



Tennessee Department of Transportation Information Technology Office

Position: Quality Analyst

Job Description

We are seeking a full-time software test professional who seeks to work in an open and collaborative Agile environment utilizing both manual and automated testing practices in an agile software development group.

Minimum Job Requirements

An ideal candidate would be a motivated software tester that is seeking new challenges in a growing environment. TDOT IT is an Agile environment that is seeking to change the face of state government and the way that software is delivered and serve the citizens of Tennessee through providing innovative and quality product applications.

The quality analyst is expected to test applications built upon web technologies and responsive design techniques. A strong desire to continually learn and be part of helping to shape new ways in which we test software effectively and efficiently would be something a candidate would possess.

Required Technical Skills

- Works directly with developers during testing cycles
- Generates test approaches from iterative software development and performs routine analysis and testing from the user perspective
- Creates and executes validation level test cases
- Creates and executes manual test cases
- Creates and executes regression test plans
- Prioritizes tests and test execution
- Visually inspects, finds, communicates, and documents defects and errors in an application
- Understands all angles of an application, working with everyone to provide positive results, without take sides

- Tests a program within a multi-user environment
- Identifies the necessary data elements, keys/search criteria, indexes, data retrieval requirements, and level of security needed for different types of system data for testing
- Generates data to test programs and/or system conditions by extracting data from existing sources or entering new data
- Tests and troubleshoots programs using generated data to determine if the program produces the correct execution sequence and programs interface as specified
- Analyzes information and evaluates results to assist in choosing the best solution to solve problems
- Observes, receives, and otherwise obtains information from all relevant sources
- Reads and interprets written functional specifications and user stories
- Discusses current system operations, proposed system requirements, and user needs with relevant stakeholders, including clients, users, and team
- Enters, transcribes, records, stores, or maintains information in written or electronic form for programs and applications
- Identifies the underlying principles, reasons, or facts of information by breaking down information or data into separate parts.
- Compares current system processes to proposed system changes to determine the potential impact on other systems and business operations.
- Analyzes existing data for accuracy and completeness. Identifies the data input, output sources and logical interfaces, to estimate the volume of associated data within the system.
- Performs a system walkthrough with team and stakeholders to collect continuous feedback for future application modifications
- Attends and participates in all team activities related to current work which includes planning, refinement, estimating, sizing, retrospectives, and reviews

Competencies

- Communication: written and verbal
- Empathic
- Analytical
- Problem Solver
- Relationships
- Planning
- Time Management
- Technical Continuous Learning
- Functional/Technical Competency
- Learning on the Fly
- Timely Decisions

Required Technologies Skills

Experience testing applications built with:

- Single Page Applications
- Relational Databases and SQL
- ASP.NET, ASP.NET Core, or another server-side API framework
- Angular
- Bootstrap, Material, or other CSS frameworks
- Restful APIs
- CI/CD

Tools

- Teams, Webex, other video and collaboration tools
- Azure DevOps (aka Team Foundation Server)
- Test Manger
- Postman, Swagger, or API testing tool
- Selenium or another automated web testing framework
- Datagrip or anther relational database management tool
- Git
- Browser developer tools

Additional Desired Skills

In addition to the above requirements, experience with the following technologies would be a benefit for the position:

- Experience in Azure and Azure related testing
- Experience in Software development skills and knowledge
- Experience with automated testing tools and code driven test frameworks such as Microsoft CodedUI , Cucumber, Selenium or other
- Understanding of general software development concepts as related to automation such as identification of web elements, etc.
- Experience testing under a services architecture