

What you implemented:

GeoJSON parser
Visual Studio 2012
Language: C++11
Dependencies: STD library, Boost library (only inline parts), WIN API

Your result (how many lines of code):

1093 lines of code
We didnt manage to make parser to all types of GeoJSON data
Supported parts are Point, MultiPoint, LineString, MultiLineString, Polygon and MultiPolygon.

Complete GeoJson specification: <http://geojson.org/geojson-spec.html>
(format specification - parts 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6 and 2.1.7)

Steps in code:

- Tokenization
- Lexical analysis
- Syntactic analysis
- Loop through tokens and perform detailed analysis
 - Ex: "after String token only ':' or '[' or '"' is expected"
 - Ex: "after ':' token only '{' or '[' is expected"
- Parse whether logic in data make sense
 - Ex: "must contain 'type' token"
 - Ex: "Point has only one array with coordinates"

What was difficult:

GeoJSON is quite complicated format to parse.
There is many different types of input data (from point to feature collection).
There are many things you need to check (arrays, members of arrays, bracket, correct parameters etc.).

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