The Website for Planning Safe Route for Runner

By Using Google Maps API



Production Mission Statement

- The website can plan some safe routes for runner to choose so that the runner can run in a much more safe condition
- Also runner can **chose the distance** for running route, the website can process the proper route for them.
- The website consider the **Traffic on the road**, the **District policing** as the Primary considerations.
- The website have the air quality warning function and pollen warning for runner who allergy to pollen.
- So the function above the can plan a safe route for runner

Develop product user stories

User Story one:

• I am a runner who always run 5 mile in the evening after my dinner, I want to choose a route which has little traffic and is quiet.

User Story two:

• I am a middle school student, I want to run in a **safe route** with good district policing so that my parents will not worry too much.

User Story three:

• I have pollen allergies, I want to run in a route without pollen distribution.

Develop an MVP

Most Valuable

- Set up the route according to the choose for distance
- Select the routes which have less traffic and more safe
- Give warning according to pollen distribution and air pollution

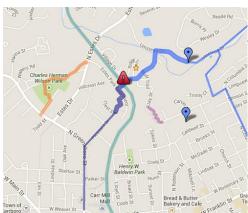
Most Valueless

Select route which has too much traffic light









Use third party APIs



Maps Static API

Embed a Google Maps image on your web page using a simple HTTP request, with no need for any other code.

Q Search Maps Static API docs



Pollen API

Use the Pollen API to get pollen information including types, plants, and indexes for a specific location.

Q Search Pollen API docs



Air Quality API

The Air Quality API allows you to request air quality data for a specific location including: more than 70 AQ indexes, pollutants, and health recommendations. It covers over 100 countries with a resolution of 500 x 500 meters.

Q Search Air Quality API docs



Directions API

Get directions between locations, for driving, cycling, transit, and walking.

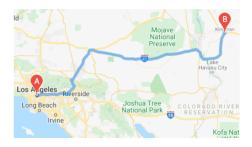
Q Search Directions API docs



Roads API

Identify the roads a vehicle is traveling along, and get metadata about those roads.

Q Search Maps Roads API docs



Routes API

Routes API is the next generation, performance optimized version of the existing Directions API and Distance Matrix API. It helps you find the ideal route from A to Z, calculates ETAs and distances for matrices of origin and destination locations, and also offers new features.

Q Search Maps Routes API docs