UW HEALTH POSITION DESCRIPTION

POSITION SPECIFICS

Title: Quality Assurance Engineer	**Department/Number: Web Center/10220**
Reports to: Manager, Web Technology	
Job Code: 320012 **FLSA Status: Exempt**	
Manager Approval: R.Broering **Date: 2/2016**	**HR Approval: MJG** **Date: 2/2016**

POSITION SUMMARY

Under the supervision and direction of the Manager, Web Technology in the Web Center the Quality Assurance Engineer is responsible for developing and executing test plans and test cases, and the creation of tools to augment our software development and testing efforts. Specific duties and responsibilities include creating, maintaining and executing test plans and test cases against our hardware and software platforms, estimating test efforts, analyzing and communicating test results, defect tracking and participating in day to day QA Activities. This can also include the writing of specialized testing tools for use in testing our software platform. In addition this position will ensure that technical specifications adhere to appropriate methodologies and principles when developing systems for web-based technologies, including, but not limited to the internet, extranet and intranet for UW Health.

The Quality Assurance Engineer must operate independently in handling a wide variety of situations. The position typically entails judgment in the development of solutions to major problems or opportunities where precedents are few. Successful performance requires technical skill in system design, analysis and implementation of programs and web-based applications. In addition, the individual must have technical knowledge of testing and testability to influence better software design, promote proper engineering practice, bug prevention strategies, testability, accessibility, privacy, and other advanced quality concepts across products. A consultative role to other department and enterprise-wide staff is also necessary. This position will work closely with all members of the Web Center technical, creative and content teams, as well as with UW Health Information Systems networking, security and analysts responsible for web server technical support.

A wide variety of internal and external relationships are involved to accomplish the objectives of performing the duties of this position. The incumbent will work in close coordination with UW Health Administration, Information Systems and Marketing and Communications. Developing and maintaining good communication with these contacts is essential to accomplishing the objectives of this position and the goals of the Web Center.

This position requires innovation and vision in problem solving and meeting objectives in a timely manner. Effective communication and organizational skills are critical to successful performance.

All members of the Web Center must actively take a UW Health enterprise perspective and approach in their work to successfully achieve the goals of the Web Center, UW Health and participating partners.

MAJOR RESPONSIBILITIES

Provides application analysis, testing, design and debugging.
1. Develop and drive a high-level QA strategy, as well as take a hands-on approach to implementing that strategy.
2. Lead efforts to develop, document, and implement applicable QA processes and procedures to provide more effective quality methods within the group in support of providing quality products.
3. Create, implement, maintain, and enhance test plans, test scripts, and test methodologies that ensure exhaustive testing of all assigned software systems to ensure compliance with software/system specifications.
4. Develop software quality test plans and test cases, and lead in setting and maintaining the standards for Software Quality Assurance test documentation.
5. Be highly committed to create world class automation for regression and feature testing.
6. Design, implement, and maintain comprehensive test plans to ensure software requirements are met.
7. Collaborate with developers to improve overall product quality by emphasizing defect prevention throughout the development process.
8. Maintain a high degree of error free programs, procedures, systems, and documentation on all software application releases.
9. Anticipate potential software problems by creating exhaustive test scenarios that ensure comprehensive testing.
10. Test web applications.

11. Document all testing results in conjunction with test plans.
12. Identify and analyze defects/test results and be able to deduct the chain of events leading to a failure.
13. Identify areas for test improvement through analysis, experience and use of metrics.
14. Communicate critical issues and status updates in a timely manner.
15. Educate and train peers and subordinates on the QA process and provide guidance to them when they are unclear about the process.
16. Provide coaching and guidance to the Quality Assurance Team on "best practices".
17. Plan, organize, and monitor the execution of the work assignments for the Quality Assurance Team.
18. Ensure that the project schedule is adhered to and the work is completed according to the schedule.
19. Participate in daily stand ups.
20. Manage processes for moving applications from test to production environments.
21. Develop and implement processes to manage the deployment of code to new clients.
22. Remain current on changes and new developments on new and existing software applications/releases (i.e., attending internal lunch and learns).
23. Establish and maintain good working relationships with peers in Development, Project Management, and with internal and external clients.

Provides application support/maintenance

24. Provide in-line documentation and overall support documentation where appropriate.
25. Assure existing systems are functioning properly and provide support where appropriate.
26. Enhance existing systems.
27. Provide on-call support for daily system operations. Respond to critical failures to the best ability. This may include researching the knowledge and skills of the staff to escalate necessary issues.
28. Assist in providing on-going user education for enhancements to existing applications.

Interact with internal and external contacts

1. Consult regularly with information architect, graphic and content teams within the Web Center. Consult with UW Health Information Systems staff to verify that additional software and web applications will be compatible with requirements.
2. Work with software vendor's directly when appropriate

All duties and requirements must be performed consistent with the UW Health Performance Standards.

POSITION REQUIREMENTS		
Education	Minimum	A Bachelor degree in a web development related field or equivalent work experience.
	Preferred	Specific coursework or experience in web development and experience with web technologies.
Work Experience	Minimum	Five (5) or more years of experience in a progressively responsible position with web development and/or information systems is required with accelerated, exceptional performance. Experience with the following technologies and tools: • Strong proficiency in at least one major development language: Java/ASP.NET/C/Python • Experience with Selenium • Knowledge of test methodologies, writing test plans, creating test cases and debugging. • Deep knowledge of internet technologies.

	Preferred	Experience with the following tools and technologies are desired:
		- Template engineering (Handlebars/Mustache) - RequireJS/AMD - Engineering techniques (SVN/Git, staging, continuous integration, etc) - Java - MySQL/MS SQL Server - Apache, Tomcat, Groovy, Grails - CSS preprocessors (SASS/LESS) - IDE (IntelliJ IDEA, MyEclipse, etc) - Gradle - Maven - MVC application frameworks like Spring - Agile development techniques - Google Analytics
Licenses & Certifications	Minimum	
	Preferred	
Required Skills, Knowledge, and Abilities		- Good technical skills, including knowledge of web technologies. - Understanding of browser rendering and compatibility issues. - Ability to work independently and be results-oriented. - Ability to prioritize projects and react to critical deadlines. - Creative approach and solutions to problems related to web development; prior experience in the field with demonstrated successful projects. - Ability to analyze and identify problems, and develop innovative solutions. - Effective communication, problem-solving and organizational abilities in both written and verbal form. - Effective interpersonal skills, including the ability to promote teamwork and ensure a high degree of internal and external customer satisfaction. - Ability to manage multiple tasks with ease and efficiency. - Ability to interact with and work around people - Ability to make judgments in demanding situations - Ability to react to frequent changes in duties and volume of work - Effective communication skills - Ability to listen empathetically - Ability to logically organize details - Comfortable accepting responsibility for medium to large scale projects involving multiple resources and spanning many months from start to finish - Ability to manage multiple concurrent activities

PHYSICAL REQUIREMENTS

Indicate the appropriate physical requirements of this job in the course of a shift. *Note: reasonable accommodations may be made available for individuals with disabilities to perform the essential functions of this position.*

Physical Demand Level		Occasional Up to 33% of the time	Frequent 34%-66% of the time	Constant 67%-100% of the time
x	**Sedentary:** Ability to lift up to 10 pounds maximum and occasionally lifting and/or carrying such articles as dockets, ledgers and small tools. Although a sedentary job is defined as one, which involves sitting, a certain amount of walking and standing is often necessary in carrying out job duties. Jobs are sedentary if walking and standing are required only occasionally and other sedentary criteria are met.	**Up to 10#**	**Negligible**	**Negligible**
	Light: Ability to lift up to 20 pounds maximum with frequent lifting and/or carrying of objects weighing up to 10 pounds. Even though the weight lifted may only be a negligible amount, a job is in this category when it requires walking or standing to a significant degree.	**Up to 20#**	**Up to 10#** or requires significant walking or standing, or requires pushing/pulling of arm/leg controls	**Negligible** or constant push/pull of items of negligible weight
	Medium: Ability to lift up to 50 pounds maximum with frequent lifting/and or carrying	**20-50#**	**10-25#**	**Negligible-10#**

objects weighing up to 25 pounds.			
Heavy: Ability to lift up to 100 pounds maximum with frequent lifting and/or carrying objects weighing up to 50 pounds.	**50-100#**	**25-50#**	**10-20#**
Very Heavy: Ability to lift over 100 pounds with frequent lifting and/or carrying objects weighing over 50 pounds.	**Over 100#**	**Over 50#**	**Over 20#**
List any other physical requirements or bona fide occupational qualifications:	•		

Work/Environmental: Moderate noise level consistent with an office environment

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Note: The purpose of this document is to describe the general nature and level of work performed by personnel so classified; it is not intended to serve as an inclusive list of all responsibilities associated with this position.