Problem

Odmlib provides an easy way for Python programmers to create or process ODM and Define-XML documents. Make it simple to generate or process ODM or any ODM extension.

Solution

Odmlib is a Python ODM library that simplifies creating and processing ODM and its extensions. The odmlib package provides and object-oriented approach to working with ODM. It also makes it easy for implementers to create tools that support their own ODM extensions without needed to create or process XML directly. It serializes ODM as XML or JSON.

If you want to see a simple example program that shows how to create a simple ODM file using odmlib, check this out: https://gist.github.com/swhume/ef8ca0385a706c344eec83dac34a1359

Open source considerations

The odmlib package is open source to encourage programmers to build their own tools and to do cool things with ODM and its extensions. For those that have similar interests, to consider improving the library. To encourage others to create and use open source applications. To help grow the community of folks using ODM and its extensions.

The odmlib package uses the MIT license. It has been independently produced as a library that scratches my personal itch to have an object-oriented library for working with ODM and its extensions. We plan to use odmlib at CDISC to generate ODM and Define-XML content from the Library.

The odmlib repository is on my GitHub site https://github.com/swhume/odmlib. The odmlib is under development.

Example code to help programmers get started with odmlib is available at https://github.com/swhume/odmlib_examples.

Activities

I plan to author blog posts to share odmlib with a broad audience. I plan to share the blog posts on LinkedIn. I will also share odmlib and its example applications with CDISC staff and others that have an interest in ODM. If there's sufficient interest, I will highlight odmlib in conference presentations and possibly at a future hackathon.

Unique Value Proposition

The odmlib Python library will be the only general purpose Python package that I'm aware of for creating ODM tools. It will work with ODM, its extensions, as well as allow developers to create software tools that support their own extensions. It also makes it much simpler to produce or process ODM documents. Published under the MIT license, I hope others that find it useful will contribute to it.

Community Relationships

As the primary author, I have been the main user of this new ODM library. CDISC will likely use this library to produce its ODM service for the CDISC Library. As an ODM team lead, I will share odmlib with other ODM experts. Since it makes it easy for Python programmers to work with ODM, I hope this library appeals to other Python developers.

After ODM v2.0 has been released as a draft, an ODM v2.0 model will be included as part of the odmlib package.

Users

The odmlib package targets Python developers that work with ODM and extensions. Programmers interested in a simple way to work with ODM should be interested in using odmlib. Python programmers that work with ODM are welcome to contribute.

Since odmlib is still under development, interested users will need to install it from the source on Github. If there's enough interest, creating a formal package on PyPi will make it easy for users to install.

Adoption Criteria

As a new project that is just about to be released, it's too early to comment on the community or users. Personally, if odmlib makes it easier for me and CDISC staff to create ODM solutions I will consider the project a success. If other developers also find it useful that would be even better.

The odmlib package was originally developed by Sam Hume as a personal project. It is not a CDISC project, but others in CDISC may use it and be contributing authors.