NM2207 Week 9 Intermediate Submission Archangel Quinterra (A0201173X)

Project proposal:

- Formula 1 2023 Season Predictions!
- The project comprises two pages:
 - The first page is the introductory page, which presents the 2022 season recap through a line chart depicting the growth of points for every F1 Constructor (team) throughout the season.
 - O The second page is the prediction page, which allows the users to put in predictions for Drivers' Championship, Constructors' Championship, the team they think will be a pleasant surprise, and Rookie of the Year. Once they submit the predictions, the page will reflect their choices, which the users can screenshot for keepsake purposes!

Data source: <u>2022 Abu Dhabi Grand Prix – FIA</u> (Page 4: Constructors' Championship)

Week	Concept	How I've used it	Line Number	Filename
2 – My first	HTML	Creating an HTML page	(whole	Index.html
Website			document)	Predictions.html
	HTML tags	Using HTML tags to define what the content inside the	(whole	Index.html
		tags will be, and dictate how such content will be	document)	
		presented	(whole	Predictions.html
			document)	
	HTML div class & ID	Classifying div class & ID on the HTML tags to be used	14-16, 18-19,	Index.html
		for:	32, 40	
		- Defining styles in CSS based on div class & ID	14-16, 18-19,	Predictions.html
		- Later concepts when class are used as reference	25, 99	
		to make changes to HTML from JavaScript		
	CSS	Creating a CSS page to define and standardize the style	(whole file)	Appstyle.css
		(look and feel) of the HTML pages		
		Linking CSS files to the HTML document	5	Index.html

			Predictions.html
Forms	Using forms to obtain users' predictions	26-95	Predictions.html
	Drop-down (option values) To choose the users' predictions for Drivers' Championship, Constructors' Championship, the team they think will become a pleasant surprise, and Rookie of the Year.	27-81	Predictions.html
	Text input To input the user's name, whereby its value will be used to generate a greeting through JavaScript	83-86	Predictions.html
	Button To submit the form, and as reference for JavaScript to execute certain functions when the button is being clicked.	92-97	Predictions.html
JavaScript document	Creating a Javascript document to perform functions and make changes to the HTML body	(whole file)	Main.js Predictions.js
Linking JavaScript	Linking the JavaScript documents to respective HTML pages	6	Main.js Predictions.js
_		Drop-down (option values) To choose the users' predictions for Drivers' Championship, Constructors' Championship, the team they think will become a pleasant surprise, and Rookie of the Year. Text input To input the user's name, whereby its value will be used to generate a greeting through JavaScript Button To submit the form, and as reference for JavaScript to execute certain functions when the button is being clicked. JavaScript document Creating a Javascript document to perform functions	Drop-down (option values) To choose the users' predictions for Drivers' Championship, Constructors' Championship, the team they think will become a pleasant surprise, and Rookie of the Year. Text input To input the user's name, whereby its value will be used to generate a greeting through JavaScript Button To submit the form, and as reference for JavaScript to execute certain functions when the button is being clicked. JavaScript document Creating a Javascript document to perform functions (whole file)

	Window.alert() Window.open()	Tests whether the object "driversChampion" have correctly extracted the value for drivers' champion from index.html Shows an alert dialogue box when its corresponding	100	Main.js
		function is executed For instance: window.alert("Let's go make some bold predictions!") Displays the message string inside "" when the function is executed	7	Predictions.js
		window.open("predictions.html"); Upon a user clicking the "clickButton" ID on index.html, the browser opens a new window, that is "predictions.html"	101	Main.js
	Document.getElementById()	Used to refer to the specific "id" on index.html or predictions.html, to perform tasks such as: . value = extract value . innerHTML = show string/message on the html document . onclick = performs a function whenever ID is clicked (more detailed explanations below)	96 5,8 16-17, 19 42-43.45 70-71, 73 98-99, 101 113	Main.js Predictions.js
4 – My first Function	Creating a function Objects	Function buttonFunction() A function that executes:	99-102	Main.js

 "window.alert()" showing an alert box prompting the user to input their predictions, and "window.open()" that opens predictions.html on a new tab where users can input their predictions 		
Function recapPredictions() A function that executes a lot of different things, including: - A "window.alert()" greeting thanking the user for submitting their predictions, the user's name extracted from their input in the form - For every prediction: extract predictions from the form on index.html and create a sentence (using strings) to recap the prediction - Show an image of the chosen value using the if/else/elseif statement	3-110	Predictions.js
Using var to define arrays that contain datasets For instance: var RedBull = [an array of RedBull's points progression]	2-13	Main.js
Using var with document.getElementById("id") to refer to the ID in index.html For instance: var clickButton = document.getElementById("clickButton")	96	Main.js

	Using var to refer "clickButton" on main.js to an ID called "clickButton" on index.html		
	Using var with document.getElementById("id").value to extract value from a user's choice on its corresponding ID on index.html	5 16 42 70	Predictions.js
	For instance: var driversChampion = document.getElementById("drivers").value;	98	
	sets driversChampion as the value of whatever a user chooses on the "drivers" ID of index.html		
	Using var with document.getElementById("Id)".innerHTML to display a string of sentences on its corresponding "id" on index.html	8 17 43 71 99	Predictions.js
	For instance: document.getElementById("greeting").innerHTML = "May your predictions come true, " + guestName + "!"		
	Displays the message string on the "greeting" ID of index.HTML		
Calling functions	Calling the function after they are being declared so that the function will be executed For instance: recapPredictions();	114	Predictions.js

		calls the "recapPredictions();" function		
5 – My first Event	.addEventListener	document.getElementById("recapButton").onclick = function() Using add event listener that executes a function, "buttonFunction()", whenever a user clicks on the "clickButton" ID on index.html	96-97	Main.js
	onclick	document.getElementById("recapButton").onclick = function() { Using .onclick to perform the "recapPredictions()" function whenever a user clicks the "recapButton" ID on predictions.html	113-115	Predictions.js
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6 – My first Loop	If else statement	After extracting values from the form, I use if, else if, and if to show an image of the user's chosen option (from index.html) under each corresponding statement For instance:	20-38 46-66 102-108	Predictions.js
		<pre>if (driversChampion == "Max Verstappen") { driversChampionImage.setAttribute("src", "resources/MaxVerstappen.jpg");</pre>		
		On predictions.html, if a user chooses the "Max Verstappen" option for their Drivers' Champion prediction, JavaScript will look for driversChampion == "Max Verstappen" and show an image of Max Verstappen on its respective ID		

7 – My first Chart	Add chart JS	Linking chart JS to index.html	7	Index.html
	Canvas ID	Adding canvas ID on index.html to provide a "container" for the line chart to appear on the HTML page - Adding the width and height of the chart in the same tag as canvas ID -	35	Index.html
	Preparing data	Adding data as a set of arrays in the JavaScript file	2-13	Main.js
	Chart	Using line chart to present the growth of points for each F1 team throughout the 2022 season	2-94	Main.js
	Type: line	Defining chart type as line chart	16	Main.js
	Options	Configuring the title text, legend display, and legend position	17-25	Main.js
	Data	Creating labels for each dataset, adding datasets to each label, and choosing its border colors	27-94	Main.js
8 – My first Dataset	Arrays	Adding datasets as arrays in JavaScript	2-13	Main.js