

KING COUNTY LIBRARY SYSTEM
Job Description

Title: **Web Application Programmer**

Dept.: **Public Services**

Code Number: **10757**

Reports to: **Web Services Librarian**

Grade Number: **16, represented**

Effective Date: **January 2009**

FLSA Status: **Exempt**

General Position Summary:

Provide friendly and customer-oriented database and software application service and support to KCLS library staff and to ITS staff. Monitor and support the OPAC and web-based applications to ensure productive use of online services and systems by staff and patrons. Create customized applications using a variety of systems and tools. Provide technical backup for the Web Services Librarian and serve KCLS staff customers via the help desk.

Essential Duties/Major Responsibilities:

Any of the following duties may be performed. These examples are not necessarily performed by all incumbents, however, and do not include all specific tasks an incumbent may be expected to perform.

1. Write programs; code and script new and unique applications in appropriate languages as required.
2. Analyze new and existing applications for errors; test and debug new and existing applications. Script web pages using current and required versions of HTML and other scripting and authoring web languages as required.
3. Design and maintain new and current relational databases as required especially for the purposes of creating dynamic web pages that can be searched, browsed and act as data-input interfaces on the Library web site, intranet and OPAC
4. Assist the Web Services Librarian with web development, digital services development and website planning and evaluation.
5. Assist with re-write of Web OPAC to be an XML based system.
6. Provide friendly and customer-oriented database, application, and technical service to libraries, patrons and to ITS staff.
7. Test system upgrades and enhancements for effectiveness. Troubleshoot system problems.
8. Provide specialized technical and application support for staff throughout KCLS.
9. Document and communicate new software features and services to KCLS staff.
10. Provide technical backup for the Web Librarian.
11. Provide knowledgeable and effective customer service on a wide spectrum of all KCLS Web Systems: Intranet, Internet and ILS systems.
12. Integrate multimedia and database applications on site.

13. Assist with Usability Testing, test pages for ADA compliance, usability in a wide variety of end-user environments.
14. Perform system implementations involving various operating systems, including web-related systems and servers.
15. Act as a liaison between Public Services and vendors in resolving problems or establishing procedures.
16. Various other services as assigned.

Secondary Duties:

1. Assist ITS staff with implementation of ILS related projects.
2. Assist other Public Services staff with implementation of Web Related Projects
3. Serve as a member of various employee committees as required.
4. Other related duties as assigned.

Communication:

Contacts are normally made with other KCLS employees. Communication is regularly initiated by the incumbent, occasionally at the supervisor's request. Frequently contacts are initiated by a third party within KCLS. The position has a requirement to interact frequently with customers within KCLS. Communications often contain discussion about confidential/sensitive matters.

Initiative:

The position requires creativity and an independent problem solving drive. Extensive design of new services or concepts is included in the position and the job involves a high degree of complexity. The incumbent receives moderate supervision. The position experiences constantly changing work situations and decisions require extensive independent critical judgment.

Accountability:

The position experiences regular interruptions and considerable flexibility is required. The incumbent's work is generally unmonitored by the supervisor and the incumbent is responsible for design, delivery, and quality control of solutions. Refined goal-setting skills are required. The position plans as part of a group activity. Some strategic planning is required at the facility/department level. An error or delay in the incumbent's work could result in inability of systems to effectively function, cooperate, and maintain data integrity. Errors can result in significant interruptions to system-wide service. Records maintained by the position include databases, programming code, file structures, maintenance records, and vendor communications.

Leadership:

The position is responsible for role modeling and promoting organizational values across KCLS but does not include mentoring responsibility.

DESIRED MINIMUM QUALIFICATIONS

Education and Experience:

A typical way of obtaining the knowledge, skills and abilities outlined below is with a four year degree from an accredited college in a related field preferably with computer, database or technical emphasis along with two years experience in SQL and related database work and web programming languages such as Cold Fusion, AJAX, Perl, ASP or any equivalent combination of education, experience and training that demonstrates the ability to successfully perform the essential duties and responsibilities of the position. Prefer experience with technical customer service with computer systems and database support of large web service applications.

Necessary Knowledge, Ability and Skills:

- Extensive working knowledge of advanced web development tools, especially Cold Fusion.
- Extensive working knowledge and scripting/authoring languages (HTML, JavaScript, XML).
- Extensive working knowledge of Cascading Style Sheets.
- Extensive working knowledge with relational database design, development, and maintenance. Especially Access and SQL products.
- Working knowledge of web-based statistical packages.
- Knowledge and solid understanding of interactive/dynamic websites.
- Knowledge of development methodology, documentation and/or systems analysis skills all an asset.
- Knowledge of User Interface and Information Architecture Principals
- Knowledge of Federal Accessibility standards and W3C code validation.
- Familiarity with website design, conventions, web-based information and content issues.
- Knowledge of library terms, environments and OPACs an advantage.

Ability to:

- Manipulate data in large databases safely and effectively.
- Use SQL as a backend for web applications.
- Write custom applications in contemporary web languages that support dynamic web applications.
- Troubleshoot technical problems i.e., determine the nature of a computer related problem and find a solution. Understand and solve computer system related problems over the phone in circumstances where the customer frequently does not understand the nature of the problem
- Communicate with patrons and library staff in an effective and friendly manner.

- Interact co-operatively and productively with other KCLS information technology staff, particularly the Network and Systems Manger, Web-Services Librarian and Information Systems Coordinator.
- Manage and perform system implementations within a networked operation with interrelated systems such as Millennium, PC Time Management Software, Thin-client, Exchange, etc.
- Manage time to maximize productivity.
- Learn new skills quickly and adapt to frequent changes in programs/procedures/systems.
- Develop and maintain effective and positive working relationships with associates and KCLS staff.
- Work effectively in a team environment.
- Read, write and understand the English language.

Skill in:

- CGI scripting: Perl, ASP, AJAX
- Computer systems, networking, and databases.
- System and application implementation and maintenance.
- Customer service techniques, methods and systems.
- Assessing situations/problems and logically finding solutions.
- Providing excellent written communications.
- Listening to, understanding and interpreting information received from employees.

SPECIAL REQUIREMENTS

Valid Washington driver's license.

PHYSICAL DEMANDS

The position requires continuous sitting, handling, hearing, keyboarding, talking, and repetitive motions of hands/wrists. Pushing and pulling up to 50 pounds and lifting and carrying up to 25 pounds are required. Specific vision abilities required by this job include close vision and the ability to adjust focus.

WORK ENVIRONMENT

Work is performed in a normal office environment. Constant sitting, on-call status and extensive PC monitor work is required. Incumbents may be subject to various shifts and/or weekend work as required or routine call-back.

Advancement Possibilities depending on qualifications:

Information Systems Administrator
Web Services Librarian

The duties listed above are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.

The job description does not constitute an employment agreement between KCLS and the employee, and is subject to change as the needs of KCLS and the requirements of the job change.

Approval: _____
Director of HR

Final: 5-07
Revised: 2009-01-16