



Development Team Roles

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Welcome to Development Team Roles.

What you will learn

At the core of the lesson

You will learn how to:

- Identify the different roles in a software development team
- Identify the responsibilities of the project manager
- Identify the responsibilities of the analyst
- Identify the responsibilities of the quality assurance role
- Identify the responsibilities of the software developer
- Identify the responsibilities of the database administrator



After completing this module, you should be able to:

- Identify the different roles in a software development team
- Describe general guidelines for effective development teams



To complete the Software Development Life Cycle (SDLC) in a successful and timely manner, development often takes place in teams. All team members have specialized roles that are designed to collaborate with each other.

Many teams are self-contained, where the team has enough technical expertise to accomplish the SDLC without relying on outside support.

Project manager



Project
manager

- Is responsible for developing a project plan
- Recruits staff to fulfill other roles
- Leads and manages the project team
- Assigns tasks to different team members
- Determines a timeline for the project
- Provides updates to upper management

Analyst



Analyst

- Is sometimes called the business analyst or requirements analyst
- Defines the purpose for each project
- Gathers requirements from leadership, clients, and users
- Organizes requirements into tasks for developers and quality assurance (QA) to use for implementation and testing

Quality assurance



Quality assurance

Using requirements, a quality assurance team member:

- Creates a list of tests that verify function, usability, efficiency, maintainability, and portability for each new requirement
- Maintains the list of tests that are needed to verify the behavior for each previously released feature
- Runs all tests and investigates any failures
- Documents the steps to replicate bugs or issues in the application for the developer
- Assists in creating the acceptance criteria, which are the performance criteria that are used to measure successful completion of the application

Software developer



Software
developer

- Writes the code that makes up the application according to the specifications that the analyst provides
- Maintains previous versions of the application if they are still supported
- Runs initial test cases to ensure that the product works
- Writes code to fix and address bugs or other issues that are reported to them

Database administrator



Database
administrator

- Maintains the data that is needed in the application
- Is responsible for planning, maintaining, and configuring access to that data; and ensuring the availability of enough computing resources to make an application work correctly
- Secures the data in the database
- Backs up data (and restore data as needed)
- Is responsible for database performance and optimization

Effective software teams

Because of the complexity of today's software applications, they are usually developed in teams. Effective collaboration can be the difference between a successful project and a project that fails.

Some general guidelines to follow include:

- Translating goals into a clear definition of work
- Prototyping and iterating over designs
- Using version control software to keep track of changes
- Documenting important decisions and any required project knowledge
- Encouraging two-way feedback
- Using time wisely

Checkpoint questions



Which team member tests an application?



Which team member secures the data in the database?

Key takeaways

Development team roles



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- The roles that are involved in the development of software include –
 - Project manager
 - Analyst
 - Quality assurance
 - Software developer
 - Database administrator
- Effective practices for developing software in a team include –
 - Clearly defining and communicating the requirements
 - Documenting the design
 - Using version control

aws re/start

Some key takeaways from this lesson are listed here.

- The roles involved in the development of software include –
 - Project manager
 - Analyst
 - Quality assurance
 - Software developer
 - Database administrator
- Effective practices for developing software in a team include – s
 - Clearly defining and communicating the requirements
 - Documenting the design
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