

Myths about DevOps :

- 1.Programming Language Knowledge is Required
- 2.Linux Experience is Must
- 3.Prior IT Experience is Required
- 4.Non-Technical background cannot do

Why Organisations Needs DevOps Specialists ??

- 1.Fast Delivery
- 2.High Availability
- 3.Less Capital Expense & Operational Expense
- 4.Reduced Outages

Software Development Life Cycle(SDLC) Phases :

- 1.Planning and Preparing Design Documents
- 2.Development : Developer develops code using Programming Languages like Java,Python etc and uploads the code to Github or Gitlab
- 3.Build : Maven
- 4.Testing : Selenium
- 5.Quality Assurance
- 6.Deploy : chef ...Ansible....Docker....Puppet
- 7.Maintenance
- 8.Monitoring : Nagios....AWS Cloudwatch

Popular SDLC Models : Waterfall....Agile...Spiral....V-Model.....Incremental Model.....Big Bang Model etc...

DevOps : Implementing automation at each and every stage

DevOps Stages :

- 1.Version Control : Maintain different version of the code --> Git
- 2.Continuous Integration : Compile,Validate,Code Review,Unit Testing,Integration Testing --> Jenkins
- 3.Continuous Delivery : Deploying the build app to test server --> Maven
- 4.Continuous Deployment : Deploying the test app on the production server for release --> Chef,Ansible,Puppet,Docker,Kubernetes

- The term DevOps is a combination of two words i.e Development and Operation
- DevOps is a Methodology that allows a single team to manage the entire application development

- The objective of devops is to shorten the systems development life cycle
- Devops is a software development approach through which superior quality software can be developed quickly and with more reliability

Scrum : Scrum is a framework used to manage a product development. With scrum a project is built in a series of iterations called as Sprints.

Sprints : Sprint is a short,time-boxed period where planned amount of work is completed and made available for review.

Note : Agile is a improvement of Waterfall SDLC Method where DevOps is improvement of Agile Methodology.

The diagram illustrates the Continuous Deployment process flow, centered around an 'Integration' hub. The process is divided into two main phases: 'Development' and 'Operations'.

Development Phase:

- Includes four sequential steps: Plan, Code, Build, and Test.
- 'Continuous Development' is associated with the Plan and Code steps.
- 'Continuous Testing' is associated with the Build and Test steps.

Integration:

- Acts as the central hub connecting the Development phase to the Operations phase.

Operations Phase:

- Includes three sequential steps: Deploy, Opearte (likely a typo for Operate), and Monitor.
- 'Continuous Deployment' is associated with the Deploy step.
- 'Continuous Monitoring' is associated with the Monitor step.

The flow is indicated by arrows connecting the steps in sequence, from Development through Integration to Operations.

