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Web Semantics Project 1

For our project, we chose to turn the GPX tracks and their associated OSM data into TTL files. We then loaded this into GraphDB in order to query our results. Additionally, we also queried DBpedia for some of the bigger elements (populated places) from our data.

Our schema is as follows:

TTL: Each TTL file is a GPXTrack. with waypoints, tracks, and nodes. Waypoints have specific names, while trackpoints are concerned with surrounding elements (hassurroundingnds and hassurroundingways). Nodes have more relations such as whether or not OSM provided tags giving additional data such as “amenity” or “tourism” or “leisure.” This format allowed us to load the TTL files into GraphDB in order to use SPARQL to query and display the data in a table.

DBpedia: We found the names, a brief summary, zip-code location, longitude, latitude, and country of the locations (if possible) from the names provided in the TTL file. Not every single node/waypoint/track has a DBpedia entry, and we found that the ones that do are generally very big cities/central hubs.