Documentation of Project Implementation for IPP 2020/2021
Name and surname: Richard_Hrmo
Login: xhrmor00

Parse.php

Script is written in one file without using `OOP principles`, because I found using them unnecessarily complicated for simple script like this. Script is basically made out of one `while` cycle, which reads through whole inputed file line by line and out of `switch` and `if` commands which compare if conditions are met. By conditions I mean for example matching `regex` or matching name of command (operation) in switch. Then code translated to `XML` language is printed out line by line as while cycle continues. I remember I had one specific problem in command `READ` because it is only command that uses `type` as it's second atribute. I solved it by adding one `if` command before `switch` begins that is speccifically made only for `READ`. That's because I couldn't find a way how to proceed it with other commands. Every other command else goes to `else` branch and is proceeded there.

Regex

Mainly 3 `regexes` are being used, which I defined as `var`, `label` and `symbol regex`. They are used to check if commands of inputed file meet lexical and syntactic code correctness. There are other regexes in code as well, but they are not defined because they are used once or twice. For example `regex` to check if header in code is correct or to check for spaces and tabulators.

XML code

`XML` code is printed out line by line after checking if code is correctly written. For printing out `XML` code I only use `echo` and `htmlspecialchars` commands. Htmlspecialchars command takes imputed `string` and changes it into `XML` string. For example if there is < character in string it changes it to `<`. After `string` is adjusted it is printed out through `echo` command with other text, usually XML commands.