



COMPILER_CONSTRUCTION

Assignment# 3

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200901015 (BSCS-01)(B)

TASK#1:

In this assignment you are required to parse an xml file (provided in attachment) file using python or any language of your preference.

The data to be extracted from file includes:

- 1.Book_Id
- 2.Author_Name
- 3.Title
- 4.Genre
- 5.Price
- 6.Publish_date
- 7.Description

We have used (module) xml for parsing the document which contains four sub-packages:

Dom, parsers, sax, etree, we have used the etree(ElementTree library) and we have given it an alias name ET.

Then we will pass the compiler.xml file as a parameter to ET.parse. After this we will use getroot() method in order to fetch the root of the xml file which is <catalog>.

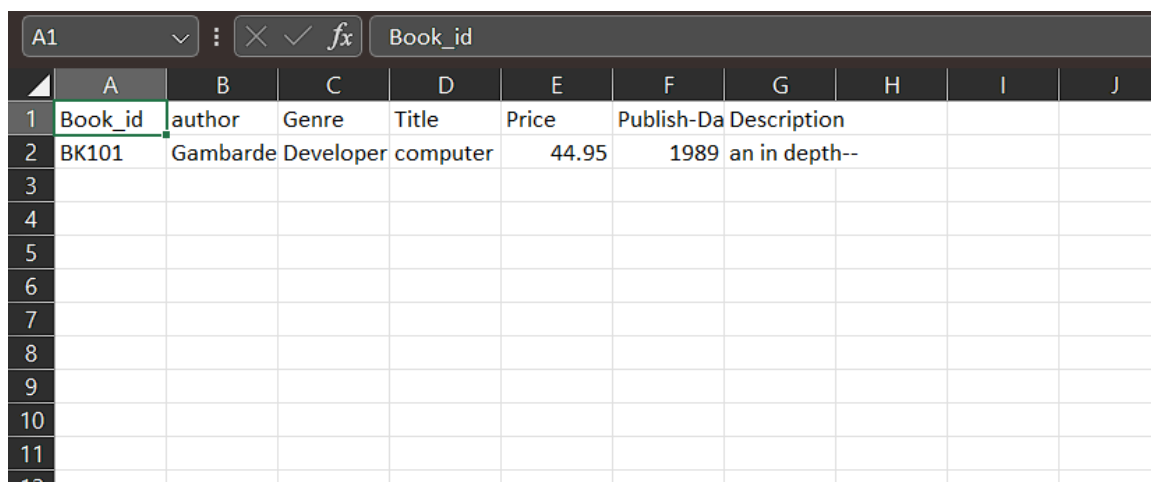
Then we have used tag , attrib, text in order to find various elements.

In order to print the attrib and text of a specific book id we have used if else condition on it, and user id is taken as an input from the user the attrib and text of the book would be printed on the basis of that user input.

TASK#1:

After extracting the above information from the tags, you have to create an excel file to record the data in the following table format.

In order to create an xml file we will use `xlsxwriter` module for this, then we will use `workbook()` method which takes one-argument as a filename then the workbook object is used to add new worksheet. We use this work object to write data via the `write()` method. After this we will create a variable `my_list` which will store the data.



The screenshot shows an Excel spreadsheet with a single worksheet named 'Book_id'. The table has 10 columns: A (Book_id), B (author), C (Genre), D (Title), E (Price), F (Publish-Da), G (Description), H, I, and J. The first row (row 1) contains the headers: 'Book_id', 'author', 'Genre', 'Title', 'Price', 'Publish-Da', 'Description', and the remaining columns are empty. The second row (row 2) contains the data: 'BK101', 'Gambarde', 'Developer', 'computer', '44.95', '1989', 'an in depth--', and the remaining columns are empty. Rows 3 through 12 are empty.

| | A | B | C | D | E | F | G | H | I | J |
|----|---------|----------|-----------|----------|-------|------------|---------------|---|---|---|
| 1 | Book_id | author | Genre | Title | Price | Publish-Da | Description | | | |
| 2 | BK101 | Gambarde | Developer | computer | 44.95 | 1989 | an in depth-- | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 5 | | | | | | | | | | |
| 6 | | | | | | | | | | |
| 7 | | | | | | | | | | |
| 8 | | | | | | | | | | |
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| 10 | | | | | | | | | | |
| 11 | | | | | | | | | | |
| 12 | | | | | | | | | | |

GITHUB_LINK:

https://github.com/eisha01/parsing_xml-file-and-creating-excel-sheet.git