Learning Systems Project Analyst

BASIC FUNCTION:

Under the direction of an assigned supervisor, provide technical leadership and project management in the adoption, implementation, and testing of Sakai Open Source Course Management System (CMS) program tools for the ETUDES alliance community members, including faculty, students, and staff; lead system design and development of open source tools to meet the CMS needs of community colleges and current ETUDES users; lead implementation efforts and collaborate with other technical staff of Sakai/ETUDES alliance members, following emerging standards foundations the CMS tools are built on.

REPRESENTATIVE DUTIES:

1. Design, develop, implement, and maintain complex distributed educational support software applications in support of the District’s open source course management system (CMS) initiatives.
2. Design and implement enhancements and extensions to CMS tools with a focus on web applications developed in Java.
3. Evaluate areas of system usage and performance; design and implement improvements to features and software efficiency.
4. Work closely with the Sakai partner program staff, ETUDES Alliance members, District departments, and technology vendors to identify, develop, and implement future tools.
5. Assist in the design and implementation of systems to facilitate the release and maintenance of open source (CMS) software and contribute to the management of the open source process.
6. Participate in cross-institutional discussions of project needs and future directions; lead projects within local development team and in collaboration with other partner program staff, alliance members, and District staff.
7. Develop Java web-based applications, using tools and methods consistent with the CHEF framework and Sakai project; implement standards such as OKI OSID/IMS, RDF/XML, XML/XSLT, SOAP, DTD.
8. Design and implement user interfaces, tools, and services; design, implement, and maintain systems to monitor and analyze usage of deployed applications.
9. Assist in troubleshooting difficult software and hardware/software problems, determining appropriate actions for the corrections and restoration of normal services.
10. Participate in quality assurance and acceptance testing efforts.
11. Participate in the design and implementation of deployed networks and server farms for deployed open source course management system and related applications.
12. Provide communication and cooperation with other departments at Foothill-De Anza, ETUDES alliance institutions, and Sakai partners who use the software frameworks and applications.
13. Advise faculty, staff, students, and open source ETUDES Alliance community members concerning detailed problems arising from use of the systems.
14. Develop and participate in short course presentations to the user communities on the architecture, use of the software frameworks, and on specific applications; participate in release activities for Sakai software.

15. Evaluate software, research emerging technologies, maintain current on technological advances in the field.

16. Write documentation; develop and lead training sessions; participate in development of grant and project proposals to assist with sustainability.

17. Attend meetings as assigned.

18. Perform related duties as assigned.

**KNOWLEDGE AND ABILITIES:**

**KNOWLEDGE OF:**

1. Advanced knowledge of computer hardware systems, software applications and languages utilized by the District.

2. Advanced knowledge of the principles, practices and techniques of data base structures and computer programming.

3. Technical aspects of field of specialty and working knowledge of related specialties.

4. Java software system development, especially in web applications and web services.

5. Portal technologies and products such as Jetspeed and uPortal.

6. Development tools such as CVS, IDEs, Ant, Maven, DocBook.

7. Development deployment and support of production software.

8. Web-based applications tools and methods such as Java, JavaScript, HTML, XML, SQL, and JSP.

9. Database application development, especially database-to-web applications using Java and Perl.

10. Advanced web technologies (XML, Servlets, Portlets, JSP, etc.).


12. VM programming, Apache, and Tomcat architecture, installation, configuration and administration.

13. Information technology environments, such as Kerberos, LDAP, IFS, CVS.

14. Interfacing web applications to student information systems, e.g. People Soft.

15. Various computer platforms including UNIX, Macintosh, and Windows NT/2000/XP, and with quality assurance, performance testing efforts.


17. Record-keeping techniques.

18. Oral and written communication skills.
19. Interpersonal skills using tact, patience and courtesy.

**ABILITY TO**

1. Demonstrate understanding of, sensitivity to, and respect for the diverse academic, socio-economic, ethnic, cultural, disability, religious background and sexual orientation of community college students, faculty, and staff.

2. Apply independent technical judgment to complex technical situations.

3. Coordinate schedules and resources with systems and network programmers and users.

4. Operate computers and peripheral equipment properly and efficiently.

5. Diagnose and understand reasons for system failures.

6. Maintain current knowledge of technological advances in the field.

7. Communicate effectively both orally and in writing.

8. Maintain records and prepare reports.

9. Prioritize and schedule work.

10. Analyze situations accurately and adopt an effective course of action.

11. Work independently with little direction and provide work directions to others.

12. Establish and maintain cooperative and effective working relationships with others.

**EDUCATION AND EXPERIENCE:**

Any combination equivalent to: Bachelor's degree in Information Systems, Computer Science, or related field, and five years experience as Senior/Lead/Principal systems or database analyst. Master's degree preferred.

**WORKING CONDITIONS:**

**ENVIRONMENT:**

1. Office environment.

**PHYSICAL ABILITIES:**

1. Hearing and speaking to exchange information in person and on the telephone.

2. Dexterity of hands and fingers to operate a computer keyboard.

3. Seeing to view a computer monitor.

4. Sitting for extended periods of time.

**HAZARDS:**

1. Extended viewing of computer monitor.

DATE APPROVED: May 27, 2004

RANGE: N-73

EEO-CATEGORY: H-30