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SDL Comparison

KEY POINTS

RAPID APPLICATION DEVELOPMENT

- Deliver fast development and deliver of high quality systems, while remaining cost efficient
- Breaks project into small segments to help reduce risk.
- Key point is business needs
- Uses iterative Prototyping along with active user input and computer developmental tools.
- Make project fit the deadline but cutting programs, instead of extending deadline.

SPIRAL MODEL

- Main focus on risk assessment
- Evaluate risks before continuing project
- Every trip around the model has four steps.
- Combination of Waterfall Model and Rapid Prototyping

Spiral Model What is it?

The Spiral SDLC Model is the combination of both the Waterfall and Rapid Prototype Development Models. By combining these two models, the Spiral model is able to complete tasks using both the bottom-up and top-down methods. To understand the Spiral, we have to know its four main steps. The first step in the model is to Determine objective, alternatives and the constraints of iteration. This is followed up by, evaluating the alternatives and identifying the risks associated with it, while having the ability to resolve said risks. From there the model looks to develop and verify its deliverables from the iteration, and finishing by planning out the next step. These four steps are complete each time the spiral enters a new phase. One of the biggest points of emphasis with the spiral model is risk assessment. Assessing the risks using this model will help determine if the project is make or break. The cost of doing these steps over and over can be expensive, but helpful when producing multiple prototypes throughout the process. It is more often than not used in larger-scale projects due to its cost, while smaller projects tend to refrain from using it.

Rapid Application Development What is it?

The SDLC Rapid Application Development model or RAD for short has a main goal of fast development and high quality while remaining cost efficient. The purpose of RAD is to create multiple prototypes quickly, therefore forfeiting most of the up-front planning. By spending less time planning the software can be written quickly, and can have its requirements changed as the process goes along. RAD also uses a form of risk assessment by breaking a project into smaller parts, so changes can be made if need be. The sole purpose of RAD is to create projects meant for business type situations with a focus on business itself, instead of technological effectiveness. RAD looks to create a high quality product very quickly. It is done using iterative Prototyping, which means prototypes can be made at any stage during the developmental process, user involvement, and computer based developmental tools like Graphical User Interfaces. With business, comes money and unlike the Spiral Model, RAD is used to stay on course for an expected deadline. If for some reason the project is in jeopardy of missing its deadline, portions of the project are removed instead of extending the deadline. This reduces the cost, which makes this model affordable for smaller-scale projects.