

Site Link

Part One

Within my website, Ride the Burgh, I am creating a bike route recommendation website that offers a few different routes locally for riders in the Pittsburgh area. The site will include a map of the route, along with an elevation chart for along the route, using Google Maps API. The site includes permanent information about each route, and is responsive for both mobile and web related needs. The user will be able to download a route GPX file if they desire, so they can plug it into their phone or bike computer to ride along the route. My target audience is anyone who wishes to explore Pittsburgh on bike, and some routes are short enough that they could even be walking routes as well. I'm also providing resources about local bike shops and bike initiatives in the area to help support the local bike scene. One of the features of the site is a rating on how hilly the routes are, which is visually indicated by the elevation chart below the map. This would allow users to understand just what they are getting themselves into if they choose to go on a specific route, which is a feature not readily available if you just look at routes on Google Maps for example. I hope to encourage Pittsburgh's bike scene to continue to grow with this site, and help educate people about routes throughout the city, and intern educate them about the city itself along the routes.

Part Two

- Landing: The user can choose to enter into the route list by clicking the bottom link for Routes or by choosing that tab in the Nav Bar.
 - They can also click into the Resources tab to learn more about bike shops in the Pittsburgh area
- Routes Page: The user can select (click into) any of the available route cards to learn more about that specific route
- Specific Route Page: The user can view the route map's start and finish points, as well as the elevation chart over the course of the route, to understand how hilly the specified route is. FOR RESPONSIVE: The elevation chart doesn't change sizes unless the page is refreshed for responsive website when using Inspection on a browser, please refresh when checking!
 - If they enjoy the look of that route, they can download its .GPX file right from that page to their computer or phone. Do so by clicking the Download Route button.

Part Three

- I. Google Maps and Elevation API, Bootstrap
- II. I chose the Maps API partly because of its well-documented use elsewhere, but also for its propensity to work on all relevant browsers. I trust Google to keep this widely-used tool up to date in terms of both documentation and web protocols. Bootstrap was used to employ a responsive design.
- III. I used it to display the route I have created and to show the elevation along that route. So first I display the route on a map on the page using latitude and longitude values in my JS, and then I display the route's elevation using the same list to generate unique points along

the route to call elevation values from Google. Bootstrap was used for its responsive column system.

- IV. By showing the route and its elevation, I aim to help the user understand what the actual route looks like in context of the city, show where they're going, as well as display the elevation so they can understand what type of ride (challenging or not) to expect along the way. I implemented some of the columns from Bootstrap along with their nav bar.

Part Four

I iterated on the placement of the elevation chart. It made the most sense to display the elevation under the actual map, rather than under the site information. I also decided against including a search for the website, as the amount of information and content being displayed by the site itself isn't enough to actually warrant a search functionality.

Part Five

The most challenging aspect of this project was implementing the actual route along the map within the API. There are more effective ways to pull in route information, however I could not find a solid amount of documentation on it to implement in time. Since I have the .GPX files, it would have been nice to have the ability to just pull in the routes from them. Instead, I manipulated all the values from the .GPX for the second and third routes to implement them since they were longer.