



ANGULAR
ARCHITECTS

CSS Advanced

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Advanced

- Images & Background Images
- Units & Sizing
- Centering Elements
- Text & Fonts
- Forms

Agenda


Image

- width & height
 - inside a inline element → referring to the image size
 - inside a block element → referring to the block element
- position & sizing is limited
 - hacky solution is to set a negative margin
 - so we often use a image container
- but all modern browser support
 - object-fit: **fill** | cover (ratio, clipped) | contain (ratio, full image)

Image Container

- use a image container (<div>)
 - for easier position & sizing
 - display: block | inline-block
 - vertical-align as needed
 - maybe add some box-shadow to it
- also good for responsiveness (next topic)

Background Image I

- background-image: url("image.webp")
- background-position: center | 50% 50%;
- background-position: left top | 0% 0%;
- background-size: 100%;
- background-size: auto 100%;
-  – background-size: cover;
- background-repeat: no-repeat;

Background Image II

- `background: url("image.webp") left top/cover no-repeat`
- but background images are bad for A11y and SEO
 - so really just use it for backgrounds, not for content!

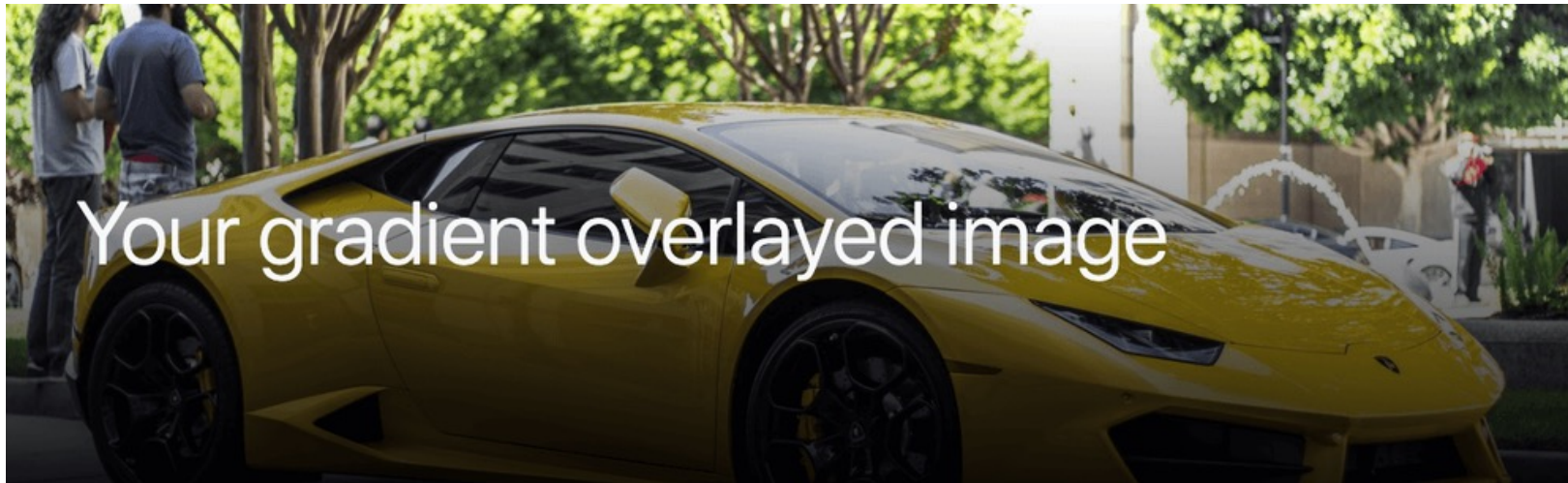
Background Gradients

- background-image: linear-gradient(red, transparent);
- background-image: linear-gradient(to bottom, red, blue);
- background-image: linear-gradient(0deg, red, blue);
- background-image: radial-gradient(red, transparent)
- <https://elementor.com/blog/gradients-in-web-design/>
- https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_images/Using_CSS_gradients

Background Gradient & Image

```
.fancy-background {  
  background: linear-gradient(180deg, rgba(0,0,0,0) 0%, rgba(0,0,0,0.90) 100%),  
  url('/path/image.jpg');  
  color: #fff;  
}
```

```
<div class="fancy-background"> Your gradient overlayed image </div>
```



<https://codingforeverybody.com/snippets/css-gradient-over-a-background-image>

Filters

- applied on the background / image
- `filter: blur(10px);`
- `filter: grayscale(10%);`
- <https://developer.mozilla.org/en-US/docs/Web/CSS/filter>

SVGs

- fill:
 - like background-color:
- stroke:
 - like border-color:
- stroke-width:
 - like border-width:
- https://dev.../.../docs/Web/SVG/Tutorial/SVG_and_CSS

Units

- px
 - absolute, independent of user settings
- %
 - relative to containing block
 - position: static / relative → block ancestor
 - position: absolute → ancestor with position other than default (static)
 - – position: fixed → viewport
- em & rem
 - relative to font-size
- vw & vh
 - relative to viewport size
 - svh / lvh / dvh ???

Recommended Units For Sizing

- font-size
 - `html { font-size: 100% }`
 - other elements in `rem` (em just for direct children)
- margin, padding
 - `rem`
- border
 - `px`
- width & height
 - `%` or `vw/dvh`, sometimes `px` or `rem`
- top, right, bottom, left
 - `%` or `rem`

<https://adrianroselli.com/2024/03/the-ultimate-ideal-bestest-base-font-size-that-everyone-is-keeping-a-secret-especially-chet.html>

Horizontally Centering Elements

- `margin-inline: auto;` - for block elements
- `text-align: center;` - for inline elements
- flex or grid (will be covered in detail in chapter 06)

```
.flex-center {  
  display: flex;  
  justify-content: center;  
  align-items: center;  
}
```

```
.grid-container {  
  display: grid;  
  place-content: center;  
}
```

Vertically Centering Elements

– old-fashioned:

– modern:

```
.parent {  
  position: relative; height: 400px;  
}  
.child {  
  position: absolute;  
  top: 50%; left: 50%;  
  transform: translate(-50%, -50%);  
}
```

```
.container {  
  display: flex;  
  align-items: center;  
}
```

```
.container {  
  display: grid;  
  place-items: center;  
}
```

Text & Fonts

- Font-families

- generic as fallback
- Google Font!?
 - use a common font or
 - include the font in your NG project (@font-face) using `.woff2` as format

- Font styling

- font-size, font-weight, font-style
- line-height, letter-spacing, white-space
- text-decoration, text-shadow
- white-space: no-wrap; overflow: hidden; text-overflow: ellipsis

Forms

- Form fields have default styling
 - which we tend to overwrite
- Provide a good form UX
 - Using :focus with border-color / outline
 - And .is-invalid with (red) border-color / outline

Best Practices

- position & size images containers/object-fit
- avoid background-images for content
- use appropriate units & centering
- if at all include font as .woff2 via @font-face
- add user feedback (UX) to your forms

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Summary

The background is an abstract composition of geometric shapes. The upper portion features a bright purple sky with soft, white, cloud-like patterns. Below this, a series of dark, intersecting lines form a perspective that leads the eye towards the center. The lower portion of the image is a deep red color, overlaid with a grid of thin, dark lines that create a sense of depth and structure.

Questions?