

Questions

1. In the traditional way of software development, different teams are working in isolation. What are the consequences of this? Choose all that apply:
 - a. Bugs are spotted at later stages of the lifecycle.
 - b. The whole process takes longer.
 - c. There will be a lot of finger-pointing and less productivity
 - d. All of the above
2. How does DevOps solve the above drawbacks?
3. Explain why the rise of DevOps concept was influenced by the traditional waterfall model of software development.
4. The maximum amount of time for an Agile-based project iteration to finish is:
 - a. 2 days
 - b. 5 days
 - c. 1 week
 - d. 2 weeks
5. In the waterfall methodology, changes are very hard to be adopted when in the implementation phase. Why?
6. A project developed using the waterfall methodology may take up to two years to complete
 - a. True
 - b. False
7. Bugs can be spotted early enough in the waterfall methodology
 - a. True
 - b. False
8. DevOps is nothing more than a way to speed up the waterfall way of software development so it takes less time
 - a. True
 - b. False
9. What are the advantages of using continuous integration?
 - a. Code is constantly checked for errors during building or integrating with other parts of the application.
 - b. Bugs are spotted early enough and, thus, takes less time to solve.
 - c. The iteration takes less time
 - d. Changes can be adopted easily.
10. What is meant by continuous delivery?
11. Why is continuous deployment considered more advanced than continuous integration and continuous deployment?
12. DevOps adopts automation tools as much as possible to facilitate the workflow
 - a. True
 - b. False
13. Virtualization can be considered one of the pillars on which DevOps was built
 - a. True
 - b. False
14. The following can be considered DevOps tools:
 - a. Jenkins

- b. Git
- c. Sublime text
- d. Vagrant

Answers

1. D
2. DevOps is about building collaboration and knowledge sharing between different teams. Under DevOps, all stakeholders are having the same target and are working in harmony to achieve it. Accordingly, all team members get involved in all the project phases. Several tools are used to facilitate this. They add automation to do the heavy lifting and minimize human intervention.
3. In the waterfall methodology, there is an inherent isolation between different stages of the project. This naturally creates the same isolation among the working teams, which leads to lower levels of cooperation and teamwork. DevOps was introduced to lift the barriers between teams, build the project through a number of fast iterations that incrementally creates the product. Each iteration will bring about a working product. More and more features get added in subsequent iterations.
4. D
5. Each stage takes a considerably long time to complete. It covers all the possible aspects of the project. Once it is finished, turning back and making changes may break the previous phases; as their input is necessary to complete the current stage.
6. A
7. b
8. B
9. A,b,c, and d
10. Running integration and quality assurance tests on the code in a constant manner (whenever new code is available). This ensures that code is closest to being delivered to production at all times.
11. Continuous deployment adds more automation and verification steps to ensure that code is ready for production. Such a practice means that submitted code will take a lot less time before it can be deployed to production environments.
12. A
13. A
14. A and b