

CSE 351 Programming Languages
FALL 2017
PROJECT
(Due: 22.12.2017 23:59)

JSON to XML Converter

In this project, you will write a converter which converts a JSON string to XML and makes semantic and syntax error checking in input string. This converter should be written using lex-yacc with C Language.

Notes for the project

- 1) You should write a JSON to XML converter which will be aware of some of the tree-structure of the JSON strings. This means, you should write a converter which recognizes all primitive types in an object, primitive type arrays in an object in a JSON string. Your converter should recognize all combinations of white space characters in input file.
- 2) Your converter should, at least, convert the example input files to the corresponding output files. **Note that, your converter should do conversion operation without need of manual modification to those input files.**
- 3) If there is syntax and semantic error in input JSON string, the converter should warn user and terminate the operation.
- 4) You should include a detailed comment in your converter's lex and yacc files when you use any statements, expressions and concepts which are not explained in lab sections. Please, feel free to write your comments in Turkish. We will control your comments and if we think the comments are not adequate to explain what is going to be done or you do not write any comment, your project will be graded out of 0 and behaved as a copied project. Please do not forget that, in the project demo, you will be asked questions about comments you will have written in the codes.
- 5) In the project demo, we can give extra input files to the converter, so please write a generic converter and do not forget that, at least, your converter should convert these files to the corresponding output files. **Note that, your converter should do conversion operation without need of manual modification to those input files.**
- 6) Project submissions will be controlled using MOSS system for plagiarism. Copied projects will be strictly punished !! Please do not forget that the all warnings for all works which has been done during the semester is valid for the project.
- 7) **This work should be done individually. Collaborative or group works will not be accepted !!**

- 8) Note that you are responsible with the files you will send for your project assignment. In addition, you should prepare a README file which explains clearly the directives for building and running your converter using files you will send for your project assignment. **In a such case that you do not send all necessary files and README file which explains clearly the directives to build and run the converter, we will directly consider your project as not working without asking.**
- 9) Please send your files corresponding to the project (i.e, at least, the files that we can build and run your converter clearly, the example input files you will have studied and the README file which consists directives how you build and run your converter) in a zip file to the **COADSYS** link for the project until 22.12.2017 23:59. Name your file as <your_name>_<your_surname>_CSE351Project.zip (example: Kemal_Serdaroglu_CSE351Project.zip). **The late assignments and assignments via E-mail will not be accepted !!**

GOOD LUCK