**CSS Media Queries** allow you to apply different styles based on the screen's size, resolution, orientation, or device type. They're essential for building **responsive websites**.

**🔹 Basic Media Query Syntax**

@media media-type and (condition) {

/\* CSS rules here \*/

}

Now, let’s look at **common and practical examples**:

**✅ Example 1: Mobile First (Adjust Font Size)**

body {

font-size: 16px;

}

@media (min-width: 768px) {

body {

font-size: 18px;

}

}

@media (min-width: 1024px) {

body {

font-size: 20px;

}

}

🟢 **Explanation:** Font size increases with screen width (mobile → tablet → desktop).

**✅ Example 2: Hide Sidebar on Small Screens**

css

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.sidebar {

display: block;

}

@media (max-width: 600px) {

.sidebar {

display: none;

}

}

🟢 **Explanation:** Hides the .sidebar on screens **600px or smaller**.

**✅ Example 3: Change Layout Using Flexbox**

css

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.container {

display: flex;

flex-direction: row;

}

@media (max-width: 768px) {

.container {

flex-direction: column;

}

}

🟢 **Explanation:** Switches layout from **horizontal** to **vertical** on tablets and phones.

**✅ Example 4: Responsive Image Size**

css

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img.responsive {

width: 100%;

height: auto;

max-width: 400px;

}

@media (max-width: 500px) {

img.responsive {

max-width: 100%;

}

}

🟢 **Explanation:** Image scales down for smaller screens but caps at 400px for larger ones.

**✅ Example 5: Target Portrait vs Landscape**

css

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@media (orientation: portrait) {

body {

background-color: lightblue;

}

}

@media (orientation: landscape) {

body {

background-color: lightgreen;

}

}

🟢 **Explanation:** Changes background color based on device orientation.

**✅ Example 6: Dark Mode Support**

css

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@media (prefers-color-scheme: dark) {

body {

background-color: #121212;

color: white;

}

}

🟢 **Explanation:** Applies dark theme when the user’s system prefers it.

**✅ Example 7: Responsive Grid**

css

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.grid {

display: grid;

grid-template-columns: repeat(4, 1fr);

}

@media (max-width: 1024px) {

.grid {

grid-template-columns: repeat(2, 1fr);

}

}

@media (max-width: 600px) {

.grid {

grid-template-columns: 1fr;

}

}

🟢 **Explanation:** Adjusts the number of columns depending on the screen size.