

SDLC Spiral Model

1. Spiral model is one of the most important Software Development Life Cycle models.
2. This model was first described by Barry Boehm in 1986.
3. Spiral Model can handle large amount of risk.
4. The spiral model has four phases:
Planning, Risk Analysis, Development & Testing, Evaluation.
5. In its diagrammatic representation, it looks like a spiral.



1.PLANNING:

Requirements are gathered from the customers and the objectives are identified, and analyzed at the start of every phase. Requirements like BRS and SRS are gathered from this quadrant. Then alternative solutions possible for the phase are proposed in this quadrant.

2.RISK ANALYSIS:

During the second quadrant all the possible solutions are evaluated to select the best possible solution. Then the risks associated with that solution is identified and the risks are resolved using the best possible strategy. At the end of this quadrant, Prototype is built for the best possible solution.

3.DEVELOPMENT & TESTING:

During the third quadrant, the identified features are Developed and verified through Testing.

4.EVALUATION:

This phase allows the customer to evaluate the output of the project before the project continues to the next spiral. Customer evaluate the software and provide their feedback and approval. In the end, planning for the next phase is started.

When to use Spiral Model?

1. When the project is large.
2. Where the amount of risk is large.
3. Where requirements are complicated.
4. Where Software require significant changes.
5. Where enough time frame is their.
6. Where releases are required to be frequent.

Advantages of Spiral Model:

1. Best model for the risk analysis and risk handling.
2. Good for large projects.
3. Flexibility in Requirements.
4. Customer Satisfaction.
5. Software is produced Early.

Disadvantages of Spiral Model:

1. The Spiral Model is much more complex than other SDLC models.
2. Spiral Model is not suitable for small projects as it is expensive.
3. It's Costly for smaller Projects.
4. Difficulty in time management: As the number of phases is unknown at the start of the project, so time estimation is very difficult.