

MERN Stack Journey

Class 5: CSS Box Model – Height, Width & Background Images

1. What is CSS Box Model?

The CSS Box Model describes how HTML elements are **structured and sized** on a web page. Every element is treated as a rectangular box.

In this class, we focus on: - Height - Width - Background Image - Background Size

2. Height Property

Definition

The CSS `height` property specifies the **height of an HTML element**.

Example:

```
.card {  
  height: 200px;  
}
```

MCQ Practice

Q1. Which CSS property specifies the height of an HTML element?

- A) height
- B) width
- C) color
- D) background-color

✅ **Answer:** A) height

Q2. Fill in the blank with an appropriate value for the CSS property.

```
.card {  
  height: _____;  
}
```

- A) 200px"
- B) 200
- C) 200px
- D) 200 px

✓ **Answer:** C) 200px

3. Width Property

Definition

The CSS `width` property specifies the **width of an HTML element**.

Example:

```
.card {  
  width: 250px;  
}
```

MCQ Practice

Q3. Which CSS property specifies the width of an HTML element?

- A) height
- B) width
- C) color
- D) background-color

✓ **Answer:** B) width

4. CSS Background Properties

4.1 Background Image

Definition

The CSS `background-image` property is used to **set an image as the background** of an HTML element.

Example:

```
.card {  
  background-image: url("https://d2clawv67efefq.cloudfront.net/ccbp-static-  
website/ocean.jpg");  
}
```

Important Notes

- The URL must be **valid**
- If height is not set, background image takes height of content

MCQ Practice

Q4. Which CSS property is used to add a background image to an HTML element?

- A) background-color
- B) background-image
- C) image-url
- D) background

✓ **Answer:** B) background-image

4.2 Background Size

Definition

The CSS `background-size` property specifies the **size of the background image**.

Example:

```
.card {  
  background-size: cover;  
}
```

Common Value

Value	Description
cover	Scales image to cover entire element while maintaining aspect ratio

🌀 **Aspect Ratio** = width / height

MCQ Practice

Q5. Which value of `background-size` scales the image to cover the entire element?

- A) contain
- B) fit
- C) cover
- D) stretch

✓ Answer: C) cover

5. Complete Working Code

index.html

```
<!DOCTYPE html>
<html>
  <head></head>
  <body>
    <div class="card">
      <h1>Tourism</h1>
      <p>Plan your trip wherever you want to go</p>
      <button>Get Started</button>
    </div>
  </body>
</html>
```

style.css

```
@import url("https://fonts.googleapis.com/css2?family=Roboto&display=swap");

.card {
  background-image: url("https://d2clawv67efefq.cloudfront.net/ccbp-static-website/ocean.jpg");
  background-size: cover;
  width: 250px;
  height: 200px;
}
```

6. Interview Questions (Class 5 – CSS Box Model Basics)

Basic Level

1. What is the CSS Box Model?

2. Difference between height and width?
3. What does `background-image` do?
4. Why should height be specified when using background images?

Medium Level


1. Difference between `background-size: cover` and `contain`?
2. What happens if width and height are not specified?
3. What is aspect ratio?

Sample Interview Answer

"The CSS Box Model defines how elements are sized and displayed. Properties like height, width, and background help control layout and appearance of UI components."

Summary

- `height` → sets element height
 - `width` → sets element width
 - `background-image` → sets background image
 - `background-size: cover` → covers entire element
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 **Next Class:** CSS Box Model – Margin, Padding & Border

Prepared as part of my MERN Stack Journey