ASSIGNMENT ON SDLC MODEL Prem B. Khodke

Q1. Discuss the prototyping model. What is the effect of designing a prototype on the overall cost of the project?

Ans. Prototype model is built using several short-cuts. Short-cuts might involve using inefficient, inaccurate, or dummy functions. A function may use a table look-up rather than performing the actual computations. The developed prototype is submitted to the customer for his evaluation. Based on the user feedback, requirements are refined. This cycle continues until the user approves the prototype.

Prototyping may have some initial costs of developing, but it reduces the overall budget by helping your product to be free of the errors or glitches that could have occurred if the idea was made from scratch without any prior user testing.

Q2. Compare iterative enhancement model and evolutionary process model.

Ans. Iterative Enhancement Model: This model has the similar phases as the waterfall model, but with fewer restrictions. In general, the phases occur in the same order as in the waterfall model but these may be conducted in several cycles. A utilizable product is released at the end of each cycle with each release providing additional functionality.

Evolutionary Development Model: Evolutionary development model bear a resemblance to iterative enhancement model. The similar phases as defined for the waterfall model occur here in a cyclical fashion. This model is different from iterative enhancement model in the sense that this doesn't require a useable product at the end of each cycle. In evolutionary development requirements are implemented by category rather than by priority.

Q3. As we move outward along with process flow path of the spiral model, what can we say about software that is being developed or maintained.

Ans. One of the most significant models for the Software Development Life Cycle that supports risk handling is the spiral model. The product advances to a more complete state as work spirals outward, and the level of abstraction at which work is conducted decreases (i.e., implementation specific work accelerates as we move further from the origin). The project manager might alter the precise number of phases required to build the product depending on the project's risks. The project manager plays a crucial role in the spiral model of product development since they dynamically set the number of phases.

Q4. Explain the Scrum Agile methodology.

Ans. In Scrum Agile methodology, the project is described as a list of features: the backlog. The features are described in terms of user stories. The scrum team estimates the work associated with each story. Features in the backlog are ranked in order of importance. A ranked and weighted list of product features a roadmap.

Q5. Explain the utility of Kanban CFD reports.

Ans. The cumulative flow diagram (also known as CFD) is one of the most advanced Kanban and Agile analytics charts. It provides a concise visualization of the three most [important metrics of your flow](https://kanbanize.com/agile/project-management/agile-metrics):

* Cycle time
* Throughput
* Work in progress

Its main purpose is to show you how stable your flow is and help you understand where you need to focus on making your process more predictable. It gives you quantitative and qualitative insight into past and existing problems and can visualize massive amounts of data.