

## **Software Testing**

Includes utilization of industry tool sets to validate full functionality of systems as well as interoperability with databases and both horizontal and vertical integration with other interfaced systems in accordance with industry standard best practices.

Skills and experience in this category include conducting investigations to provide information about the quality of the product or service under test; providing objective, independent views of the software to allow the Purchaser to appreciate and understand the risks of software implementations; and development of artifacts used in enterprise common testing/evaluation of information systems. Testing techniques include but are not limited to the process of executing a program or application with the intent of finding software bugs or other defects.

Skills and experience in this category include the following:

- Full understanding of testing processes & procedures and willingness to work within the Purchaser's configuration management process.
- Development of artifacts used in testing /evaluation of information systems and tool sets used to validate full functionality of the system as well as interoperability with databases and both horizontal and vertical integration with other interfaced systems in accordance with ISO or industry standard best practices.
- Artifacts generated and used by vendors should include but are not limited to Standard Software Test Plans (STP), Standard Software Test Descriptions (STD) and Standard Software Test Reports (STR).
- Conduct of Load, Functional/ Regression and Conformance testing of information systems built around mainframe or Microsoft .NET, J2EE or other mainstream product lines.
- Providing guidance and mentoring to State staff on proper testing procedures.
- Planning, implementation, and testing of usability for Web sites and Web-based applications including: Web site effectiveness, efficiency, and satisfaction; user's ability and time it takes to find information and complete services online.
- Experience with user-centered design including: Early focus on user tasks and needs; ability to observe, measure, and record a user's behavior; and implement feedback using an iterative design process.
- Reviewing, testing, and providing recommendations for the improvement of web-based information and application accessibility using [Section 508 of the Rehabilitation Act Standards and the World Wide Web Consortium's \(W3C\) Web Content Accessibility Guidelines \(WCAG\)](#).
- Using testing tools, in a Microsoft, Java based, or mixed N-Tier environment (Client Server /Web).
- Using testing tools in a mainframe environment (e.g. QABatch).