CAP782:RESPONSIVE WEB DESIGN

L:3   T:0   P:2   Credits:4

Course Outcomes: Through this course students should be able to

CO1 :: understand the need of responsive web design

CO2 :: apply CSS media queries for responsive web design

CO3 :: apply responsive typography techniques to enhance readability on various screens.

CO4 :: develop a responsive web application that seamlessly adapts to different screen sizes and resolutions

Unit I

Getting started with responsive web design : understanding the RWD, pros/cons RWD, percentage based layout for fluid Width CSS, start with a pixel width layout and convert to percent, use and work with equation width= the target/context formula

Unit II

HTML5 structure for website : overview of html structure, CSS resets and html5, html for container, header, navigation, html for four column content area, html for two column footer

Unit III

Using CSS : writing CSS for navigation bar and logo, building CSS for navigation and its element, formatting header, formatting header and images in columns, formatting footer

Unit IV

Creating responsive websites with media query and images : media query structure, using media queries in stylesheet links, breakpoints, design ranges, using media queries, optimizing images, responsive images, image file formats

Adding media queries to fluid layout : build a media query for 600 px width, make the navigation bar fill the width of the device, centre and shrink the logo, adjust the text alignment of the header

Unit V

Working responsively: mobile and beyond : content before layout, responsive design tools, user experience, device-agnostic design, focusing on mobile first

Unit VI

Creating responsive websites to improve performance : performance as design, web pages loading and rendering, measuring performance, cleaning up your code, minimizing http requests, conditionally loading content, reflows and repaints

List of Practicals / Experiments:

PRACTICALS

- Write a practical to implement equationwidth= the target/context formula to design web page
- Write a practical to create the basic html page using html containers
- Write a practical to create the basic html page using html header navigation
- Write a practical to create the basic html page using html four column content area
- Write a practical to add the CSS elements in web page.
- Write a practical to create media queries to style the web pages
- Write a practical to modify the body style using breakpoints for the web pages
- Write a practical to create the device agnostic design for the web pages

Text Books:
1. LEARNING RESPONSIVE WEB DESIGN: A BEGINNER'S GUIDE by CLARISSA PETERSON, O'REILLY

References:
1. RESPONSIVE WEB DESIGN BY EXAMPLE by FRAHAAN HUSSAIN, PACKT PUBLISHING

2. RESPONSIVE WEB DESIGN WITH HTML5 AND CSS3 by BEN FRAIN, PACKT PUBLISHING