# Responsive Web Design - Lab

## **Topics Covered**

Responsive web design (RWD) is a web design approach to make web pages render well on all screen sizes and resolutions while ensuring good usability. It is the way to design for a multi-device web. In this article, we'll help you understand some techniques that can be used to master it.

## Resources

- Responsive design
  - https://developer.mozilla.org/en-US/docs/Learn/CSS/CSS layout/Responsive Design
- Beginner's guide to media queries
  - https://developer.mozilla.org/en-US/docs/Learn/CSS/CSS layout/Media queries

## **Tasks**

## 1. Media Types

The page is being shown on a screen Media Types https://developer.mozilla.org/en-US/docs/Web/CSS/@media#media\_types Media types describe the general category of a device. Except when using the not or only logical operators, the media type is optional and the all type is implied.

For full screenshot check the screenshot.png file in the folder for the task

## **Objective:**

Create a webpage that looks like the screenshot above.

## **Requirements:**

- 1. File Setup:
  - Create an HTML document named media-types.html
  - Create a CSS file named media-types.css
- 2. Element creation
  - Add title of the page in an <h1> element
  - Add <h2> elements and p elements for each <h2> as shown on the screenshot
- 3. Styling
  - Add the standard reset styling padding, margin, box-sizing
  - Add the following styles the body element:
    - 1. Padding 2em
    - 2. Font 14px/1.5 Lato, sans-serif
  - Add padding-bottom of 1.5em to all paragraphs
  - Add the following styles to the body's ::before pseudo element



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- 1. Background-color #369
- 2. Color #fff
- 3. Padding 1em 1.5em
- 4. Margin-bottom 2em
- 5. Border-radius 0.3em
- Add the media gueries outlined in the text and screenshot

## 2. Media Features

The device is in landscape orientation **Media Features** Not complete list https://developer.mozilla.org/en-US/docs/Web/CSS/@media#media features hover

For full screenshot check the screenshot.png file in the folder for the task

## **Objective:**

Create a webpage that looks like the screenshot above.

## **Requirements:**

- 4. File Setup:
  - Create an HTML document named media-features.html
  - Create a CSS file named media-features.css
- 5. Element creation
  - Add title of the page in an <h1> element
  - Add <h2> elements and p elements for each <h2> as shown on the screenshot
- 6. Styling
  - Copy styling from Task 1
  - Add the media queries outlined in the text and screenshot

## 3. Logical Operators

```
Logical Operators
Used for combining multiple media features together into a single media query, requiring each chained feature to return true for the query to be true. It is also used for joining media features with media
@media (min-width: 800px) and (max-width: 1200px) {
    body::before {
         content: 'The viewport width is larger than 800px and smaller than 1200px';
```

For full screenshot check the screenshot.png file in the folder for the task

## **Objective:**

Create a webpage that looks like the screenshot above.

## **Requirements:**

7. File Setup:





















- Create an HTML document named logical-operators.html
- Create a CSS file named logical-operators.css

#### 8. Element creation

- Add title of the page in an <h1> element
- Add <h2> elements and p elements for each <h2> as shown on the screenshot

#### 9. Styling

- Copy styling from Task 1
- Add the media queries outlined in the text and screenshot

## 4. Media Feature - width

```
The viewport width is larger than 800px
Media Feature - width, min-width, max-width
(media (width: 800px) {
   body::before {
       display: block;
       content: 'The viewport width is exactly 800px';
```

For full screenshot check the screenshot.png file in the folder for the task

## **Objective:**

Create a webpage that looks like the screenshot above.

## **Requirements:**

#### 10. File Setup:

- Create an HTML document named media-feature-width.html
- Create a CSS file named media-feature-width.css

#### 11. Element creation

- Add title of the page in an <h1> element
- Add <h2> elements and p elements for each <h2> as shown on the screenshot

## 12. Styling

- Copy styling from Task 1
- Add the media gueries outlined in the text and screenshot

## 5. Media Feature - hover

```
The device does support hover
Media Feature - Hover
The primary input mechanism cannot hover at all or cannot conveniently hover (e.g., many mobile devices emulate hovering when the user performs an inconvenient long tap), or there is no primary
pointing input mechanism.
omedia (hover: none) (
```

For full screenshot check the screenshot.png file in the folder for the task

## **Objective:**

Create a webpage that looks like the screenshot above.













## **Requirements:**

#### 13. File Setup:

- Create an HTML document named media-feature-hover.html
- Create a CSS file named media-feature-hover.css

#### 14. Element creation

- Add title of the page in an <h1> element
- Add <h2> elements and p elements for each <h2> as shown on the screenshot

#### 15. Styling

- Copy styling from Task 1
- Add the media queries outlined in the text and screenshot

# 6. Complex Queries

The viewport height is larger than 680ps or the media type is screen and the orientation is portrait.

#### Complex Queries

https://developer.mozilla.org/en-US/docs/Web/CSS/CSS\_media\_queries/Using\_media\_queries#creating\_complex\_media\_queries

#### Combining multiple types or features

The and keyword combines a media feature with a media type or other media features. This example combines two media features to restrict styles to landscape-oriented devices with a width of at least

For full screenshot check the screenshot.png file in the folder for the task

## **Objective:**

Create a webpage that looks like the screenshot above.

## **Requirements:**

## 16. File Setup:

- Create an HTML document named complex-queries.html
- Create a CSS file named complex-queries.css

#### 17. Element creation

- Add title of the page in an <h1> element
- Add <h2> elements and p elements for each <h2> as shown on the screenshot

#### 18. Styling

- Copy styling from Task 1
- Add the media queries outlined in the text and screenshot















