

Perlego Developer Assessment – CMS Edition

Hello and welcome to the domain specific Perlego developer assessment. Congratulations on passing the initial interview; now we are going to test your skills through a realistic challenge that you could experience on the job.

The role you are applying for will require you to have an understanding of Python so today we are going to focus on testing your ability to create and test a solution using Python.

Task:

For the challenge, we would like you to determine what countries each of the 4 books in the sample data set can be sold in.

Requirements:

1. The solution must be able to read Sales Rights information for Book records using the ONIX 3.0 standard.
2. The solution must be able read Sales Rights information for Book records using both the normal tags and also the short tags.
2. The solution must be able to parse the information and store the results in an appropriately designed MYSQL database containing the countries permitted for the books.
3. The solution should gracefully handle errors / missing data and exceptions whilst providing appropriate error information.
4. The solution should have an appropriate automated test mechanism.

Additional Information:

- For the challenge, you are able to use pre-existing XML parsers and existing ORM solutions.
- We do not offer a database for you to record the information in, it is recommended you use an online free service to host your MYSQL instance.
- ONIX 2.1 is out of scope of this activity. Please do not read, refer or code anything with it in mind, it is significantly different from the 3.0 standard.
- We are only interested in retrieving the **countries**, not the regions or other more specific sales restrictions.

ONIX 3.0 Information:

https://www.editeur.org/files/ONIX%203/ONIX_for_Books_Release3-0_docs+codes_Issue_51.zip

You will find in this zip file the documentation of what constitutes an ONIX metadata file, with all the different data points it can contain. I suggest you don't spend too long understanding every part and focus on finding the information you need out of these files - in our case, general Onix Message understanding and how Sales Rights information is structured will be the focus.

Sample Data:

Please refer to the email to retrieve the sample XML data.

Scoring:

In order to score the assessment, we will review the code with our development team and also review the results of an automated analysis.

- Fault tolerant solutions will score more highly.
- Solutions using appropriate design patterns will score more highly.
- Appropriately tested solutions will score more highly.
- Applications with appropriate database design will score more highly.

Delivery:

To deliver the application, please upload the solution to Github in a private repository, and give access to romain@perlego.com.

Help & Questions:

If there is anything in the assessment that you do not understand or would like clarification on feel free to contact romain@perlego.com. He will usually get back to you within a couple of hours. We aim for the assessment to take about 3 to 4 hours maximum. If you find it takes significantly more, get in touch. For reference, we've seen the assessment done in about 50 lines of code before without automated tests. If in doubt, keep it simple!

Good luck!