Developer Position Description
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Position Description: DLF Aquifer

Position Title: Developer (Grant funded. Full time. Six month contract.)

Reports to: Systems Architect

Position Summary
Under the direction of the Systems Architect, implements Aquifer systems by developing software, installing and customizing third party software, integrating components, performing system tests and debugging code, evaluating technologies and collaborating with the data analyst, other developers and system administrators to achieve these ends.

Principal Duties

Develop robust web-client user interfaces which integrate with Aquifer server-side components and back-end systems. Write program code to implement system components and interfaces according to the technical specifications and architectural designs of the Systems Architect. Provide feedback to the Systems Architect on the designs during implementation. Collaborate with the data analyst and other developers to ensure consistency of development practice.

Install, configure and customize third party software components. Where the Systems Architect determines that existing code will be used to implement components of the design, install and configure those components on Aquifer hosts in consultation with the systems administrators on those hosts. Where necessary, customize the components to meet the specific needs of Aquifer.

Integrate components and perform system tests. By deploying and configuring components, integrate these functions to implement the architectural designs specified by the Systems Architect. Perform tests on deployed systems to ensure that they function as specified. When tests fail, investigate and correct bugs.

Assist the Systems Architect in the evaluation of technologies for use in Aquifer systems. Investigate and report on the suitability of candidate technologies.

Position Requirements

Education:
Required: Degree in Information Technology or Computer Science or equivalent experience.
Preferred: Advanced degree in Information Technology, Computer Science or Library Science.

Experience:
Required: Three years professional experience as a programmer/analyst or software developer.
Preferred: Experience developing digital library systems and services.

Knowledge, Skills and Abilities:
Required: A high level of skill and ability in writing software code.
A practical knowledge of software development lifecycles and methodologies. Skill with developing and deploying systems on Linux/Unix systems. A high level of proficiency with at least one object-oriented computer language such as Java, at least one scripting language such as Perl or Ruby, and all important XML and web technologies.
Preferred: Experience developing user-friendly web applications with Ruby on Rails and AJAX web development techniques.   Knowledge of digital library technologies, protocols and standards such as METS, MODS, MARC, DC, SRW/U, OAI-PMH, MARC, Z39.50.

Supplemental Information

Most Important Decisions or Judgments:

Deciding how to design code to best implement the technical requirements.

Deciding when to report problems with the design to the Systems Architect or Business Analyst as they arise during implementation.

Contacts:

Contact: Business Analyst/Assessment Expert
Purpose: Consults for clarification about functional requirements. Reports problems with functional requirements. Seeks advice when obstacles are identified.

Contact: Systems Architect
Purpose: Consults for clarification about designs and specifications. Reports problems with designs and specifications.

Contact: Data Analyst and other developers
Purpose: Collaborates with during development to ensure consistency and efficiency in implementation.

Contact: System Administrators of host systems
Purpose: Consults and collaborates with to ensure Aquifer components are properly installed and configured on Aquifer hosts.