <div class="container mt-5">

        <!-- First table with blue background -->

        <table class="table table-bordered blue-background">

            <thead>

                <tr>

                    <th>Name</th>

                    <th>Age</th>

                    <th>Profession</th>

                </tr>

            </thead>

            <tbody>

                <tr>

                    <td>Varun</td>

                    <td>20</td>

                    <td>Student</td>

                </tr>

                <tr>

                    <td>Tanishka</td>

                    <td>19</td>

                    <td>Student</td>

                </tr>

                <tr>

                    <td>Bobby</td>

                    <td>47</td>

                    <td>Professor</td>

                </tr>

            </tbody>

        </table>

        <!-- Second table with red background -->

        <table class="table table-bordered red-background">

            <thead>

                <tr>

                    <th>Name</th>

                    <th>Age</th>

                    <th>Profession</th>

                </tr>

            </thead>

            <tbody>

                <tr>

                    <td>Varun</td>

                    <td>20</td>

                    <td>Student</td>

                </tr>

                <tr>

                    <td>Tanishka</td>

                    <td>19</td>

                    <td>Student</td>

                </tr>

                <tr>

                    <td>Bobby</td>

                    <td>47</td>

                    <td>Professor</td>

                </tr>

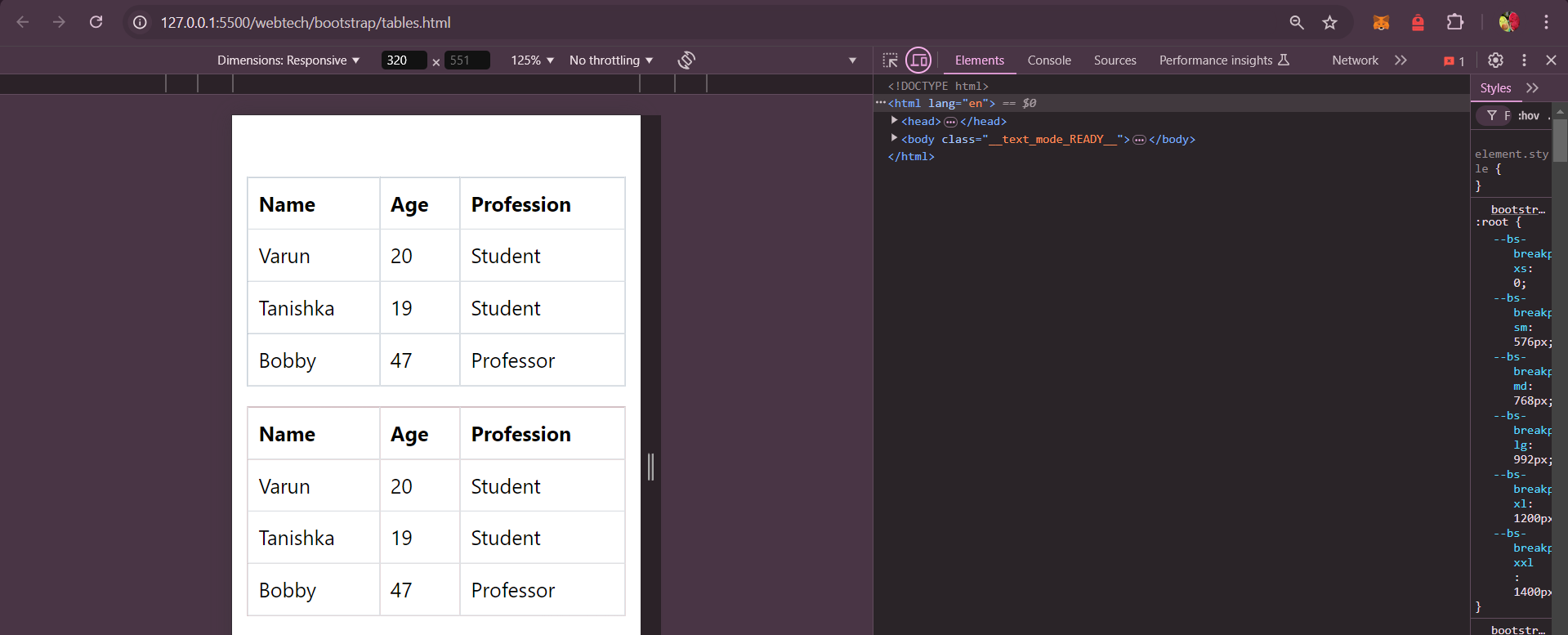
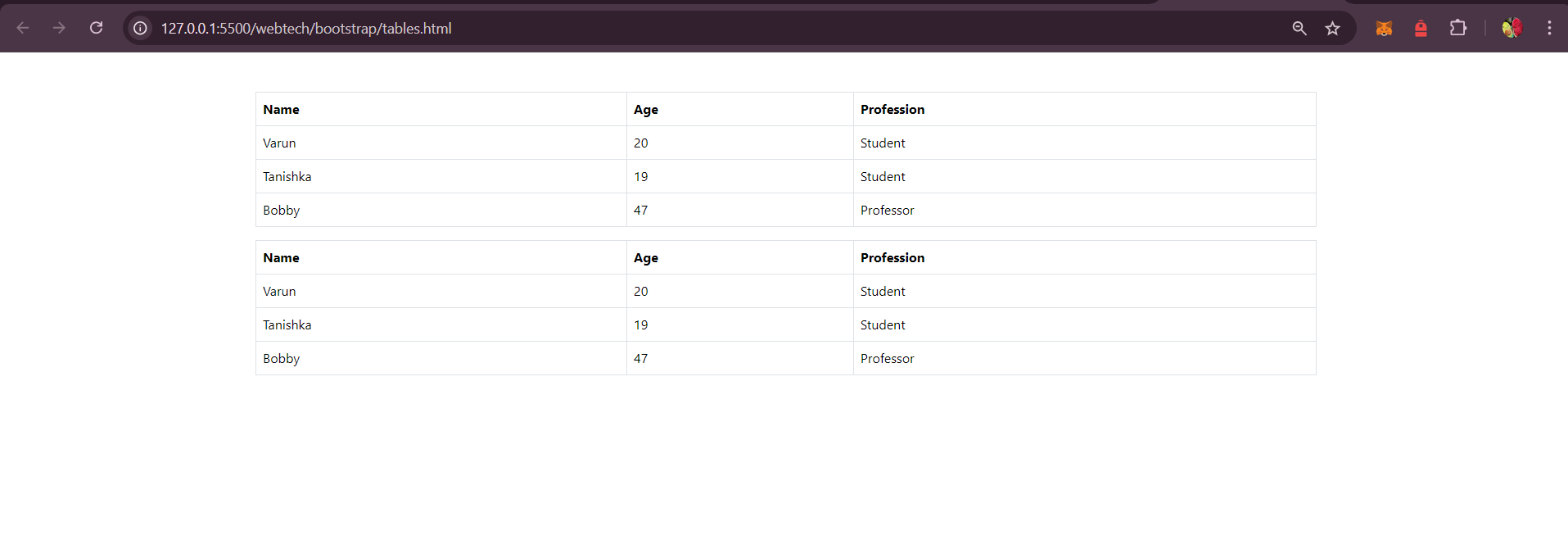
            </tbody>

        </table>

    </div>

</body>

</html>



**B.3 Conclusion:**

*Completed bootstrap implementation*

**B.3 Observations and Learning:**

*Successfully completed bootstrap implementation*

**B.4 Question of Curiosity**

Q1. What are Bootstrap components? Can you name a few?

Bootstrap components are pre-designed, reusable UI elements that follow the Bootstrap framework's styling. These components help developers create responsive and consistent web layouts quickly. They include a variety of UI elements like navigation, forms, buttons, and modals, ensuring design uniformity and efficiency.

A few examples of Bootstrap components:

Navbar: Responsive navigation bar.

Buttons: Styled buttons for different actions.

Cards: Flexible and extensible content containers.

Forms: Pre-styled form elements like input fields and labels.

Alerts: Messages to provide feedback to users.

Q2. What are Bootstrap modals, and how can you implement one?

A Bootstrap modal is a dialog box/popup window that is displayed over the current page. It is used to display important information, forms, or interactive content without leaving the page.

To implement a Bootstrap modal:

Include Bootstrap's CSS and JavaScript files.

Create a button to trigger the modal.

Define the modal structure with HTML.

Q.3 How can you customize Bootstrap’s default styles?

Bootstrap's default styles can be customized in several ways:

Custom CSS: Override Bootstrap's styles with your own CSS by linking a custom CSS file after the Bootstrap CSS file.

Sass Variables: If you're using Sass, you can modify Bootstrap's built-in variables and rebuild the CSS. This allows for deeper customization.

Utility Classes: Bootstrap offers utility classes that allow you to modify margin, padding, color, etc., without writing custom CSS.

Q.4 Explain the difference between Bootstrap 4 and Bootstrap 5.

Key differences between Bootstrap 4 and Bootstrap 5:

No jQuery in Bootstrap 5: Bootstrap 5 removed jQuery as a dependency, making it more lightweight and compatible with modern JavaScript frameworks.

Enhanced Grid System: Bootstrap 5 introduced a new grid tier (xxl) for extra-large screens and updated the grid system with better control and flexibility.

Improved Forms: Bootstrap 5 overhauled the form controls to provide more consistency across browsers and devices.

New Utilities: Bootstrap 5 offers more utility classes for spacing, text alignment, and more customization options.

Q.5 Describe how responsive design is achieved in Bootstrap.

Responsive design in Bootstrap is achieved through:

Grid System: Bootstrap uses a 12-column grid system that allows for creating responsive layouts by specifying different column sizes for different screen sizes (e.g., .col-sm-6, .col-lg-4).

Media Queries: Bootstrap provides breakpoints based on screen sizes (e.g., small, medium, large) so you can apply different styles for different devices.

Utility Classes: Classes like .d-none, .d-md-block, .d-lg-flex help to show or hide elements based on the screen size.

Responsive Components: Many Bootstrap components, like navbars and tables, have built-in responsiveness to adapt to various screen sizes.