SYSTEM ENGINEERING ROLES AND RESPONSIBILITIES INFOGRAPHIC OVERVIEW

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SYSTEM ENGINEERING LIFECYCLE

MAIN ROLES AND THEIR RESPONSIBILITIES



STAKEHOLDERS

Users, Clients, Sponsors

- Define the requirement or objectives
- Provide input or feedback during the development lifecycle
- Evaluate the outcomes or deliverables
- Approve acceptance testing



SYSTEM ANALYST

- Systematically assess stakeholder's requirement and draw design of the system
- implementation
 Evaluate on choices
 of hardware and
- of hardware and software, as well as technology/business solutions
- Ensure final system meets objectives and provide value to stakeholders



SYSTEM ENGINEER

- Design system architecture, components, interfaces and data
- Implement feature s by coding with best practices
- Ensure the system is reliable, maintainable, and meets performance standards.



QUALITY ASSURANCE (QA) ENGINEER

- Design and write test plan, test cases, and test script to validate system functionality
- Implement different testing (functional, performance, security) to ensure system quality
- Identify defects and work with development team to resolve them

Project initialization

Stakeholders/System Analyst

Identifying problems, opportunities, and objectives

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System

Engineerin

g lifecycle

Deployment and Evaluating

After the system release,

Stakerholders will evaluate the
features. Sometimes it's called user
acceptance testing. (UAT). System
Analyst might join to explain or
document the feedback

Testing

Quality Assurance Engineer would test the features/implementations and feedback to system engineer if any acceptance criteria is not matched

Requirement Collection

Stakeholders and System Analyst would deterrme human information requirements.

Requirement Analysis

System analyst would analyze requirements and interpret them to the development team

System Design

System Engineer (System architect or developers) would design the implementation details/specifications Sometimes System analyst might attend

System Development

System Engineer will implement the details, in case any miscommunication, requirement confirmation might need Stakeholders and System analyst to join