

UW HEALTH JOB DESCRIPTION

Software Quality Assurance Engineer			
Job Code:	FLSA Status: Exempt	Mgt. Approval: J. Ritthaler	Date: January 2024
Department: Marketing & Communications		HR Approval: M. Grayson	Date: January 2024
JOB SUMMARY			
<p>The Software Quality Assurance Engineer is a pivotal contributor to the development and execution of sophisticated test plans and test cases for hardware and software platforms. This role enhances software development and testing procedures through strategic tool creation and provides strong support within the quality assurance (QA) team.</p> <p>The Software QA Engineer estimates test efforts, analyzes and communicates test results, completes meticulous defect tracking, and is proactively involved in daily QA activities. The Software QA Engineer excels in designing and implementing advanced automated testing frameworks, tools, and scripts, systematically streamlining repetitive tasks.</p> <p>Thorough regression testing is pivotal, as the focus is on meticulously identifying, monitoring, and tracking software defects, ensuring expedient and accurate reporting to stakeholders. Careful attention to detail and analytical skills enables thorough examination of test results, precise defect isolation, and collaborative problem-solving with software engineers to create effective solutions. The Software QA Engineer demonstrates expertise of methodologies and principles for web-based technologies, including the internet, extranet, and intranet for UW Health. In scenarios with limited precedents, this role exhibits autonomy, leveraging judgment to innovate solutions.</p> <p>The Software Quality Assurance Engineer fosters collaboration with cross-functional teams such as Marketing Technology, Digital Marketing, Communications, UW Health Administration, and Information Systems to drive improvement. Effective communication with stakeholders ensures alignment with objectives and the overarching goals of the department.</p>			
MAJOR RESPONSIBILITIES			
<ul style="list-style-type: none"> Lead the development and execution of the QA strategy, ensuring its effective implementation. Lead and drive the documentation and enhancement of QA processes and procedures to elevate quality practices for optimal product delivery. Design and implement advanced test plans, test scripts, and methodologies to ensure thorough software/system compliance. Establish and refine standards for software quality assurance, taking ownership of software test plans and cases. Champion the creation of top-tier automation solutions for regression and feature testing. Oversee and execute testing for web applications, ensuring high-quality standards are met. Document and communicate testing results meticulously, aligning with test plans and overall project goals. Collaborate closely with software engineers to integrate defect prevention throughout the development lifecycle. Expertly analyze defects and test outcomes, proficiently tracing the root causes of failures. Lead the identification of opportunities for test process enhancement using analytical insights and metrics. Mentor and educate colleagues, sharing QA knowledge and offering guidance on process-related queries. Support in fostering a culture of best practices and continuous improvement. Ensure project schedules are adhered to and work is completed within set timelines. Take a proactive role in daily stand-up meetings, providing valuable insights to the team. Oversee the smooth movement of applications from testing to production environments. Stay current with changes in software applications by actively participating in knowledge-sharing sessions. Provide on-call support, quickly addressing critical failures, and coordinating with the team to manage escalations effectively. Develop and execute plans for in-depth user education, empowering them to leverage advanced features and improvements in existing applications. Collaborate closely with development teams to prioritize and implement system enhancements and bug fixes. Stay updated on emerging technologies and trends to influence the continuous improvement of application support practices. Lead and facilitate regular collaboration between the Digital Marketing team and UW Health Information Systems staff, ensuring seamless integration of additional software and web applications with specified requirements. Participate in strategic discussions and decision-making processes related to software integration and vendor relationships. <p style="text-align: center;">ALL DUTIES AND REQUIREMENTS MUST BE PERFORMED CONSISTENT WITH THE UW HEALTH PERFORMANCE STANDARDS.</p>			
JOB REQUIREMENTS			
Education	Minimum	Bachelor's degree in Software Engineering, Computer Science, or related field Four (4) years of relevant experience may be considered in lieu of degree	

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	Preferred	Master's degree in Software Engineering, Computer Science, or related field		
Work Experience	Minimum	Seven (7) or more years of experience in a progressively responsible position with web development and/or information systems, demonstrating accelerated and exceptional performance.		
	Preferred	<ul style="list-style-type: none">Advanced proficiency in template engineering using Handlebars or Mustache.Knowledge of version control systems such as Git.Familiarity with continuous integration tools like Jenkins or GitOps.Knowledge of database systems like MySQL and MS SQL Server.Experience with web server technologies like Apache, Tomcat, and application frameworks like Groovy, Grails.Expertise in CSS preprocessors like SASS and LESS.Advanced proficiency in IDEs such as IntelliJ IDEA and VS Code.Proficiency in build tools like Gradle and Maven.Expertise in working with MVC application frameworks, such as Spring.Comprehensive understanding of Agile development techniques.Advanced understanding of web analytics principles and tools.		
Licenses & Certifications	Minimum	None		
	Preferred			
Required Skills, Knowledge, and Abilities		<ul style="list-style-type: none">Expert technical skills, with an advanced understanding of web technologies (HTML, CSS, JavaScript) and web testing tools.Expert knowledge of programming languages such as Java and Python, as well as scripting languages.Extensive experience with Selenium and other advanced testing tools.Proven expertise in test methodologies, including creating comprehensive test plans, test cases and debugging strategies.Deep understanding of internet technologies and their applications.Previous experience in mentoring or guiding junior team members.Strong problem-solving skills and the ability to lead critical support situations.Deep familiarity with browser rendering and compatibility issues.Proven ability to work independently, effectively manage project priorities, and consistently meet critical deadlines.Demonstrated creative problem-solving approach showcased through a history of successful web development projects.Advanced analytic mindset to identify areas for improvement and drive innovative solutions.Excellent verbal and written communication skills for seamless cross-functional collaboration.Strong interpersonal skills to lead teamwork and ensure exceptional customer satisfaction.Ability to manage multiple complex tasks with exceptional efficiency.Highly self-motivated, excelling in both independent and team-oriented environments.Proven judgment and adaptability to navigate demanding situations and frequent workload changes.Advanced communication skills, including empathetic listening and clear detailing.Experienced in taking responsibility for medium to large-scale projects involving multiple resources, spanning extensive timeframes.Proficiency in effectively managing multiple concurrent activities.		
PHYSICAL REQUIREMENTS				
Indicate the appropriate physical requirements of this job in the course of a shift. <i>Note: reasonable accommodations may be made available for individuals with disabilities to perform the essential functions of this position.</i>				
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	Up to 20#	Up to 10# or requires significant	Negligible or constant push/pull of

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	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.		walking or standing, or requires pushing/pulling of arm/leg controls	items of negligible weight
	Medium: Ability to lift up to 50 pounds maximum with frequent lifting/and or carrying objects weighing up to 25 pounds.	20-50#	10-25#	Negligible-10#
	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:				