

DOM Manipulation/Event Handler – Form Validation:

- This function will check the “Join Mailing List” form to make sure that when users submit their information, the required fields (like Name and Email) are filled in properly.
- We'll create a helper so that as the user types, they get immediate feedback if something isn't right.
- We'll also check if the text matches a specific pattern and use built-in browser features to ensure everything is formatted correctly.

API Integration – Google Maps:

- This feature will embed a Google Map on the website, showing where the Duquesne Incline is located. The map will also have a marker and an info window that gives more details about the attraction.
- First, we'll add the Google Maps API script into our HTML file.
- Then, we'll write a function that initializes the map by setting the right coordinates and placing the marker with its information.

jQuery Implementation – Interactive Image Carousel:

- This feature creates an interactive carousel that lets users slide through a gallery of images.
- We'll use jQuery to handle the necessary animations, making the carousel smooth and engaging.
- When the page loads, jQuery will initialize the carousel.