

FullStack Engineer Assignment :: IETM

Objectives

- Develop an XML parser **without any XML parsing library**. Tech stack does not matter.
- The solution must be a REST API with the following endpoint:
 1. POST :: /api/xmlToJson:
 - This endpoint has to receive the XML file `test.xml` as its input. No body.
 - The output of this endpoint has to be a JSON file `output.json` containing the JSON representation of the XML structure.
 - The hierarchy and structure of the XML file ought to be maintained.
 - **Note:** Your solution will be tested with several internal hidden XML files to ensure robustness and correctness of your parser implementation.
 - Implementing core XML features is required:
 - * XML declaration (`<?xml version="1.0" encoding="UTF-8"?>`)
 - * Comments (`<!-- -->`)
 - * Nested elements with proper hierarchy
 - * Attributes on elements (both single and multiple)
 - * Self-closing tags (`<element/>`)
 - * Text content in elements
 - * Entity references (`&`, `<`, `>`, `"`, `'`)
 - * Mixed content types
- The project must be deployed to any cloud and the API endpoints and the frontend must be publicly accessible in order for us to asses your solution.
- The code must be comitted to a version control system and commit messages should be explanatory. At least the subject of the commits must be self-explanatory.
- Time constraint for this project is 48 hours.

Deliverables

1. Link to project code stored in a version control system (GitHub/GitLab/Other).
2. Link to deployed project (REST API) on any cloud platform.
3. 'README.md' file with instructions to building and running your assignment solution. Should also include documentation for all endpoints. (should be checked into version control)
4. 'APPROACH.md' file, explaining your approach. (should be checked into version control)

Undesirable

- Code generated via AI for the parser.