

# D3 Workshop 2

Interactions & Animations

# Workshop Overview

- Callbacks in JS and D3
- Tooltips in D3
- Brushing in D3
- Linking in D3
- Q & A

# Callbacks/Asynchronous Programming

Function executed not sequentially, but instead after a task is completed.

```
const message = function() {  
    console.log("Printing this after a delay");  
}  
  
setTimeout(message, 5000)
```

# Callbacks/Asynchronous Programming

```
setTimeout(function() {  
  
    console.log("Printing this after a delay");  
  
}, 5000);
```

# Callbacks/Asynchronous Programming

```
setTimeout(() => {  
  
    console.log("Printing this after a delay");  
  
}, 5000);
```

# DOM Events

## Examples:

- On page load
- Mouse over
- Click
- Double-Click

```
<button id="click-me-btn">Click here</button>
```

```
document.getElementById("#click-me-btn")  
    .addEventListener("click", function() {  
        alert("User has clicked on the button!");  
    });
```

# Event Listeners in D3

```
<button id="click-me-btn">Click here</button>
```

```
<script>
```

```
  d3.select("#click-me-btn")
    .on("click", function(/* event, datum */) {
      alert("User has clicked on the button!");
      d3.select(this)
        ....

    .on("mouseout", function() {
      ...
    });
```

```
</script>
```

Now for the code!