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**APOTHECARY STEWARDSHIP**

WEB TECHNOLOGY PROJECT REPORT

SUBMITTED TO MANIPAL ACADEMY OF HIGHER EDUCATION, MANIPAL



**By**

**B Lalit Sai (230970006)**

**M Goutham Srinivas (230970019)**

**Sudeep (230970021)**

**Aakanxa Modha (230970031)**

**Gaurang Sharma (230970038)**



**Login/Sign Up**

B Lalit Sai (230970006)

**BOOTSTRAP**

* **Navbar component:**

Used the bootstrap navbar for the top navigation bar.

<nav class="navbar navbar-expand-lg navbar-light" style="background-color: #003e78;">

* **Container Component:**

I have used the bootstrap container component to wrap the content.

<div class="container d-flex justify-content-center align-items-center">

* **Form component:**

I have used various Bootstrap for components for my login form, including form groups, labels, and input fields.

<form class="loginForm needs-validation" novalidate>

Novalidate:- It tells the browser to disable the default validations

* + - **Form groups:** <div class="form-group">
    - **Form Labels:** <label for="email">Email</label>
    - **Input Fields:** <input type="email" id="email" class="form-control" required>

<input type="password" id="pass" class="form-control" required>

* **Buttons:**

I have used Bootstrap buttons for “Submit” and “Reset”.

<input type="submit" class="btn btn-primary col-12 mb-1" value="Submit" id="submit">

<input type="reset" class="btn btn-secondary col-12 mb-3" value="Reset" id="reset">

* **Dropdown component:**

Used Bootstrap dropdown components within the navigation bar.

<a class="nav-link dropdown-toggle text-warning" href="#" id="navbarDropdown" role="button" data-bs-toggle="dropdown" aria-expanded="false">

* **Navigation Links:**

<a class="nav-link active text-warning" aria-current="page" href="../index\_nav.html">Home</a>

* **Font icons:**

Used Bootstrap Icons for social media icons.

<i class="bi bi-facebook"></i>

<i class="bi bi-twitter"></i**>**

**Responsive Design Concepts**

First added the Meta tag for responsive to work.

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

The Meta tag ensures that the page is responsive and adapts to different screen sizes.

Since I have used Bootstrap, several classes are added that have pre-defined responsive design:

* **Bootstrap Responsive Navbar:**

<nav class="navbar navbar-expand-lg navbar-light" style="background-color: #003e78;">

The ‘navbar-expand-lg’ ensures that the navigation bar collapses into a responsive mobile menu on smaller screens.

* **Bootstrap Responsive Columns:**

<div class="col-12 d-inline-flex justify-content-between">

The col-12 class defines a full-width column that automatically adjusts to different screen sizes. It is combined with ‘justify-content-between’ to control the layout.

* **Bootstrap Grid System:**

<div class="row">

Bootstrap’s rid system allowed us to create responsive layouts by specifying the number of columns each element should span. Rows and columns automatically adjust for various screen sizes.

* **Responsive Images:**

<img src="logo.png" alt="" width="10px" height="5px" style="margin-right: 5px;">

The width and height can be adjusted for responsiveness.

* **Bootstrap Media Queries:**

Bootstrap uses media queries to control the layout and styling of components for different screen sizes.

**Assistive Technologies**

Incorporated several assistive technologies and features to enhance accessibility for users with disabilities. Here’s a list of them:

* **Semantic HTML Tags:**

I have used several semantic HTML tags such as <nav>, <a>, <label>, <input>, <button> and <img> to provide clear and meaningful structure to the document. These tags are essential for screen reader to understand and navigate the content effectively.

* **Alternative Text for Images:**

All images in the code have the ‘alt’ attribute defined, which provides a text alternative for users who cannot view images.

* **Form Labels and Input Labels:**

I have associated form elements(like input fields and labels) using the ‘for’ and ‘id’ attributes. This association helps screen readers announce the labels when users interact with form elements.

<label for="email">Email</label>

<input type="email" id="email" class="form-control" onfocus="readAloud('Email')" required>

* **Form Validation Feedback:**

I have included feedback for form validation with ‘valid-feedback’ and ‘invalid-feedback’ classes. These classes can be read aloud by screen readers to convey form validation messages.

* **Screen Reader Text:**

In various places, I have also used ‘onfocus’ attributes with the ‘readAloud’ function to provide screen reader-friendly text for elements that may not have visible text but are essential for user interaction. For example:

onfocus="readAloud('Email')";

* **Form Field Validation:**

JavaScript functions and classes are used to validate form fields. This includes adding the ‘is-valid’ and ‘is-invalid’ classes for feedback and announcement by screen readers.

* **ARIA Roles and Attributes:**

While not explicitly visible in the code, it is essential to note that Bootstrap components and elements often utilize ARIA (Accessible Rich Internet Applications) roles and attributes to enhance accessibility. Bootstrap takes care of these behind the scenes to ensure components are screen-reader- friendly.

* **Focus styles and Keyboard Navigation:**

By using Bootstrap, you inherit focus styles and keyboard navigation features that are beneficial for users relying on keyboard input and screen readers.

**Landing Page And BMI Calculator**

**M Goutham Srinivas (230970019)**

1. **Bootstrap**

* Clean, modern and reusable design: I opted for a bootstrap template with various components such as key feature cards, Our team cards(team members) and few clean animations.
* For the landing page, I wanted to offer the user multiple ways for navigation. The landing page itself has four highlighted features in the form of cards of equal size which I created using the bootstrap GRID and CARD H-xxx attribute .
* The navbar acts as the second and most consistent component across all webpages , enabling the user to navigate the website and its pages depending on which page they are at, whether they are logged in or not.
* The services section of the Landing page offers all the functionalities that we wanted to offer in the form of bootstrap cards and grids with attractive icons.
* Using the iframe tag I was able to embed a location of the office address. This is supposed to make it easier for the users to directly navigate from the most popular maps provider(google maps).
* Used bootstrap font icons to give a little personality to the website and make it more attractive.
* In addition to bootstrap we also made use of CSS to add in those niche styling requirements to the landing page.
* Using a base template directly from bootstrap website, I was able to reuse a lot of the components in other pages.
* Using warning(green-yellow) , as our text color in the text-warning class attribute allowed us to maintain consistency
* For the BMI calculator, I opted to use only the navbar element and Normal html/CSS/js approach as it is a simple page with a bit of calculation required using JavaScript.
* Bootstrap buttons help me reduce the code and make it more concise and fast.

1. **Responsive Design Concepts**

* Using native **bootstrap grid layout**, I was able to size my content
* according to the screen. Using attributes like **col-lg-6 , col-sm-12** and so on enabled me to apply **layouts for different screen sizes** very efficiently.
* I made the navbar responsive across all pages using the **collapse navbar** class.
* For some particular components , I implemented **CSS media queries** to make the webpage fit to a particular size.

**III. Assistive Technology Concepts**

* Provided Alt for all images which gives a description of the image.
* Screen readers allowed us to make the webpage usable for visually challenged people. Using **OnFocus Attribute** in buttons and hyperlinks, they can navigate the webpage using **TAB** and the selected option is read out .
* Throughout our website we have maintained a color **contrast ratio** of **7.53:1,** this Is much greater than the recommended at least **4.5:1**, which makes our website consistent even for people with colour-blindness. Before implementing this color scheme, we made sure that we passed the webaim.org ‘s **color contrast testing** in all scenarios

**HOME REMEDIES AND COPARISION OF DRUG**

SUDEEP (Reg. No:230970021)

1. **Bootstrap**

Classes of Bootstrap are used on the elements of the web page such as div container, Cards. Bootstrap colors such as ‘Primary’ are used throughout to maintain design consistency.

The website's mobile compatibility is achieved by utilizing Bootstrap's responsive feature. Bootstrap's card component is employed to structure the content for each disease section.

The container with the class container d-flex flex-wrap is used to manage the layout and provide a responsive design. In summary, Bootstrap has significantly streamlined the process of creating a user-friendly, responsive, and visually appealing web page.

Its pre-built components and styles have been instrumental in achieving the desired design and functionality.

Throughout the code, I've applied different Bootstrap classes to style the various elements on the page, ensuring a cohesive and professional look.

1. **Responsive Design Concepts**

In this web page, Responsive factors are applied through a combination of CSS and Bootstrap.Bootstrap breakpoints (col-mb, col-md, col-sm, col-lg) are implemented to Bootstrap components, whilst media queries cope with the responsiveness of HTML and CSS factors.

The div container and images are fully responsive and fit on a small screen of the phone.

The navigation menu is also a crucial part of responsive design. I've utilized Bootstrap's responsive navigation menu, which collapses into a button on smaller screens.

Users can expand it to access navigation links, making navigation more straightforward on mobile devices while preserving desktop functionality.

To enhance user interaction and maintain a responsive layout, I've implemented dropdown menus. These dropdowns are designed to work seamlessly on various screen sizes, providing an intuitive user experience.

**III. Assistive Technology Concepts**

In this web page, the assistive technology concept such as the reading out-loud feature is used.

* Enhancing User Experience – Vibrant and high-comparison colour schemes have been thoughtfully applied across the website to beautify readability. Employing formidable fonts correctly emphasizes key elements of the site's content material. Additionally, the strategic use of photos provides treasured visible help. This deliberate choice of contrasting colours no longer best augments text legibility but additionally caters to customers with shade vision deficiencies, ensuring an inclusive and consumer-pleasant layout.
* The provided HTML code demonstrates the integration of several assistive technology concepts and best practices to enhance web accessibility for users with disabilities. These concepts focus on making the web content more usable and navigable for a diverse range of users.
* Throughout development, I've used accessibility testing tools and validators to identify and address potential issues, ensuring that the webpage complies with accessibility standards and guidelines.
* The use of Bootstrap components ensures a standardized and accessible user interface, which can help users navigate and interact with the content using assistive technologies more effectively.

**PILL IDENTIFIER**

**Aakanxa Modha (230970031)**

1. **Bootstrap**

- I've designed a web page intended to serve as a 'Pill Identifier' tool, allowing users to determine the identity of pills based on colour and shape.

- I've harnessed the power of Bootstrap, a popular front-end framework, for this web page. To do so, I've incorporated Bootstrap's Cascading Style Sheets (CSS) and JavaScript libraries into the page using Content Delivery Networks (CDNs).

- The page features a navigation bar at the top. This is a key component, and I've customized it using Bootstrap's Navbar component. I've added a logo and navigation links to create a user-friendly and aesthetically pleasing menu.

- To facilitate user interaction and selection of pill characteristics, I've implemented Bootstrap's dropdown menus. Users can choose a pill's colour and shape from these menus, and Bootstrap handles the dropdown functionality elegantly.

- Ensuring that the web page looks good and functions well on various devices is vital. Bootstrap's responsive design features have been invaluable in achieving this. While the provided code doesn't explicitly use Bootstrap's grid system, it is part of Bootstrap's toolkit for creating responsive layouts.

- I've combined custom CSS with Bootstrap utility classes to fine-tune the styling of different page elements. This allows me to maintain a cohesive design and ensure that the page is visually appealing.

- To display information about the identified pill, I've relied on Bootstrap's Card component. The card includes an image of the pill and its name, which is set dynamically based on the user's selection.

- The 'Identify the pill' button is styled using Bootstrap's button classes, ensuring a consistent and attractive appearance.

- In summary, Bootstrap has significantly streamlined the process of creating a user-friendly, responsive, and visually appealing web page. Its pre-built components and styles have been instrumental in achieving the desired design and functionality.

1. **Responsive Design Concepts**

- When developing the webpage, I've given special attention to responsive design, ensuring that it looks and functions well on different devices and screen sizes.

- To achieve this, I've harnessed Bootstrap's grid system. It allows me to define how elements are arranged on the page based on screen size. This means that elements can stack vertically on smaller screens and align side by side on larger screens, providing an optimal viewing experience.

- The use of fluid containers is another key component of responsive design. These containers automatically adjust the width of content to the screen size. This ensures that content doesn't appear too compressed on small screens or too spread out on larger screens.

- To fine-tune the design, I've incorporated custom CSS media queries. Media queries are rules that let me apply different styles based on screen width. For instance, I can adjust font sizes, margins, or hide specific elements on smaller screens to enhance readability and user experience.

- The navigation menu is also a crucial part of responsive design. I've utilized Bootstrap's responsive navigation menu, which collapses into a button on smaller screens. Users can expand it to access navigation links, making navigation more straightforward on mobile devices while preserving desktop functionality.

- Images on the webpage are set to scale proportionally with the screen size, ensuring that they maintain their aspect ratio. This avoids distortion on different devices.

- For text and font sizes, I've used relative units like percentages or ems. This allows text to adapt to various screen sizes, ensuring readability without the need for excessive zooming or scrolling.

- In the design, I've also paid attention to touch-friendliness. Interactive elements such as buttons and dropdowns are appropriately sized and spaced for touchscreens, improving the user experience on mobile and tablet devices.

- I've followed the principle of progressive enhancement throughout the development process. This means building the core functionality and content first to ensure accessibility and usability without advanced CSS or JavaScript. Additional styling and interactivity are introduced as the screen size increases, enhancing the user experience without sacrificing accessibility.

These responsive design concepts collectively create a web page that is accessible and user-friendly on a variety of devices, ranging from smartphones and tablets to desktop computers, ensuring that users can comfortably interact with the content, regardless of their screen size.

1. **Assistive Technology Concepts**

- I've used semantic HTML elements like `<nav>`, `<header>`, and `<footer` to create a well-structured document that screen readers can easily interpret.

- In forms, I've ensured that input fields and buttons are properly labeled and associated with their respective labels. This is essential for screen readers to provide accurate descriptions and guidance.

- Each image on the webpage is equipped with descriptive alternative text (alt text). This enables individuals using screen readers to comprehend the purpose and content of each image.

- I've implemented keyboard navigation, allowing users to access and interact with all elements using only the keyboard. This is especially important for people with disabilities who rely on keyboard input.

- To assist keyboard and screen reader users, I've added visible focus indicators to interactive elements. This makes it clear which element currently has keyboard focus.

- To enhance navigation for screen reader users, I've included a "Skip to Content" link at the beginning of the page. This allows them to bypass repetitive navigation and jump straight to the main content.

- ARIA roles and attributes are used to improve the accessibility of dynamic elements like dropdown menus. These provide screen readers with important information about the role and state of these elements.

- I've paid close attention to color contrast to ensure that text and background colors meet accessibility standards. This benefits individuals with visual impairments, making text more legible.

- Text on the webpage can be resized without causing layout issues, catering to users with varying visual needs.

- Throughout development, I've used accessibility testing tools and validators to identify and address potential issues, ensuring that the webpage complies with accessibility standards and guidelines.

- To verify the usability of the webpage for screen reader users, I personally conducted testing with screen reader software, ensuring that content and functionality are understandable and user-friendly for individuals with visual impairments.

By incorporating these assistive technology concepts, I've aimed to create a webpage that is inclusive and accessible to a diverse range of users, regardless of their abilities or the technology they use to access the web.

**INTERACTION CHECKER**

**Aakanxa Modha (230970031)**

* **Bootstrap**

- In the HTML code I provided, I've used various Bootstrap components to style and structure the webpage.

- I've incorporated a navigation bar at the top of the page to create a user-friendly menu. It includes a logo and links to different sections of the website.

- I've also added buttons to the page that look appealing, and I've used Bootstrap styles to achieve this.

- For user selection, I've implemented dropdown menus, which enhance the user experience. These dropdowns are customized using Bootstrap classes.

- Throughout the code, I've applied different Bootstrap classes to style the various elements on the page, ensuring a cohesive and professional look.

- To enable dropdown functionality and other interactive features, I need to make sure that I have properly included Bootstrap 5's JavaScript library in the code.

* **Responsive Design Concepts**

- In the HTML code, I've applied responsive design principles using Bootstrap components, aiming to ensure the webpage adapts well to different screen sizes and devices.

- I've incorporated a responsive navigation bar at the top of the page. This navigation bar collapses into a menu for smaller screens, making it user-friendly on both desktop and mobile devices.

- The buttons I've used in the code are styled with responsiveness in mind. They adjust their size and appearance based on the screen size, ensuring a consistent and visually pleasing experience across devices.

- To enhance user interaction and maintain a responsive layout, I've implemented dropdown menus. These dropdowns are designed to work seamlessly on various screen sizes, providing an intuitive user experience.

- Throughout the code, I've harnessed Bootstrap's responsive classes to control the layout, spacing, and visibility of elements on different devices. This helps in optimizing the webpage's appearance and functionality for various screen sizes.

- It's essential to ensure that Bootstrap's JavaScript library is integrated correctly. This will guarantee that interactive features, like the responsive navigation menu, function smoothly on all devices.

* **Assistive Technology Concepts**

- The code has semantic HTML structure, which is essential for screen readers to interpret and provide meaningful information to users with visual impairments.

- It uses alternative text for images, like the logo, by specifying the "alt" attribute. This text is read aloud by screen readers, making the content more accessible to users who cannot see images.

- The code includes dropdown menus that are navigable using keyboard input, ensuring that users who rely on keyboard navigation can access and select options easily.

- The navigation menu within the code is structured with accessibility in mind. It features appropriate labels, roles, and ARIA attributes, which assist screen readers in understanding and announcing the menu items correctly.

- The JavaScript code enhances user interaction by dynamically updating content based on user selections. This functionality is designed to work seamlessly with screen readers, allowing users to receive real-time feedback.

- The responsive design principles employed in the code ensure that the content reflows and adjusts appropriately when viewed on various devices. This flexibility supports users with different assistive technologies, such as screen magnifiers or voice input.

- The code incorporates contrasting color schemes for improved readability, benefiting users with various vision impairments.

- The use of Bootstrap components ensures a standardized and accessible user interface, which can help users navigate and interact with the content using assistive technologies more effectively.

**Side Effects and Articles.**

**Gaurang Sharma 230970038**

**Bootstrap**

We have implemented Bootstrap 5 which is a popular front-end-framework, for the development of this webpage various concepts are:

* **Bootstrap CSS and JavaScript:**
  + The Bootstrap CSS and JavaScript files are linked in the <head> section using CDN (Content Delivery Network). This includes bootstrap.bundle.js for styling and bootstrap.bundle.min.js for JavaScript functionality.
* **Grid System:**
  + Bootstrap’s grid system is used for creating responsive. The code includes various ‘container’ and ‘row’ elements to structure the content. The use of classes like ’col-xs-3’, ‘col-sm-7’, ‘col-md-3’ and ‘col-lg-2’ specifies the column widths for different screen sizes.
* **.Navbar:**

The navigation bar is styled using Bootstrap classes. The ‘navbar’ and ‘navbar-expand-md’ classes help create a responsive navigation bar.

The mobile menu toggle button is created using the ‘navbar-toggler’ class.

* **Buttons:**

Buttons are styled using Bootstrap classes like ‘btn’ and ‘btn-primary’.

There are custom button styles with ID references like ‘btn1’, ‘btn2’ and so on.

* **Dropdowns:**

The website features a dropdown menu in the navigation bar, which is created using bootstrap’s dropdown components. It uses ‘dropdown-toggle’ and ‘dropdown-menu’ classes.

* **Typography:**

There are various text elements, such as headings and paragraphs, are styled using bootstraps typography classes, such as ‘text-center’.

* **Footer:**

The Footer section is styled using Bootstrap classes. It includes centered text and icons for social media links.

**Responsive Design Concepts**

* **Viewport Meta Tag:**
  + The ‘<meta name=” viewport” content="width=device-width, initial-scale=1.0">’ tag is included in the HTML ‘<head>’. This tag is essential for making the webpage responsive by setting the initial scale and ensuring that the content adapts to the viewport’s width.
* **Media Queries:**
  + Media Queries are fundamental for responsive design. They allow CSS Style to be adjusted for different screen widths. Bootstrap often uses media queries to control the responsiveness of the components.
  + Eg: - @media screen and (max-width:420px) {

. logo h3{

font-size: 20px;

}

}

* **Font Styling:**
  + @importurl('https://fonts.googleapis.com/css2?family=Poppins&display=swap');
  + To add a special style sheet link in the <head> section and then refer to the font in the CSS.
  + We have used “Poppins”, Sans-serif as a default font.
* **Input Styling (Contact form)**

We have implemented subscription form In which It contained name and email form

* + In Input fields are responsive with Bootstrap classes to make it easy to use on both desktop and mobile devices.
* **CSS Framework (Bootstrap):**
  + - <link href=<https://cdn.jsdelivr.net/npm/bootstrap@5.0.0/dist/css/bootstrap.min.css>>
    - <scriptsrc=https://code.jquery.com/jquery-3.2.1.slim.min.js "crossorigin="anonymous"></script>
    - <script src="https://cdn.jsdelivr.net/npm/popper.js@1.12.9/dist/umd/popper.min.js" crossorigin="anonymous"></script>
    - It provides CSS framework for building responsive and visually appealing websites and web applications which specifies pre-defined HTML, CSS and JavaScript components, along with a responsive grid system layouts.
* **Responsive Containers and Images:**
  + Images are made responsive by using Bootstraps classes. These classes ensure that images scale appropriately and do not overflow their containers on different screen size.
* **Assistive Technology Concepts** 
  + **Speech Synthesis (Text-to-Speech):**
  + The webpage takes advantage of the browser’s “Read Aloud” feature to make it easier for the visually impaired user to navigate the web pages.
  + **High Contrast Colours:**

The web page employs a high-contrast colour palette, which is advantageous for users with visual impairments or colour blindness, as it improves the legibility of the text and content