Reviewer: Henry

Code reviewed: XML.py

Date reviewed: November 13, 2016

Author: Kris Lai

**Bugs**

1. Defect: Incorrect output

Priority: Low

Description: Values that are the same but represented in different significant digits are labelled as ‘mismatch’.

Steps to reproduce:

1. Input: two xml file names (xml1, xml2) where the same attribute has the same value but represented in different significant digits. E.g: first file has <metallicity>1234</metallicity> and the second one has <metallicity>1234.00</metallicity>

ii. Run main(xml1, xml2)

iii. Open outputted CSV file and see the ‘metallicity’ tag marked as ‘mismatch’

1. Defect: Program crashes

Priority: Medium

Description: Program crashes when main receives in its parameter a file name which does not exist. Depending on integration, this can be problematic if system does not exist in his repository.

Steps to reproduce:

1. Input: two xml file names (xm1, xml2), either one is not contained in working directory

ii. Run main(xml1, xml2)

iii. Program raises exception

1. Defect: Incorrect output

Priority: High

Description: Output empty when system names do not match. External sources can use an alternate system name as the main system name and the program must still recognize these two systems as being the same.

Steps to reproduce:

1. Input: two xml file names (xml1, xml2) where the first file has system->name = ‘altName1’ and second file has system->name = ‘altName2’ and second file has ‘altName1’ listed as a system alternate name

ii. Run main(xml1, xml2)

iii. Open outputted CSV file and see it is blank

1. Defect: Incorrect output

Priority: High

Description: Transit time units differ but their values are the same. Is not detected as a mismatch. However, this should be further clarified with product owner on how to handle the units.

Steps to reproduce:

1. Input: two xml file names (xml1, xml2) <transittime> ‘unit’ flag is different for both file but same values for <transittime>

ii. Run main(xml1, xml2)

iii. Open outputted CSV file and see that there is not ‘mismatch’ row pertaining to the mismatched record

1. Defect: Incorrect output

Priority: High

Description: Differences in children tags in System -> Star is not being detected when the structures are not the same

Steps to reproduce:

1. Input: two xml file names (xml1, xml2) where there is a difference in any tag under System->Star

ii. Run main(xml1, xml2)

iii. Open outputted CSV file and see that there is not ‘mismatch’ row pertaining to the mismatched records

**Logic**

1. Type: Inefficient code

Location: line 46

Suggestion: Is there a purpose for looping? Can we return after first occurrence of true?

1. Type: Vulnerability

Location: line 109

Suggestion: include in the try statement in case file is already opened