Link: https://kerwinteh.github.io/cs20/Assignment8/index.html

index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <title>APIs</title>
   <script src="index.js"></script>
   <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script
>
   <style>
       body {
           background-color: #2d2f45;
           color: white;
           width: 100%;
           display: flex;
           margin: 2%;
       }

       h2{
           background-color: #62b89d;
           border-radius: 25px;
           padding: 25px;
           width: 80%;
       }

       p {
           max-width: 70%;
       }

   </style>
</head>
<body>
<div>
   <h1>APIs</h1>
   <h2>Using AJAX</h2>
   <p id="AJAX"></p>
   <br/><br/>

   <h2>Using Fetch</h2>
   <p id="fetch"></p>
   <br/><br/><br/><br/><br/>
```

```
   <h3>API Results</h3>
   <p>This is CoinCap API. It gives real-time pricing and market activity for
over 1000 cryptocurrencies.</p>
   <p>API website: https://docs.coincap.io/</p>
   <p>There are several options for this API. The one I used was the asset
option where I can see a list
   of asset data they have. From there, I filtered the assets by id and used
that to find bitcoin data such as
   its name, symbol and current real time price.</p>
   <p>2 options where this could be useful is when trying to create a
cryptocurrency trading app and
   when someone just simply wants to keep track of the bitcoin prices without
having to go into an app everyday.
   For example, by using this API, I can just open this website and check live
bitcoin prices everyday!</p>
   <br/><br/>

   <h3>Question</h3>
   <p>The most challenging part about this assignment was figuring out how to
access the element I wanted to
   in the json object using javascript. The most satisfying part of this
assignment was after I completed it and
   refreshed, I saw the bitcoin prices actually changing according to real time
and I didn't know it did that
   prior to doing this assignment.</p>
</div>
</body>
</html>
```

index.js

```
//AJAX
const req = new XMLHttpRequest();
req.onreadystatechange = function () {
 if(req.readyState === 4 && req.status === 200) {
     const json = JSON.parse(req.responseText);
     $("#AJAX").append("Name: " + json.data[0]["id"] + "<br/>");
     $("#AJAX").append("Symbol: " + json.data[0]["symbol"] + "<br/>");
     price = parseInt(json.data[0]["priceUsd"]);
     $("#AJAX").append("Price (USD):  " + price.toFixed(2));
 }
};
req.open("GET", "https://api.coincap.io/v2/assets?ids=bitcoin", true);
req.send();


fetch("https://api.coincap.io/v2/assets?ids=bitcoin")
   .then(res => res.json())
   .then(json => {
       $("#fetch").append("Name: " + json.data[0]["id"] + "<br/>");
       $("#fetch").append("Symbol: " + json.data[0]["symbol"] + "<br/>");
       price = parseInt(json.data[0]["priceUsd"]);
       $("#fetch").append("Price (USD):  " + price.toFixed(2));
   })
```

Using postman