**HOTEL RESERVATION SYSTEM**

WEB TECHNOLOGY PROJECTREPORT

SUBMITTEDTOMANIPALACADEMYOF HIGHER EDUCATION, MANIPAL



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1. **Keerti Narayan Hegde(230970122)**
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**Login Page/Registration Page**

Keerti Narayan Hegde(230970122)

1. **Bootstrap**

The "form-control" class standardizes the input fields, creating a professional and user-friendly interface. Bootstrap's grid system is employed to structure the registration form, promoting responsive design, and ensuring the content adapts seamlessly to various screen sizes. The "card" component encapsulates the registration form, offering an organized and visually appealing presentation with a fixed width, defined padding, and subtle box-shadow effect. In summary, Bootstrap greatly contributes to a well-structured, visually pleasing, and user-friendly registration and login experience.

1. **Responsive Design Concepts**

The registration page and login page gives effective use of responsive design principles to ensure optimal user experience across different devices and screen sizes. The inclusion of Bootstrap's "container-fluid" and responsive utility classes enables the content to adapt fluidly, maintaining readability and usability. Additionally, background images are configured to scale correctly using "background-size: cover" and "background-position: center," ensuring that the visual elements remain appealing on various screens. The choice to set the container's height to "100vh" (100% of viewport height) allows the form to fill the available vertical space, guaranteeing a responsive layout. The use of media queries, would further enhance responsiveness by adjusting styles based on the device's screen width. In essence, the registration page and login page contains responsive design for various screen sizes.

1. **Assistive Technology Concepts**

The registration page and login has various elements for user friendly accessibility. It uses HTML to create a labeled form, ensuring users who rely on screen readers can navigate it effectively. "aria-live" attributes provides real-time error messages, aiding users in understanding validation issues. Clear error messages are provided for various problems, such as missing fields or password mismatches, improving user guidance. Furthermore, HTML5 input types like "email" and "date" offer specialized keyboard layouts and date pickers, enhancing the user experience for people with diverse needs and abilities, making the registration process more accessible and user-friendly.

**Booking page**

Keerti Narayan Hegde(230970122)

1. **Bootstrap**

The main content of the website is logically arranged inside a Bootstrap container class, allowing for responsive web design. This container uses a Bootstrap card component to provide user information in an attractive and well-organized way. The styling of the card, which includes elements like background, box-shadow, border-radius, and width, gives a beautiful appearance. Input fields are also styled and organized using Bootstrap's form-group and form-control classes, which offer correct alignment and a unified, user-friendly interface. The btn class-styled bootstrap buttons make sure that buttons for functions like "Submit" and "Homepage" look good and seem consistent across the page. The booking uses the Bootstrap container class and the card component which helps create a responsive design that adapts to various screen sizes. The card's styling, including width, background, border-radius, and box-shadow, makes the webpage looks attractive.

1. **Responsive Design Concepts**

The user booking page has some responsive concept making it accessible on various devices. The viewport meta tag plays a crucial role, helping the page adapt to different screen sizes. Background images are optimized with styles like background-size: cover, ensuring they scale well and look good. The use of background-position: center and background-attachment: fixed keeps the images centered and fixed in place while scrolling. The background-color serves as a fallback in case the images can't be displayed, ensuring a good user experience. Furthermore. The fixed width of the user profile card ensures readability, especially on larger screens. This project follows a mobile-first approach, starting with small screens and progressively enhancing the design for larger devices. For booking page to ensure responsiveness, background images are styled with properties like background-size: cover, background-position: center, and background-attachment: fixed, making them scale and remain centered while the user scrolls ,providing a seamless user experience.

1. **Assistive Technology Concepts**

To make the page accessible, it uses semantic HTML elements and the ARIA (Accessible Rich Internet Applications) standard for improved compatibility with assistive technologies, aiding users with disabilities. Read lables are used to help the people with disabilities. Overall, the booking page is designed with responsiveness, visual aesthetics, and accessibility in mind, making it user-friendly for a wide range of users.

**FACILITIES PAGE**

**(Kavya Madhav Pandit-230970124)**

1. **Bootstrap**

The main content of the website is logically arranged inside a Bootstrap container class, allowing for responsive web design. This container uses a Bootstrap card component to provide user information in an attractive and well-organized way. Bootstrap “card” is used to create visual appearance as container in the facilities page .The styling of the card, which includes elements like background colour, border, and width, gives a beautifulappearance. When a user hover over a card it enlarges them using “transform-scale” property of bootstrap. Images used in card are styled with rounded corners using bootstrap “rounded-circle” property. The btn class-styled bootstrap buttons make sure that buttons for functions like "Grab now" which redirects to a booking page.

1. **Responsive Design Concepts**

The user profile page has some responsive concept making it accessible on various devices. The viewport meta tag plays a crucial role, helping the page adapt to different screen sizes. Background images are optimized with styles like background-size: cover, ensuring they scale well and look good. The use of background-position: center and background-attachment: fixed keeps the images centered and fixed in place while scrolling. When a user hovers over a card it enlarges them and ensuring a good user experience. Furthermore, the page consists classes like align-items-center to center content both horizontally and vertically, making it visually appealing. The fixed width of the facility card ensures readability, especially on larger screens. This project follows a mobile-first approach, starting with small screens and progressively enhancing the design for larger devices.

**FEEDBACK PAGE**

**(Kavya Madhav Pandit-230970124)**

**I. Bootstrap**

# In this page bootstrap enhances styling and layout design of feedback page. Bootstrap “Form-control” component is used in input field for the effective user interaction with the feedback form. Bootstrap “card” is used to create visual appearance as container in the feedback form.

Bootstrap “star-widget” is used to take feedback in terms of rating which standardises the user interaction.Boostrap “button” are used to submit the formand here after submitting alert box will appear and it displays the message as “feedback is submitted successfully”.

**II.Responsive Design Concepts**

Bootstrap media query is used to adopt the form layout to different screen sizes.The form width and input field width are adjusted for screens of different widths.This project follows a mobile-first approach, starting with small screens and progressively enhancing the design for larger devices. For feedback page to ensure responsiveness, background images are styled with properties like background-size:cover, background-position:center, and background-attachment: fixed, making them scale and remain centered while the user scrolls and provides a seamless user experience. Form place holders are styled with font colors and font family to make it look more attractive in the feedback form.Varois CSS properties like height,width,padding,margin are applied to feedback page to align it in a proper way.Thus feedback form provides a friendly way of responsive and effective user interaction.

**III. Assistive Technology Concepts**

In this feedback page one of the assistive technology that is speech synthesis is used to provide a more effective user interaction for the user especially for better understanding of form. The code includes JavaScript functions to read labels and form inputs using Web Speech API. These function readLabel() enable user with visual implements and form input spoken aloud by screen readers.To make the page accessible, it uses semantic HTML elements and the ARIA (Accessible Rich Internet Applications) standard for improved compatibility with assistive technologies, aiding users with disabilities

**HOME PAGE**

**(SHRISTI PRIYA, 230970127)**

**Bootstrap**

**Nav**

The Navbar component from Bootstrap is employed in our design to create a responsive and collapsible navigation menu. It ensures that users can easily access different sections of the website on both desktop and mobile devices.The Bootstrap Navbar incorporates features like dropdown menus, navigation links, and responsive behavior, making it an integral part of our user-friendly navigation system.

We use Bootstrap's Navbar utility classes to customize the appearance and functionality of our navigation bar, aligning it with our brand's visual identity.

**Background Carousel:**

To enhance the visual appeal of our home page, we've integrated a Background Carousel component from Bootstrap. This dynamic element allows us to display eye-catching images and promotional content in a sliding format.

The Bootstrap Background Carousel offers smooth transitions between background images, creating an engaging visual experience for our users. It adapts to different screen sizes, ensuring a seamless display on various devices.

Our Background Carousel is powered by Bootstrap's carousel classes, which enable us to control the timing of slide transitions and customize the content displayed within each slide.

**Cards:**

We've used Bootstrap's Card component to present content and information in an organized and visually appealing manner. Cards allow us to group related content, such as hotel room details or promotional offers, with a consistent design."

Bootstrap's Cards are versatile, and we've customized them to showcase key information, including images, titles, descriptions, and action buttons, providing a user-friendly presentation of our content.

The responsive nature of Bootstrap Cards ensures that our content looks well-structured and readable across a variety of screen sizes. This component is fundamental to our design for displaying content snippets efficiently.

By including sentences like these in your documentation, you can clearly convey how these Bootstrap components are used in your responsive home page design and their specific roles in enhancing the user experience.

**Responsive Design Concepts**

Used media queries to load different image sizes based on screen resolution. This helps in reducing the page load time on smaller screens.

Adjust the navigation menu for smaller screens. Consider using a mobile-friendly navigation pattern, such as a hamburger menu, for better usability on mobile devices.

Used media queries to adjust font sizes and spacing to ensure readability and aesthetics on various screen sizes.

Our Carousel component is designed to captivate users on both mobile and desktop screens. It smoothly adapts to different screen sizes, maintaining the impact of the imagery.

Our Navbar is designed to be fully responsive, adapting to various screen sizes. On smaller screens, it seamlessly transforms into a mobile-friendly navigation menu, providing a smooth user experience.

The Background Carousel on our homepage is responsive, automatically adjusting the image dimensions and slider behavior to fit the screen. This ensures that stunning visuals are displayed optimally on all devices.

The Cards we employ are responsive, meaning that whether you're viewing our hotel services on a smartphone or a widescreen desktop, the content remains organized and visually appealing.

**ABOUT US**

**(SHRISTI PRIYA , 230970127)**

**Bootstrap**

**Grid:**

Grid columns allow you to divide your web page content into a grid of rows and columns, ensuring that your content looks good on various screen sizes, from large desktop monitors to small mobile devices.

**Column Classes:**

Bootstrap provides a set of classes that define how many columns a particular element should span within a row. These classes are named based on the number of columns they occupy.

**Google map:**

The provided HTML code creates a <div> container with a specific height and embeds a Google Map using an <iframe>. The embedded map displays the area around Manhattan with the specified zoom level. The use of classes and styles is likely for custom or Bootstrap-based styling, and the allowfullscreen attribute ensures that users can view the map in fullscreen mode.

**Icons:**

We include the Font Awesome CSS in the <head> of your HTML document. we can do this by adding the following line:

<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.0.0-beta3/css/all.min.css">

we've used Font Awesome icons for Facebook, Google, Instagram, and Twitter. The bi bi class is used to set the icon size to 2 times its default size. we can adjust the icon size by changing the "2x" to a different size.

**Responsive Design Concepts**

Bootstrap's grid system is responsive by default. we can use different column classes

based on the screen size. It specifies that a column should occupy half of the container's width on medium-sized screens and larger, but stack on top of each other on smaller screens.

The Google Map will be responsive and adapt to different screen sizes. The aspect ratio is maintained, and the map will take up the appropriate portion of the screen, depending on the user's device.

On medium-sized screens and larger, the icons will be laid out in a row with equal spacing. On smaller screens, they will stack vertically to ensure a responsive layout.

**ROOM PAGES**

SAHIL ANAND (230970132)

1. **Bootstrap**

Bootstrap is a open-source framework for creating responsive web pages. It provides a set of pre-designed components and styles that can be easily combined into web projects.

One of the advantage of bootstrap is its customizability. it provides default

styles and components, developers can easily modify or override them to match

specific design requirements.

Following are the bootstrap concept that I used in the code:

**Bootstrap CSS Link :**

Link includes bootstrap css file from a CDN(Content Delivery Network), and it provides pre-defined styles for various HTML element.

* **Container :**

The standard container class creates a responsive fixed-width container. It is suitable for most content and keeps a consistent width on various screen sizes.

* **Cards:**

Bootstrap cards are a flexible and extensible content container in the Bootstrap framework. They are a versatile way to present various types of content, such as text, images, links, and more, in a visually appealing and organized manner. Bootstrap cards are designed to be responsive and can easily adapt to different screen sizes.

Major Classes used:

* Bootstrap grid classes(class="p-5", col-md p-5)
* **Image and Text:**

Cards can contain images, text, or a combination of both. This flexibility makes them suitable for displaying a wide range of content, from simple text information to complex media-rich elements.

**Responsive Design :**

Bootstrap cards are designed to be responsive, meaning they can adjust their size and layout based on the screen size, making them suitable for use in mobile and desktop environments.

1. **Responsive Design Concepts**

Responsive design is a concept in web development that ensures a website adapts and functions well on various devices and screen sizes, including desktops, tablets, and mobile phones.

* max-width: 100% on images, they are prevented from overflowing their parent containers and remain proportionate to the screen size.
* <meta name="viewport"> tag in the HTML head allows us to control the viewport's width and it scale on different devices.

Responsive design is a web development approach that ensures websites adapt seamlessly to various screen sizes and devices, offering optimal user experiences through flexible layouts and media queries.