Filter

PW SKILLS
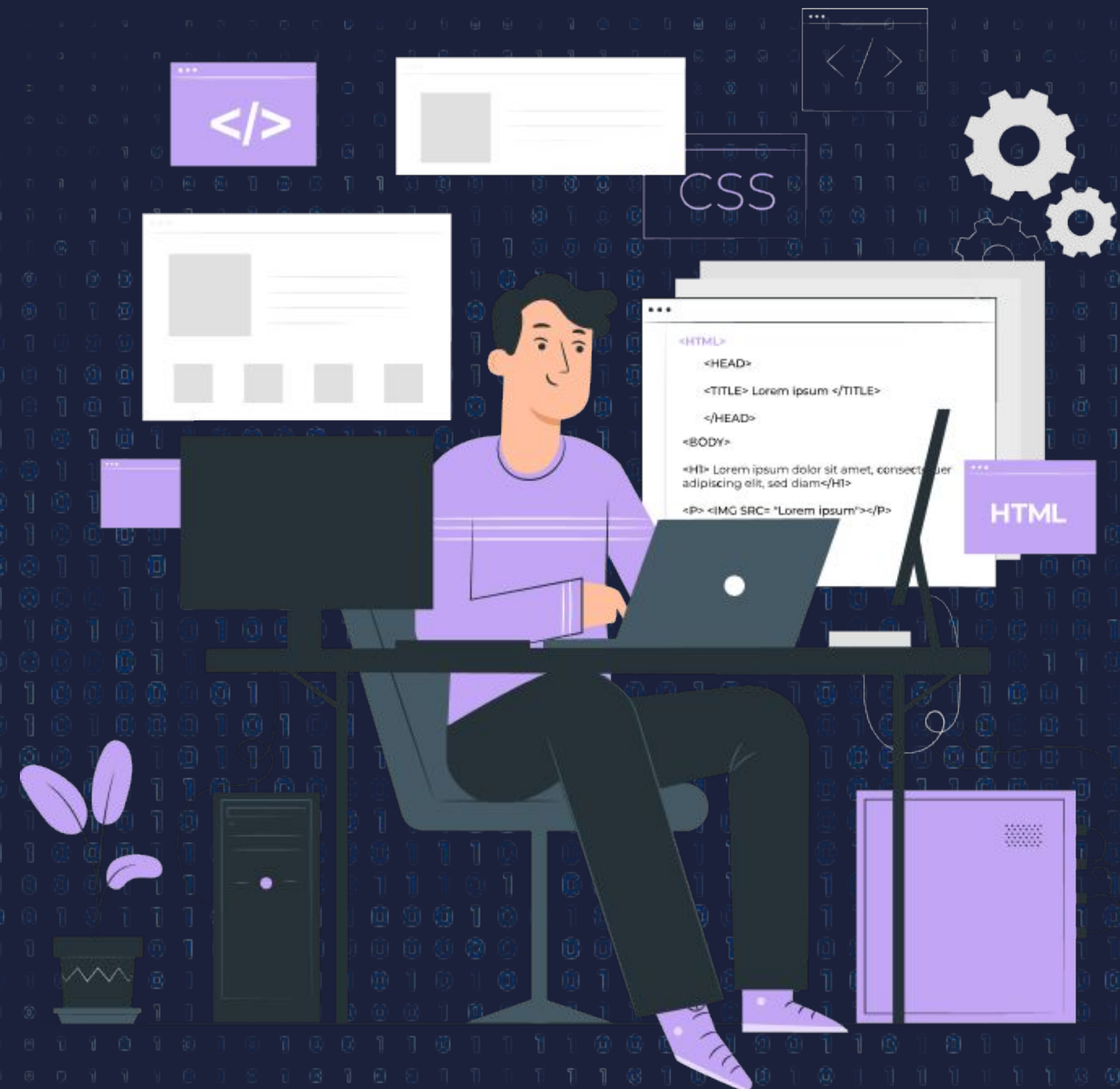
Topics Covered

- What is a filter?
- Syntax of filter
- Common Filter functions
- Combining multiple filters

What is a filter?

Apply various graphical effects such as colour shift or blur to an element

Syntax of filter

To apply filters, we use following syntax,

```
filter : <filter-function>
```

where, filter-functions are predefined functions used to apply various visual effects to elements on a web page.

Filter functions - Blur
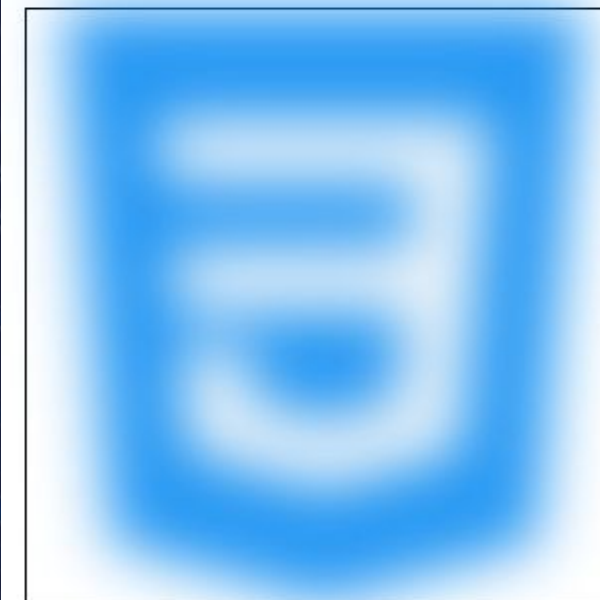
Duration of the transition in seconds or milliseconds.

```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Filter</title>
  </head>
  <body>
    <div>
     <img

src="./assets/css.png"
      alt="image"
      width="100%"
     />
    </div>
  </body>
</html>
```

CSS

```css
div {
    border: 1px solid black;
    width: 200px;
    height: 200px;
}

img {
    filter: blur(10px);
}
```

Output

Filter functions - Brightness

Duration of the transition in seconds or milliseconds.

```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Filter</title>
  </head>
  <body>
    <div>
     <img
src="./assets/css.png"
alt="image" width="100%"
     />
    </div>
  </body>
</html>
```

CSS

```css
div {
    border: 1px solid black;
    width: 200px;
    height: 200px;
}

img {
    filter: brightness(0.4);
}
```

Output

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Filter functions - Grayscale

Duration of the transition in seconds or milliseconds.

HTML

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Filter</title>
  </head>
  <body>
    <div>
      <img
src="./assets/css.png"
alt="image" width="100%" />
    </div>
  </body>
</html>
```

CSS

```
div {
    border: 1px solid black;
    width: 200px;
    height: 200px;
}

img {
    filter: grayscale(0.8);
}
```

Output

Filter functions – Hue Rotate

Duration of the transition in seconds or milliseconds.

HTML

```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Filter</title>
  </head>
  <body>
    <div>
      <img
src="./assets/css.png"
alt="image" width="100%" />
    </div>
  </body>
</html>
```

CSS

```css
div {
  border: 1px solid black;
  width: 200px;
  height: 200px;
}

img {
  filter: hue-rotate(90deg);
}
```

Output

Filter functions - Drop Shadow

Duration of the transition in seconds or milliseconds.

HTML

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Filter</title>
  </head>
  <body>
    <div>
      <h1>Filter is
Easy</h1>
    </div>
  </body>
</html>
```

CSS

```
h1 {
    color: rgb(71, 76, 167);
    filter: drop-shadow(30px 30px
0 rgb(103, 97, 97));
}
```

Output

Combining Multiple Filters

Duration of the transition in seconds or milliseconds.

HTML

```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Filter</title>
  </head>
  <body>
    <div>
      <img
src="./assets/css.png"
alt="image" width="200px" />
    </div>
  </body>
</html>
```

CSS

```css
img {
    filter: drop-shadow(30px 10px
2px #3fb1e2)
    hue-rotate(90deg)
    drop-shadow(30px 10px 2px
#3fb1e2);
}
```

Output