Kalamazoo Route Planner

By:

Austin Miller, Bjarne Wilken, Christian Fuentes, Matthew Phillips and Mike Henke

Kalamazoo Route Planner is a website that calculates routes based on user inputs and preferences. The website utilizes common front-end technologies like JavaScript and HTML. The back end uses Python and other libraries, like Flask, to run the site and store data in a SQL Database. Walking and bicycling are the main modes of transportation for navigation which differs Kalamazoo Route Planner from other Navigation Applications. Given a set of points, the best route is then calculated and drawn on a map of the Kalamazoo area. The algorithm considers some stress factors when doing the calculations. Among them are speed limits, the typology of a road or path, as well as the amount of activity on them. In addition, the website will provide information about nearby amenities like pharmacies, bike parking, grocery stores, and more.