

Software Engineering Roles & Responsibilities

Software Developer

Business Analyst

Test Engineer

DevOps Engineer

System Analyst



System/Software Architect

UI/UX Engineer

Security Engineer

Project Manager

Product Owner/Manager

Software Developer

A software developer is a person who creates computer programs or applications.

Write code using programming languages.



Write Unit Test Cases to make sure the code is working as expected



Debug & Troubleshoot Software



Perform code reviews of junior engineers to ensure code quality



Business Analyst

A software business analyst is someone who helps create and implement software solutions for businesses.



Working with stakeholders to understand their business needs and goals, and identifying opportunities for improvement



Gathering and documenting requirements for software development projects



Analyzing data and information to identify trends, patterns, and relationships



Communicating findings and recommendations to stakeholders and project team members

Test Engineer

Developing and implementing test plans and strategies to ensure the quality of software



A test engineer is responsible for **designing, developing, and executing tests** for software or hardware systems in order to ensure that they meet expectations.

Writing, executing, and maintaining test cases and scripts



Identifying, analyzing, and reporting defects or issues in the software



Participating in code reviews to ensure the quality of the codebase



DevOps Engineer

A professional who specializes in the integration of **software development (Dev)** and **IT operations (Ops)**.



Collaborating with the **development** and **operations** teams to plan and execute software projects



Developing and implementing automation tools and processes



Develop and maintain CI/CD (Continuous Integration/ Continuous Delivery) infrastructure for the projects.



Investigating and resolving technical issues and incidents



System Analyst

Analyzing the needs of the organization and its stakeholders to identify opportunities



Designing and specifying the functional requirements for software systems



Developing software systems using a variety of programming languages and tools.



Testing and debugging software



A software system analyst is a professional who works with organizations to design and develop software systems that meet their business and technical needs.

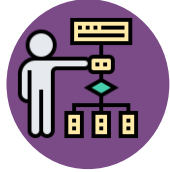


System/Software Architect

A professional who is responsible for the **overall design and architecture** of a software system.



Collaborating with others to identify and prioritize software needs



Developing and implementing architecture and design plans for software solutions



Providing technical leadership and guidance to other members



Evaluating and selecting appropriate software solutions and technologies

UI/UX Engineer

Developing and implementing user interface designs
and user flows



A professional who focuses on the
User Interface Design & User
Experience of a software
application

Conducting user research and testing to
gather feedback and insights



Creating wireframes, prototypes,
and high-fidelity designs



Working with developers to
ensure that UI's are
implemented accurately



Security Engineer

A security engineer is a type of engineer **who focuses on designing and implementing computer and network security systems**



Developing and implementing security policies, procedures, and standards



Conducting security assessments and audits



Monitoring and analyzing security logs and alerts



Implementing security controls and technologies

Project Manager

Defining the scope, goals, and deliverables of the project



A person who is responsible for **planning, organizing, and overseeing** the completion of a specific project or set of projects within an organization.

Communicating project status, progress, and issues to stakeholders and decision makers



Ensuring that the project is completed on time, within budget, and to the required quality standards



Providing leadership and guidance to the project team

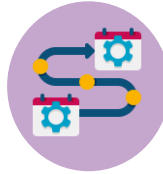


Product Owner/Manager

A person who is responsible for **defining and prioritizing the features and requirements** of a product in a product development process.



Identifying and analyzing market opportunities and customer needs



Developing and maintaining a product roadmap



Gathering and prioritizing product and customer requirements



Developing and implementing marketing and sales strategies