

## Build Your Resume!

### Part-time .NET Development Position / Digital Library Center

Need a part-time .NET developer for creation of the classes and editor for the open-source EAC metadata editor. Programming will be contributed to SobekCM, which powers UFDC and dLOC, and distributed openly to other interested groups. Pay will be \$15/hour for 240 hours and all work should be completed within sixteen weeks.

Ideal candidates will have the following skills and experience:

- Proficiency with C#, SQL Server, and Transact-SQL
- Strong object oriented development
- Familiarity with XML, XSLT, and related technologies
- Good technical, analytical and problem solving skills required
- Self motivated with excellent verbal and written communication skills

Additional considerations for skills or experience in:

- User interface and graphics design
- WinForms development
- ASP.net development
- Experience writing and debugging SQL stored procedures

The successful candidate will be required to:

1. Take the EAC schema and create a class library with the interfaces and classes to hold the data. The final classes will be *Serializable* and implement the *IEquatable* interface, as appropriate for each object. Collections of objects will be stored as generic collections, with public access via *ReadOnlyCollections* and appropriate getters and setters (i.e., 'Add', 'Remove'). Additional internal methods will allow for clearing the collections and comparing/merging collections.
2. Create a static reader class which will accept either a file name or a *Stream* object, convert to a *XmlTextReader*, and then iterate through each node, fully populating the data structure
3. Create a static writer class which will write EAC-compliant XML to a *Stream* object, using a minimal number of *StringBuilder* intermediate objects, as necessary.
4. Design database tables and stored procedures to store the main EAC information which will be need to be retained in a pre-existing database.
5. Create the *IDatabase* interface, static database gateway class, and appropriate database connection classes for saving the pertinent data to the database and retrieving the pertinent data from the database.
6. [AS TIME PERMITS] Create windows forms and/or web forms to allow users to view and edit the information from the EAC files.

EAC Details:

The EAC schema is based on the Extensible Markup Language (XML), which enables the display, discovery and sharing of contextual information. The standard is maintained by the Society of American Archivists in partnership with the Berlin State Library, and is compatible with ISAAR(CPF), the International Standard Archival Authority Record for Corporate Bodies, Persons, and Families. EAC allows us to encode contextual information about the creation and use of historical records by agents

including individuals, families, and organizations. In addition to basic biographical and historical data, the contextual information may describe functions, activities, geographic places, events, and relationships to other agents.

The richness and flexibility of the EAC schema makes it possible to enhance all digital services based on provenance. EAC supports the linking of contextual information about record-creating agents to digital object metadata or to descriptions of library and archives holdings. It also supports the linking of contextual information about one agent to contextual information describing other agents, based on defined relationships between the agents and/or their records. EAC can be used for authority file encoding either as a standalone schema or in combination with other standards. For example, EAC can be used in conjunction with the Encoded Archival Description (EAD) schema for encoding and delivering archival finding aids. EAD would be used to encode descriptive information about archival records, and EAC would be used to encode contextual metadata about the agents responsible for creating the records.

Background on SobekCM (UFDC and dLOC)

Full proposal

<http://www.uflib.ufl.edu/ufdc/?m=hdPD&b=UF00095574&v=00001>