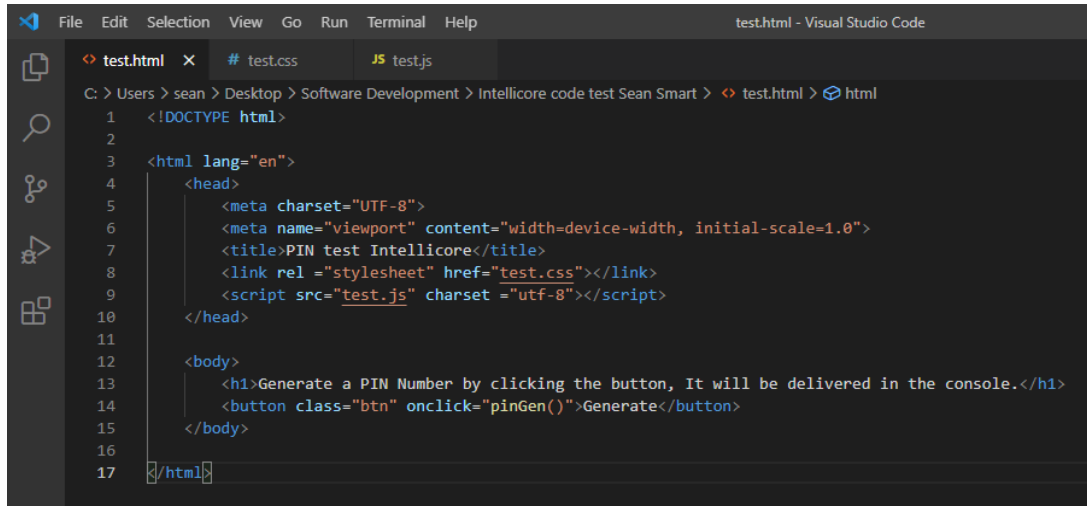


Intellicore Coding Challenge Documentation

I decided to use HTML, CSS and JavaScript for the challenge because I have had commercial experience in these technologies.



```
1 <!DOCTYPE html>
2
3 <html lang="en">
4   <head>
5     <meta charset="UTF-8">
6     <meta name="viewport" content="width=device-width, initial-scale=1.0">
7     <title>PIN test Intellicore</title>
8     <link rel="stylesheet" href="test.css"></link>
9     <script src="test.js" charset="utf-8"></script>
10  </head>
11
12  <body>
13    <h1>Generate a PIN Number by clicking the button, It will be delivered in the console.</h1>
14    <button class="btn" onclick="pinGen()">Generate</button>
15  </body>
16
17 </html>
```

The html lang displays that the language in the code will be displayed in English.

The link rel connects the CSS file with your HTML, while the script src connects your JavaScript file to your HTML.

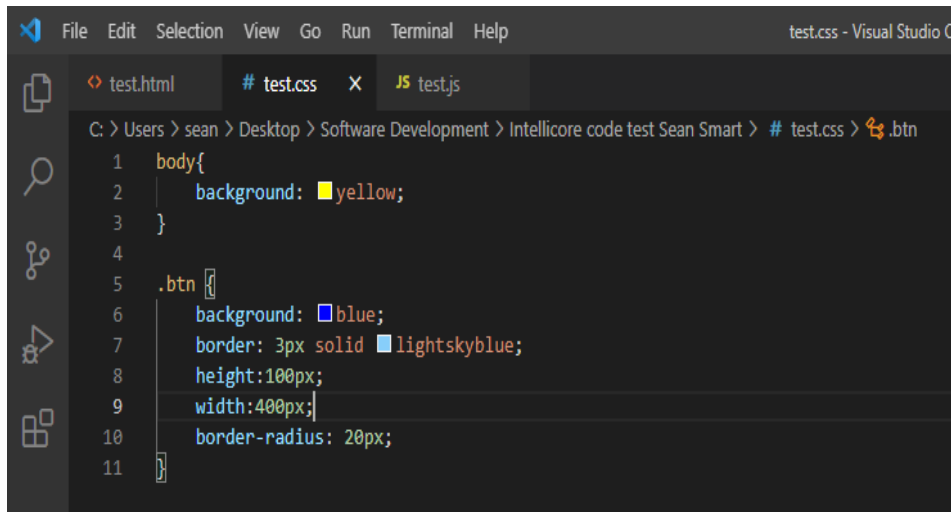
The viewport and the device width and initial scale ensures the webpage will fit on any device from laptop to tablet and to mobile phone.

All these remains in the head tag.

The body tag is where all the content will appear in your HTML file.

The h1 tag will display a header on your page, a header is mostly used in titles.

The button class is to name the button which is going to generate your 4 digit PIN and create the function, the onclick is when the JavaScript functions in the JavaScript file gets called into the HTML file.

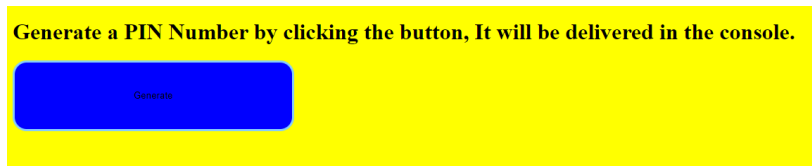
A screenshot of the Visual Studio Code editor interface. The top menu bar includes File, Edit, Selection, View, Go, Run, Terminal, and Help. The title bar on the right says 'test.css - Visual Studio C'. The editor has three tabs: 'test.html', '# test.css', and 'JS test.js'. The active tab is '# test.css', showing the following CSS code:

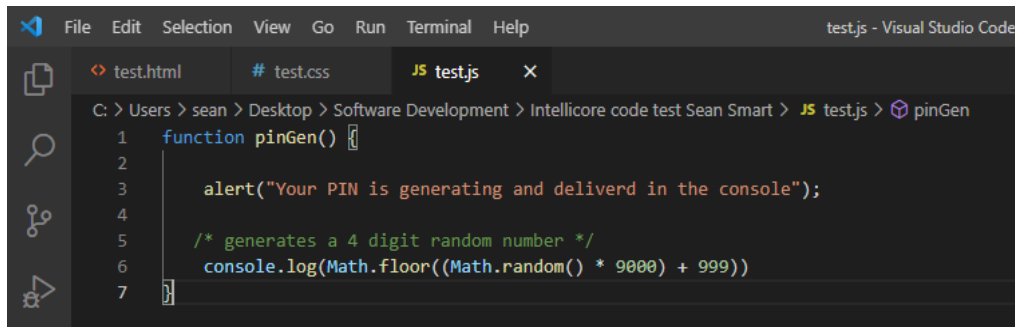
```
1 body{
2   background: yellow;
3 }
4
5 .btn {
6   background: blue;
7   border: 3px solid lightskyblue;
8   height:100px;
9   width:400px;
10  border-radius: 20px;
11 }
```

The left sidebar shows icons for Explorer, Search, Source Control, Run and Debug, and Extensions. The status bar at the bottom indicates the file path: 'C: > Users > sean > Desktop > Software Development > Intellicore code test Sean Smart > # test.css > .btn'.

The CSS file styles all of the HTML elements, the body is the entire background of the page, typing in background and any colour you want will make the background of your page the selected colour, the semi colon is used to close the command so it's important to close or you will encounter problems later.

The btn which we have named our button in the HTML file. Here we style the background colour of our button, the border is developed outside the button about how noticeable or thick the border looks, the height and width is to increase the size and how wide we want our button and the border radius creates the curves to make the button feel smooth.





```
1 function pinGen() {
2
3     alert("Your PIN is generating and delivered in the console");
4
5     /* generates a 4 digit random number */
6     console.log(Math.floor(Math.random() * 9000) + 999)
7 }
```

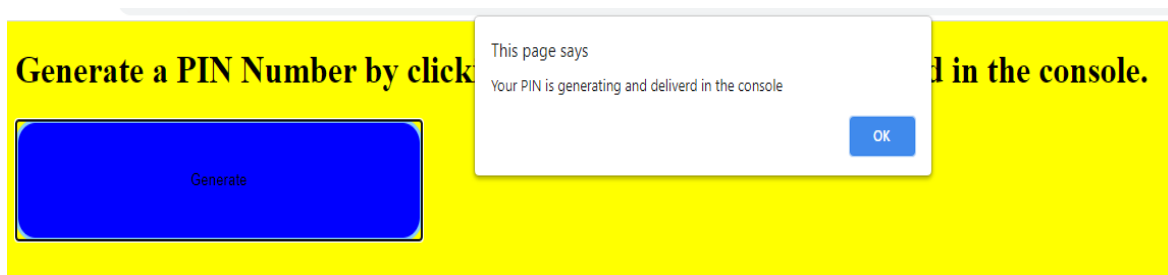
In the JavaScript file to create the interactivity for the button. We create a function `pinGen()` which is called back in the HTML file where it is defined in the `onclick` which assures the HTML and JavaScript file are working together.

The alert creates a warning message after the action is performed.

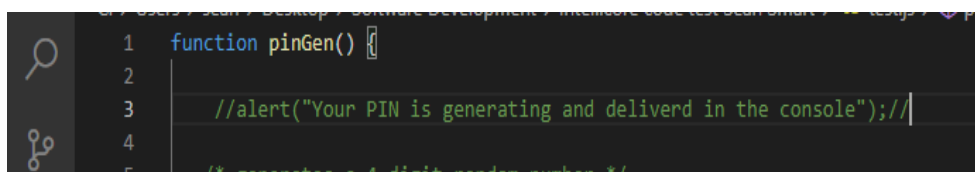
A single line comment (`/* */`) is used to document what you are doing in your code which comes in handy when you are dealing with lots of code and you won't get lost while looking back.

Console log will log all of the data of the 4 digit PINs once the button has been pressed.

The Math function is used since it is an object and the floor is to know what is being used inside the brackets, the `.random` will display numbers at a random order and the `*` multiplies the number inside the bracket with the maximum number of 9000.



I've commented out the alert code because it can be a bit irritating for the message to constantly appear every time that the button is pressed.



```
1 function pinGen() {
2
3     //alert("Your PIN is generating and delivered in the console");//
4
5     /* generates a 4 digit random number */
```


To test it in the debugger you go onto sources on your console and click on the js file you can add breakpoints by clicking on the line of code displayed on the left to click on the button a message will appear "Paused in debugger" you can click on the play button and the function will perform its action or you can press f10 to follow through the code which the JavaScript and the other files work together to perform its action.