

Winnefox Library System Position Description

Position: Database-Application Developer

Date: 30 May 2018

General Purpose

The person filling this position designs, creates, maintains, and supports custom databases and interfaces to meet needs not filled by conventional software. This person also manages paid database subscriptions, access to those subscriptions, and provides support for those subscriptions.

Supervisor: Assistant Director

Supervises:

Salary Matrix Level: E

Essential Duties and Responsibilities

Duty / Responsibility	Performance Standards
Database Support—Third-party databases	
Act as liaison with third-party electronic database vendors. <ul style="list-style-type: none"> • Coordinate setup of new databases, including in-house and remote authentication. • Schedule demonstrations of new products. • Negotiate subscription pricing annually. • Research vendor product offerings and pricing, to be aware of when we may be able to get a comparable database at a cost savings. • Manage administrative accounts with each vendor. • Be aware of contract constraints with vendors and enforce when necessary. • Work with vendors to obtain usage statistics. 	Databases are set up in a timely manner. Authentication on products works as expected. Projects stay within the approved budgets Good relationships are maintained with vendors.
Install and maintain the authentication software (EZProxy) used to provide access to licensed electronic databases for users. <ul style="list-style-type: none"> • Maintain up-to-date list of EZProxy IP addresses for vendors. 	Access is maintained with little or no disruption to services. Authentication on products works as expected.

<ul style="list-style-type: none"> • Design and maintain authentication forms that integrate seamlessly with the library websites. • Configure EZProxy for each new database added. • Interface with SirsiDynix patron database for authentication. • Implement backup authentication method when needed. • Stay up to date on new software versions and install software updates as needed. • Manage log files to maintain availability of statistical extraction. • Perform troubleshooting when problems occur. • Advise on configuration of public PC security software and filtering so that in-house access is uninterrupted on library computers. 	
<p>Provide training and documentation on the use of local and third-party databases.</p> <ul style="list-style-type: none"> • Provide links to vendor-supplied documentation on third-party paid databases whenever available. • Create and maintain additional support/documentation help pages where vendor-supplied help falls short. • Provide opportunities for workshops or webinars on subscription databases. • Provide training when needed to users of local databases. 	<p>Library staff are able to effectively use third party databases. Library staff are able to train patrons and other staff to effectively use databases.</p>
<p>Support library staff as they use local and third-party databases and assist patrons.</p> <ul style="list-style-type: none"> • Provide technical support to libraries and patrons on the use of local and third-party databases. • Provide backup support to libraries in researching and resolving issues regarding use of eBooks and digital audio books on computers and a wide variety of portable devices. • Resolve issues regarding use of other subscription databases. • Analyze and address access issues as they occur. 	<p>Staff and patrons are satisfied with database service.</p>

Database Support—Local databases	
<p>Manage the database and interface used by Winnefox libraries (WCTS ordering system) for ordering materials.</p> <ul style="list-style-type: none"> • Construct queries and program necessary code to fulfill ongoing service enhancements as requested by the users. • Facilitate data and interface migrations as servers and software versions change. • Manage backups of the data. • Investigate any problems as they arise and provide explanations and/or solutions. • Manage security and permissions so that only authorized users of the database can create orders. • Resolve response time issues if needed. 	<p>Access to WCTS ordering system is maintained with little or no disruption to services. Library directors, staff, and WCTS staff are able to effectively use the ordering system. No loss of critical data, including ordering history, financials, etc.</p>
<p>Design, create, and manage databases used by libraries for local newspaper and other archival indexing.</p> <ul style="list-style-type: none"> • Construct queries and program necessary code to fulfill ongoing service enhancements as requested by the users. • Provide a user-friendly search interface that allows patrons to obtain their expected results. • Provide data entry screens for staff and volunteers to use for adding and editing data • Perform batch imports of data • Facilitate data and interface migrations as servers and software versions change. • Integrate with paid databases when possible to enhance usage on subscription products. • Manage security and permissions so that only authorized users of the database can add new data and protect the data from injection attacks. • Manage backups of the data. • Resolve response time issues if needed. 	<p>Access is maintained with little or no disruption to services. Library patrons are able to effectively use databases. No successful injection attacks against database. No loss of data.</p>

<p>Design, create and manage the electronic resource pages of the library websites used by Winnefox Libraries. These pages link to local databases, licensed third-party products and recommended websites.</p> <ul style="list-style-type: none"> • Maintain interfaces that seamlessly integrate with library websites, making timely updates as changes occur on the library websites. • Add/remove licensed databases as subscriptions change. • Add/remove links to recommended websites as needed. • Manage security and permissions on the database to prevent injection attacks. • Manage backups of the data. • Resolve response time issues if needed. 	<p>Access is maintained with little or no disruption to services. No successful injection attacks against database. No loss of critical data, including usage statistics recorded by these pages.</p>
<p>Design and manage the database used in-house for call tracking.</p> <ul style="list-style-type: none"> • Analyze needs, construct queries and program necessary code to fulfill ongoing service enhancements as requested by the users. • Facilitate data and interface migrations as servers and software versions change. • Manage backups of the data. • Investigate any problems as they arise and provide explanations and/or solutions. • Resolve response time issues if needed. 	<p>Winnefox staff are able to effectively use this database. Access is maintained with little or no disruption to services. No loss of critical data.</p>
<p>Support any other databases / database interfaces as needed.</p> <ul style="list-style-type: none"> • Assist with SQL-related Pharos issues as they arise. • Answer questions about additional Access databases used in the libraries. • Create and maintain advanced forms that interface with databases. 	<p>Customer satisfaction. Customers include Winnefox staff, as well as directors and staff at Winnefox libraries.</p>
<p>Other Tasks</p>	
<p>Support library digitization projects</p> <ul style="list-style-type: none"> • Make recommendations for digitization vendors, and/or equipment. • Encourage adhering to industry standards for metadata, etc. 	<p>Library staff are able to easily digitize local history resources. Library staff and patrons have easy access to these materials.</p>

<ul style="list-style-type: none"> • Import and/or migrate data into database software. • Maintain design of interface for hosted content • Develop user-friendly interfaces for digitized local history resources not hosted within CONTENTdm. • Facilitate Communications with potential vendors 	
<p>Manage the backups and upgrades of SQL and related services on the SQL server.</p> <ul style="list-style-type: none"> • Create and schedule maintenance plans and monitor execution of the plans. • Perform optimization on databases to ensure the most efficient execution of queries. • Run integrity checks periodically. • Upgrade server with latest version of software when new versions are released. • Ensure services related to SQL are running as required and investigate why they stopped if they stop. • Restore tables or databases if data gets corrupted or is lost. • Configure security to protect against SQL injections. 	<p>Access is maintained with little or no disruption to services. No loss of critical data. No successful injection attacks against databases.</p>
<p>Provide backup support for the telecommunications network as needed. Troubleshoot connectivity issues.</p>	<p>Timely resolution of issues when primary telecommunications support is unavailable.</p>
<p>Provide statistics on use of digital resources.</p> <ul style="list-style-type: none"> • Obtain statistics on a periodic basis from vendors and present in historical form for libraries. • Implement means of counting usage when vendor statistics may not be available (such as is the case for the local databases). • Write scripts to extract data from log files. • Analyze statistics and be aware of usage trends in order to make evaluations and recommendations based on these statistics. • Be alert to inconsistencies in statistics and investigate why they occur and resolve any issues. 	<p>Provide library directors with the proper information to fill out state-requested annual reports. Provide libraries with knowledge about what services are used most by their particular library users. Customer satisfaction. Customers include directors and staff at Winnefox libraries.</p>

KNOWLEDGE, SKILLS AND ABILITIES

- Experience with Microsoft SQL
- High level of competence in JavaScript and ability to write scripts
- Experience in Classic ASP, ASP.NET MVC, C#, Visual Basic, and Visual StudioGood understanding of HTML authoring and CSS
- Use of Web authoring software on a server to pool Web pages that update a Web site for quality control, editing code, adding meta tags, insertion in Web architecture, etc
- Computer skills including confident use of personal productivity software (word processing, spreadsheet, email, calendaring, presentation) and web-based communication tools.
- Knowledge of Database-to-Web software
- Good understanding of graphics programs. Familiarity with multimedia tools.
- Good understanding of Web servers and server application software
- Interpret server logs for accurate visitor counts and tracking
- Familiarity with as well as an ability to learn a variety of operating systems.
- Knowledge of, and ability to provide, excellent customer service
- Ability to establish and maintain effective working relationships with other staff, member librarians, and the general public.
- Willingness to attend relevant meetings, workshops, and conferences.
- Writing and editing skills in a variety of media, including print, electronic and digital.
- Skill in communicating effectively with people from diverse backgrounds.
- Ability to prioritize tasks and handle multiple projects and deadlines
- Ability to adapt to change; willingness to teach and learn new ways of doing things, including new technologies.
- Familiarity with research, data analysis and presentation
- excellent verbal and written communication skills
- creative problem solving and analytical skills

REQUIRED EDUCATION AND/OR EXPERIENCE

Requires experience with Internet applications, and microcomputer systems and a degree in Computer Science, Information Science, Computer Engineering, or related field; or any combination of experience and training which provides the necessary knowledge and abilities described above. Library experience helpful.

TOOLS AND EQUIPMENT USED

Typical office equipment, computers and software including computer workstation, computer projector, calculator, fax machine, photocopier, telephone, and printers.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee may be required to stand for extended periods of time; talk and hear; use hands to dial, handle, or feel objects or controls; and reach with hands and arms. The employee may be required to kneel, walk, stand, bend, twist, push and pull. Job requires employee to be able to push carts and lift boxes weighing up to 50 pounds.

WORK ENVIRONMENT

Typical office environment. Some driving is necessary.

SELECTION GUIDELINES

Formal application, rating of education and experience; oral interview; background check; and job-related tests may be required.

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.

This job description does not constitute an employment agreement between the employer and employee. It is subject to change by the employer as the needs of the employer and requirements of the job change.