Thursday, 18 April 2024

Grids & Media Queries

Grid

Definition: CSS Grid Layout is a two-dimensional layout system for the web that allows you to create grid structures for layout and design.

Usage: Provides a powerful way to design complex layouts with rows and columns.

Benefits: Offers more flexibility and control over layout compared to traditional methods like floats and positioning.

grid-template-columns:

Purpose: Defines the columns of the grid layout.

Values: Can be specified in absolute units (pixels, inches, etc.), relative units (percentages, fractions), or flexible units (auto, minmax(), etc.).

grid-template-rows:

Purpose: Defines the rows of the grid layout.

Values: Similar to grid-template-columns, can be specified in absolute units, relative units, or flexible units.

grid-row:

Purpose: Specifies the grid items' location within the grid rows.

Syntax: start / end

grid-column:

Purpose: Specifies the grid items' location within the grid columns.

Media Queries in CSS:

Definition: Media queries are a feature in CSS that allow you to apply different styles based on the characteristics of the device or viewport, such as screen size, resolution, orientation, and more.

Usage: Used to create responsive designs that adapt to various devices and screen sizes.

Syntax: Media queries are written using the @media rule followed by one or more conditions enclosed in parentheses.

Conditions in Media Queries:

Device Width: @media (max-width: 768px) { ... }

Device Height: @media (min-height: 600px) { ... }

Orientation: @media (orientation: landscape) { ... }

Pixel Ratio: @media (min-resolution: 2dppx) { ... }

Aspect Ratio: @media (aspect-ratio: 16/9) { ... }

Feature Queries: @media (hover: hover) { ... }

Usage:

Apply different styles for smaller screens to improve readability and usability.

Adjust layout, font sizes, and spacing for various devices.

Load different images or background colors based on device capabilities.