

Assignment No:1

1. Create a responsive website for a fictional restaurant. The website should display correctly on devices of various sizes, using media queries and a mobile-first design approach.

Objective:

- To create a responsive website for a fictional restaurant.
- Use media queries for responsiveness of the webpage.

Theory:

1. Introduction to Responsive Web Design

Responsive Web Design (RWD) is an approach to web design that makes web pages render well on a variety of devices and window or screen sizes. It's a crucial concept in modern web development, ensuring that websites are accessible and user-friendly across different platforms, from mobile phones to desktop computers.

2. Mobile-First Approach

The mobile-first approach is a design strategy that prioritizes designing for mobile devices before designing for desktop or other devices. This approach has gained popularity due to the increasing use of mobile devices for web browsing.

3. CSS Media Queries

Media queries are a key component of responsive design. They allow you to apply CSS styles based on various parameters, most commonly the width of the browser viewport.

Example of a Media Query:

```
/* CSS */
@media screen and (min-width: 768px) {
  /* Styles for screens 768px and wider */
}
```

4. Flexible Layouts

Flexible layouts use relative units like percentages instead of fixed units like pixels. This allows content to adapt to different screen sizes.

5. Responsive Images

Images should adapt to different screen sizes to maintain performance and visual appeal.

Techniques:

- Use of max-width: 100%
- srcset attribute for serving different image sizes
- Picture element for art direction

6. Typography in Responsive Design

Typography plays a crucial role in responsive design. Font sizes, line heights, and paragraph widths should be adjusted for different screen sizes.

Best Practices:

- Use relative units (em, rem) for font sizes
- Adjust line-height for readability on different devices
- Consider font weight and contrast for legibility

7. Navigation Patterns for Responsive Design

Navigation is one of the most challenging aspects of responsive design. Different patterns can be used to make navigation accessible on smaller screens.

Common Patterns:

- Hamburger menu (as implemented in our design)
- Priority+ navigation
- Footer anchor

Conclusion:

It demonstrates Creation of a personalized site using HTML, CSS, JS and using and integrating frameworks like bootstrap and AJAX etc

GitHub Repo with Source Code :

[FSDL Assn 1](https://github.com/RudradevArya/FSDL/tree/main/1_responsive_restaurant)

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Output (Screenshots):

