DevOps

▼ What is DevOps?

DevOps is **the combination of cultural philosophies, practices, and tools that**
increases an organization's ability to deliver applications and services at high velocity: evolving and improving products at a faster pace than organizations using traditional software development and infrastructure management processes.

▼ `What are DevOps life cycle phases`?

There are a total of seven phases in the DevOps lifecycle – **Continuous development, continuous integration, continuous testing, continuous delivery, continuous feedback, continuous deployment, and continuous operations.**

▼ Tell us a few tools for every phase in devops?

Continuous Development – Git, SVN, Mercurial, CVS, and JIRA, Ant, Maven, Gradle.

Continuous Testing –Selenium, **TestNG**, **JUnit**

Continuous Deployment –Puppet, Chef, SaltStack, and Ansible

Continuous Monitoring –Splunk, ELK Stack, Nagios, NewRelic and Sensu.

▼ `What are the benefits of DevOps`?

Unites teams for faster product shipments

Simplifies development focus

Renews focuses on the customers

Introduces automation to the development process

Supports end-to-end responsibility

▼ `How does the organization get benefit from the use of DevOps culture`?

DevOps facilitates collaboration by breaking down the silos among Dev/Ops/QA teams and
encourages them to work together toward a single goal: **Creating more value**

for your organization, which will ultimately help you deliver more value to your customers.

- `What are the git commands`?

  1. Git clone 2. Git branch 3. Git checkout 4. Git status 5. Git add 6. Git commit 7. Git push **8. Git pull 9. Git revert 10. Git merge**

- `What is GitHub`

  GitHub is **a code hosting platform for version control and collaboration**. It lets you and others work together on projects from anywhere.

- `How does the GitHub help us/developer`

  It **enables developers to upload their own code files and to collaborate with fellow developers on open-source projects**. GitHub also serves as a social networking site in which developers can openly network, collaborate, and pitch their work.

- `Do you have an account with Github`

  Yes

- `What is push and pull cmd`

  The **git pull**
  the command is used to get updates from the remote repo. This command is a combination of **git fetch** and **git merge** which means that, when we use git pull, it gets the updates from remote
  repository (git fetch) and immediately applies the latest changes in your local (git merge).

  The **git push**

  After committing your changes, the next thing you want to do is send your changes to the remote server. Git push uploads your commits to the remote repository.

- `What are the local and remote repository`

  Local repositories reside on the computers of team members. In contrast, remote repositories are hosted on a server that is accessible for all team members - most likely on the internet or on a local network.

- `Is it possible to push without a commit command?`

  No, you must make a commit before you can push

- `Is it possible to push/upload on GitHub without any git command`?

- `What is CI/CD?`
- `What are the different ways to use/install jenkins`
- `What is a plugin in Jenkins?`

  Plugins are **the primary means of enhancing the functionality of a Jenkins environment to suit organization- or user-specific needs**.
  There are over a thousand different plugins that can be installed on a Jenkins controller and integrate various build tools, cloud providers, analysis tools, and much more.

- `Which plugin let you send email`?

  Using **Email Extension Plugin** – This plugin lets you configure every aspect of email notifications. You can customize things such as when to send the email, who receives
  it, and what the email says.

- `What is a .war file and How does maven help us in deploying an app`

  The . war (Web application ARchive) is **a packaging mechanism for putting together the application code of a web application to be deployed to a Servlet container.**