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**EPP Assignment**

Write short notes on following:

* Scrum

Scrum is a project management approach used in Agile development. It favours moving projects forward via short-term blocks of work called sprints, which are usually confined to two-week intervals. Teams working with this framework are self-organizing and not top-down or hierarchical in nature. Scrum-specific roles include the Scrum master, essentially a team guide and the product owner, who represents the business and customers. It is easy to understand and allows rapid feedback and issues to be brought up through daily meetings. Often this framework can place a high degree of pressure on the team due to the frequent and short deadlines. Scrum framework is used by organizations looking for a lightweight, team-based approach to agile project management.

* Lean Development

It is an Agile framework based on optimizing development time and resources, eliminating waste, and ultimately delivering only what the product needs. This approach is also referred to as the Minimum Viable Product strategy, in which a team releases a bare-minimum version of its product to the market, learns from users what they like, don’t like and want to be added, and then iterates based on this feedback. Its streamlined approach allows more functionality to be delivered in less time. It eliminates unnecessary activity, and as a result can reduce costs. The development team gets empowered to make decisions, which can also boost morale and confidence. Because of its streamlining of the process and forcing the team to cut away any activity that doesn’t directly affect the final product, this framework is used by many organizations. An organization with an outstanding development team can be useful for this approach to be successful.

* Extreme programming (XP)

This agile framework focusses on emphasizing the production of higher-quality software to please customers as well making life better for the engineers who are developing it. The main characteristics of XP include dynamically changing software requirements, using a small development team and leveraging technology that facilitates automated unit and functional tests. It can help cut costs for software development organizations. The team members are accountable to the team for their work. The emphasis on quality-of-life issues helps boost employee morale and retention. Although, it does not place emphasis on code quality, which can lead to defects in early iterations. It is also not ideal if developers are not in the same location. It is designed to help companies meet the needs of customers who might not know or be able to articulate precisely what they need, or whose needs may change frequently. This agile framework is designed to help companies reduce the risks of managing projects like this with dynamic requirements.

* Adaptive Software Development (ASD)

This framework is a direct outgrowth of an earlier agile framework, Rapid Application Development. It aims to enable teams to quickly and effectively adapt to changing requirements or market needs by evolving their products with lightweight planning and continuous learning. The ASD approach encourages teams to develop according to a three-phase process: speculate, collaborate, learn. It focused on the end users, which can lead to better and more intuitive products. It allows for on-time and even early delivery. Also, it encourages more transparency between developers and clients. Further, it demands extensive user involvement, which can be difficult to facilitate. It requires testing into every stage, which can add to a project’s costs. The emphasis on rapid iterating and continuous feedback can lead to scope creep. Adaptive Software Development can be a useful methodology if an organization prioritizes rapid delivery of products and sees value in continuously evolving your offerings.

* Feature Driven Development

It is a type of agile framework that organizes software development around making progress on features. Features in the FDD context, though, are not necessarily product features in the commonly understood sense. They are similar to the Scrum framework int terms of user stories. For example, the login process might be considered a feature in the Feature Driven Development methodology. It involves a simple five-step process allowing for more rapid development. It also allows larger teams to move products forward with continuous success. It involves less written documentation, which can lead to confusion and does not work efficiently for smaller projects and is also highly dependent on lead developers or programmers. Further, it uses pre-defined development standards so that teams are able to move quickly. It is useful for big corporations and large-scale software projects because of its top-down decision-making approach.