Language processing IE (3° year)

First practical work - 2018/2019

3 GeoJSON Parser

GeoJSON is the JavaScript-based Object Notation (JSON) for describing geographic features, such as landmarks, paths, or terrain areas (https://en.wikipedia.org/wiki/GeoJSON). This work is to build a processor to validate texts in GeoJSON.

It is recommended that students begin by studying the notation to understand its syntactic structure and to implement the processor gradually, beginning with texts with simple elements such as Point and LineString, and only later integrate more complex elements.

The evaluation will take into account the quality of the material produced (regular expressions, grammar and final application), the coverage of the processor to validate the different descriptive elements of GeoJSON; the report and presentation; but also the originality of the solution. Note that GeoJSON notation is rich enough to avoid identical or similar implementations.

4 Rules for the practical work

- Work can be done individually or in groups of two elements;
- Until 17 May 2019, without any possibility of postponement, students should submit via VIRTUAL.IPB:
 - o A commented listing of the program (Lex and Yacc);
 - o The test files used to verify and validate the work;
 - A small report explaining the solution developed, the regular expressions, the grammar and, the achieved results.
- It is also require the presentation and demonstration of the work. What will happen in the practical classes of May 21, 2019;

Prof. Paulo Matos (06/05/2019)