

Infinite Carousel

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <title>Infinite_carousel</title>
  <style>
    .slider {
      height: 100px;
      margin: auto;
      overflow: hidden;
      position: relative;
      width: 100%;
    }

    .slider::before,
    .slider::after {
      background: linear-gradient(to right, white 0%, rgba(255, 255, 255, 0)
100%);
      content: "";
      height: 100px;
      position: absolute;
      width: 200px;
      z-index: 2;
    }

    .slider::after {
      right: 0;
      top: 0;
      transform: rotateZ(180deg);
    }

    .slider::before {
      left: 0;
      top: 0;
    }

    .slide-track {
```

```
-webkit-animation: scroll 40s linear infinite;
animation: scroll 40s linear infinite;
display: flex;
width: calc(250px * 14);
}

.slide {
  height: 100px;
  width: 250px;
}

@keyframes scroll {
  0% {
    transform: translateX(0);
  }

  100% {
    transform: translateX(calc(-250px * 7));
  }
}
</style>
</head>

<body>
  <div class="slider">
    <div class="slide-track">
      <div class="slide">
        
      </div>

      <div class="slide">
        
      </div>

      <div class="slide">
        
      </div>
    </div>
  </div>
</body>
</html>
```

HTML Code:

1. Document Type Declaration (<!DOCTYPE html>):

- Defines the document type and version of HTML being used.

2. HTML Structure:

- `<html lang="en">`: Specifies that the document is written in English.
- `<head>`: Contains metadata about the HTML document, such as character set, viewport settings, and the title of the page.
- `<meta charset="UTF-8">`: Sets the character set to UTF-8.
- `<meta name="viewport" content="width=device-width, initial-scale=1.0">`: Configures the viewport for responsive design.
- `<title>Infinite Carousel</title>`: Sets the title of the HTML document.
- `<style>`: Contains CSS styles for the document.

CSS Styles:

3. Styles for the Slider Container (`.slider`):

- `.slider`: Styles for the container of the carousel.
 - `height: 100px;`: Sets the height of the slider.
 - `margin: auto;`: Centers the slider horizontally.
 - `overflow: hidden;`: Hides content that overflows the slider.
 - `position: relative;`: Positions the slider relative to its normal position.
 - `width: 100%;`: Sets the width of the slider to 100% of the container.

4. Pseudo-elements for Gradient Overlay (`.slider::before` and `.slider::after`):

- `.slider::before, .slider::after`: Pseudo-elements for creating a gradient overlay on both sides of the slider.
 - `background: linear-gradient(to right, white 0%, rgba(255, 255, 255, 0) 100%);`: Creates a horizontal gradient from white to transparent.
 - `content: "";`: Generates content for the pseudo-elements.
 - `height: 100px;`: Sets the height of the pseudo-elements.
 - `position: absolute;`: Positions the pseudo-elements absolutely within the slider.

- `width: 200px;`: Sets the width of the pseudo-elements.
- `z-index: 2;`: Places the pseudo-elements above the slide track.

5. Styling for `slider::after`:

- `.slider::after`: Additional styling for the pseudo-element after.
- `right: 0;`: Positions the pseudo-element to the right of the slider.
- `top: 0;`: Positions the pseudo-element at the top of the slider.
- `transform: rotateZ(180deg);`: Rotates the pseudo-element by 180 degrees.

6. Styling for `slider::before`:

- `.slider::before`: Additional styling for the pseudo-element before.
- `left: 0;`: Positions the pseudo-element to the left of the slider.
- `top: 0;`: Positions the pseudo-element at the top of the slider.

7. Slide Track Animation (`slide-track`):

- `.slide-track`: Container for the individual slides and animation.
- `-webkit-animation: scroll 40s linear infinite;`: Applies the scroll animation to the slide track for webkit browsers.
- `animation: scroll 40s linear infinite;`: Applies the scroll animation to the slide track.
- `display: flex;`: Configures the container as a flex container.
- `width: calc(250px * 14);`: Sets the width of the slide track to accommodate all slides.

8. Individual Slide Styles (`slide`):

- `.slide`: Styles for each individual slide.
- `height: 100px;`: Sets the height of each slide.
- `width: 250px;`: Sets the width of each slide.

9. Keyframes for Scroll Animation (`@keyframes scroll`):

- Defines keyframes for the scroll animation.
- `0%`: Initial state of the animation.
- `100%`: Final state of the animation.
- `transform: translateX(0);`: Initial position of the slide track.
- `transform: translateX(calc(-250px * 7));`: Final position of the slide track, creating the scrolling effect.

HTML Body:

10. **Slider Container** (`<div class="slider">...</div>`):
 - Contains the slider with a track and individual slides.
11. **Slide Track** (`<div class="slide-track">...</div>`):
 - Contains individual slides and is animated to create the scrolling effect.
12. **Individual Slides** (`<div class="slide">...</div>`):
 - Each slide contains an image with a specified height and width.

Summary:

This code creates an infinite carousel with a scrolling effect using CSS animations. The individual slides are contained within a flex container, and a gradient overlay is applied on both sides of the slider to create a fading effect. The animation continuously scrolls through the slides, creating an infinite carousel effect.