

Software Developers, Quality Assurance Analysts, and Testers

SOC: 15-1252 • Career Profile Report

■ Key Facts

\$131,450

Median Salary

1,895,500

Employment

+15.0%

Growth Rate

■ Requirements & Salary Range

Education: Bachelor's degree

■ Automation Risk Assessment

Low Risk - 8.0% probability of being automated in the next 10-20 years.

This job is relatively safe from automation due to its creative, social, or complex problem-solving requirements.

■ Work-Life Balance

8.5/10 - Excellent work-life balance

■ Personality Fit (RIASEC)

Higher scores indicate better personality fit for this career type.

Realistic	7.4/10	Investigative	9.2/10
Artistic	4.6/10	Social	5.4/10
Enterprising	5.6/10	Conventional	6.8/10

■ Top Skills Required

Analytical skills, Communication skills, Creativity, Detail oriented, Interpersonal skills, Problem-solving skills

✓ Strengths

- High Demand
- Flexible Work
- Continuous Learning

■ Challenges

- Burnout Risk
- Rapid Technological Change

■ What They Do

Software Developers, Quality Assurance Analysts, and Testers typically perform the following tasks:

- Analyze user needs and software requirements to determine feasibility of design within time and cost constraints.
- Develop or direct software system testing or validation procedures, programming, or documentation.
- Confer with systems analysts, engineers, programmers and others to design systems and to obtain information on project limitations and capabilities, performance requirements and interfaces.
- Modify existing software to correct errors, adapt it to new hardware, or upgrade interfaces and improve performance.
- Prepare reports or correspondence concerning project specifications, activities, or status.
- Analyze information to determine, recommend, and plan installation of a new system or modification of an existing system.
- Store, retrieve, and manipulate data for analysis of system capabilities and requirements.
- Design, develop and modify software systems, using scientific analysis and mathematical models to predict and measure outcomes and consequences of design.
- Determine system performance standards.
- Consult with customers or other departments on project status, proposals, or technical issues, such as software system design or maintenance.
- Confer with data processing or project managers to obtain information on limitations or capabilities for data processing projects.
- Monitor functioning of equipment to ensure system operates in conformance with specifications.
- Coordinate installation of software system.
- Supervise the work of programmers, technologists and technicians and other engineering and scientific personnel.
- Supervise and assign work to programmers, designers, technologists, technicians, or other engineering or scientific personnel.
- Obtain and evaluate information on factors such as reporting formats required, costs, or security needs to determine hardware configuration.
- Train users to use new or modified equipment.