**ASDM**

Assignment No.1

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

ANS: Prototype is the act of making the software applications prototypes which is basically an incomplete version of the software program that is being developed. It takes place in software development and is comparable to prototyping as known in other fields like that of manufacturing and mechanical engineering. However, it is completely different from that of the final product and stimulates only a few aspects.

2) Compare iterative enhancement model and evolutionary process model.

ANS: Iterative Waterfall Model: The Iterative Waterfall model is probably the most used software development model. This model is simple to use and understand. But this model is suitable only for well-understood problems and is not suitable for the development of very large projects and projects that suffer from a large number of risks.

Evolutionary Model: The Evolutionary model is suitable for large projects which can be decomposed into a set of modules for incremental development and delivery. This model is widely used in object-oriented development projects. This model is only used if incremental delivery of the system is acceptable to the customer.

3) 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.

In diagrammatic form, it resembles a spiral with several loops. The spiral's precise number of loops is unclear and varies from project to project. A phase of the software development process is referred to as each spiral loop.

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.

The waterfall model's methodical, managed elements are combined with the idea of iterative development in the spiral model. Iterative and sequential linear development models, or the waterfall model, are combined to create the spiral model, which places a strong emphasis on risk analysis.

4) Explain the scrum agile methodology. ANS: Agile scrum methodology is a project management system that relies on incremental development. Each iteration consists of two- to four-week sprints, where the goal of each sprint is to build the most important features first and come out with a Potentially Shippable Product. One of the most popular agile methodologies in use today, Scrum is a lightweight software development methodology that focuses on having small time-boxed sprints of new functionality that are incorporated into an integrated product baseline. Scrum places an emphasis on transparent customer interaction, feedback and adjustments rather than documentation and prediction.

5) Explain the utility of Kanban CFD reports.

ANS: The cumulative flow diagram tracks the total number of work items in progress each day. It is called “cumulative” because the values are accumulated over time.

There is a lot of critical flow information that can be drawn from the CFD at a glance. You can analyse your process in more depth by learning to recognize the most common CFD patterns. By tracking the duration of each task, teams can see how quickly they are delivering work.

The gradient of the CFD curves is used to observe changes in work in progress amounts. A sharp increase in the slope gradient would occur if your team is doing too many things at once. Such types of impediments visually show how stable your process is.