Sigurds Skangals, IT3

Skangals’ map documentation

The file is using HTML5 standards and UTF-8 encoding. The application is using Leaflet library for work with web map services and geoJSON.

**Base Map Layers**

The code defines four different base map layers that users can switch between using the layer control:

1. **OpenStreetMap** - The standard OpenStreetMap tile layer with basic street mapping.
2. **OpenStreetMap.HOT** - The Humanitarian OpenStreetMap Team map, optimized for humanitarian and disaster response mapping.
3. **LĢIS Topo50** - A map from Latvia's Geospatial Information Agency showing 1:50,000 scale topographic data.
4. **LA Topo75 (1940)** - A historical map from the Latvian Army's Geodesy and Topography Department showing 1:75,000 scale data from 1940.

Each layer includes appropriate attribution information as required by the respective data providers, ensuring compliance with licensing terms.

**Custom Bridge Overlay**

The code creates a custom GeoJSON layer displaying four bridges in Valmiera, Latvia. The bridges are defined as a FeatureCollection with LineString geometries, each representing a bridge as a line segment.

**Interactive Features**

The map includes several interactive elements:

* **Layer Control** - A standard Leaflet layer control allows users to toggle between the four base layers and show/hide the bridges overlay.
* **Marker** - A marker is placed at the location of Vidzeme University's Faculty of Engineering, with a popup displaying the institution's name.
* **Click Interaction** - When users click on the map, a popup appears showing the exact latitude and longitude coordinates of the clicked location, formatted to five decimal places.

The code uses Leaflet's event handling system to detect map clicks and respond by creating and displaying a popup at the clicked coordinates.