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HW1

Question 1:

a) Concepts are generalized ideas that are not specific to a particular implementation and have a wider definition domain. Whereas the implementation is a specific realization of the concept.
b) Knowing the difference between a concept and an implementation is crucial because it makes the actor assess their decisions in light of both, the conceptual base of tool and the pros of its implementation rather than just relying on superficial knowledge of the tools.
c) Concept: Hybrid Mobile Application Development Framework, Implementation: React-native, Flutter, Xamarin.

Question 2:

That time is referred to as the dark ages because their no proper version control systems like Git or Mercurial at the time and there was a lack of proper DevOps tools as well.

Question 3:

Open source CI is set up on private servers in the organization and provide complete control to the organization over the CI process. Hosted CI is a shared platform containing many easier options for organizations to implement CI over their existing codebases without having to spend heftily or worry about setting up the CI servers.

Using on-premise (open-source) CI gives the organization complete control over the integration, compilation, environment and dependency utilization of the product during build and testing, but in hosted CI, the control although many, are still limited by the options offered by the platform. On the other hand, hosted CI allows organizations to use CI tools easily and use pre-built presets readily. Open-source CI allows organizations to implement an extra layer of

security as the codebase is used and built on private servers whereas hosted CI may have servers in any locations which might not agree to the security policies of a particular company or a country. Finally, Hosted CI makes it easy for smaller teams and projects to readily utilize CI without worrying about every minute detail of the implementation.

Question 4:

The core focus of the presentation was on sharing knowledge of important concepts of various tools and platforms used in DevOps. Hence, the presenter was explaining many such tools and elaborating on their various uses and importance in the engineering domain.

Question 5:

This happens because of a popular problem called the 'definition sprawl' where a single term (like DevOps for instance) is utilized in a more stretched out domain and used to define a lot of operations. Although this causes terms like DevOps to not have a specific meaning, this also allows organizations to have their own definitions of the term/ position name which they can utilize according to their own inhouse needs.

Question 6:

Before the advent of a DevOps team, in conventional organizations, the developers/ engineers were tasked with the development of the product until the initial release only. Any other scalability issues and maintenance on the product were assigned to the operations team of the organizations. With the inclusion of DevOps in such organizations, developers are responsible to see a project through to the end dates with tasks including developing, maintaining and scaling the product even after the first deployment.