

# Software Development Lifecycle (SDLC)

**Q: What is SDLC?**

A: Software Development Lifecycle — a structured process for planning, building, testing, and deploying software.

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**Q: What are the main phases of SDLC?**

A: Requirement Gathering, Design, Development, Testing, Deployment, and Maintenance.

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**Q: What is Requirement Analysis?**

A: The process of understanding and documenting what the system should do.

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**Q: What is System Design?**

A: Defining architecture, components, data flow, and technical approach before development.

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**Q: What does Development phase mean?**

A: The stage where developers write code based on requirements and design.

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**Q: What is Testing in SDLC?**

A: The process of verifying that the software works correctly and meets requirements.

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**Q: What does Deployment mean?**

A: Releasing the software into a production environment for users.

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**Q: What is Maintenance?**

A: Ongoing updates, bug fixes, and improvements after deployment.

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**Q: What is Waterfall Model?**

A: A linear SDLC approach where each phase is completed before moving to the next.

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**Q: What is Agile Model in SDLC?**

A: An iterative approach where development happens in cycles with continuous feedback and improvement.