

# What do Software Developers/QA Analysts do?

Develop, create, test and modify general computer applications software or specialized utility programs. Analyze user needs and develop software solutions. Design software or customize software for client use with the aim of optimizing operational efficiency. May analyze and design databases within an application area, working individually or coordinating database development as part of a team.

## Work Content

Modify existing software to correct errors, allow it to adapt to new hardware, or to improve its performance.

Develop and direct software system testing and validation procedures, programming, and documentation.

Confer with systems analysts, engineers, programmers and others to design system and to obtain information on project limitations and capabilities, performance requirements and interfaces.

Analyze user needs and software requirements to determine feasibility of design within time and cost constraints.

Coordinate system installation and monitor equipment functioning to ensure specifications are met.

Develop testing programs that address areas such as database impacts, software scenarios, regression testing, negative testing, error or bug retests, or usability

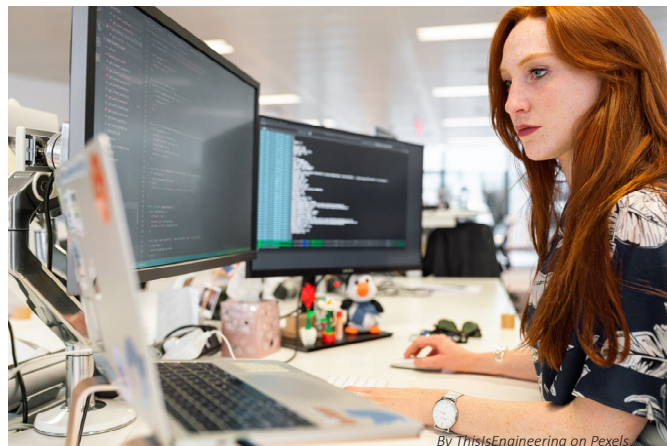
## Places to work

Computer Systems Design and Related Services

Self Employed Workers, All Jobs

Computer and Electronic Product Manufacturing

Publishing Industries



Median annual wage \*

Not available

Projected employment \*\*

12,916

Annual openings (Jobs)

1,092

## Career Cluster



information  
technology

\* Wage estimates based on surveys conducted from November 2019 to May 2021

\*\* Projected Occupational Employment in 2030

## How do you become a Software Developer/QA Analyst?

Software developers, quality assurance analysts, and testers usually have at least a four-year college degree in a computer-related field. While work experience and on-the-job training are not a requirement, applicants with experience and strong computer programming abilities are preferred. The ability to stay up-to-date with new developments in the field is also a valuable skill. Knowledge of the industry for which software is being developed is another asset. Many software developers continually pursue knowledge of technological advances through classes and training programs.

## Interests (Holland Codes)



**Investigative** — Investigative occupations frequently involve working with ideas, and require an extensive amount of thinking. These occupations can involve searching for facts and figuring out problems mentally.

**Conventional** — Conventional occupations frequently involve following set procedures and routines. These occupations can include working with data and details more than with ideas. Usually there is a clear line of authority to follow.

## Work environment

Many software developers quality assurance analysts, and testers work for computer systems design and related services firms or software publishers. Software development is a collaborative process, and developers work on teams with others developers. However some developers telecommute. Most work full time, and long hours are common.

## Explore more: \*\*\*

IEEE Computer Society, [www.computer.org/](http://www.computer.org/)

\*\*\* Inclusion of this information is intended to provide a convenient resource for exploration, but does not constitutes an endorsement for any organization, nor is the list all-inclusive.

### Source:

New Hampshire Employment Projections, base year 2020 to projected year 2030  
New Hampshire Occupational Employment and Wages, May 2021  
Occupational Outlook Handbook, Bureau of Labor Statistics

