DevOps main aim is to establish collaboration between Development Team and Operation Team.

DevOps is a culture/process in IT industry to simplify application delivery process to the client with high quality.

## Development Team Roles

Requirement Gathering --> Requirement Analysis --> Design --> Development (Coding)

--> Unit Testing --> Code Integration --> Bug Fixing

## **DevOps Team**

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- 1) Understand Infrastructure requirement
  - Network
  - Servers
  - Storage
  - Backup
  - Security

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- 2) Infrastructure Creation on Cloud(AWS) (Terraform)
- 3) Configuration Management ( Ansible)

- 5) Working with Source Code Repository (Git hub) 6) Working with Docker (Simplify app execution process) 7) Manage Containers with Kubernetes (Orchestration)
- 8) Automate Build and Deployment Process (Jenkins) CICD pipeline
- 9) Infrastructure and App monitoring

4) Work with Linux Machine(Servers)

Skills required for a DevOps 

SDLC (Software Development Life Cycle) (Waterfall model, Agile Model, Scrum framework)

Application Architecture (Front end , Backend , tech stack, database)

Linux OS (commands) **Shell Scripting** Cloud Computing (AWS) DevOps Tools

- -Terraform
- Ansible
- Maven
- Git and GitHub
- Tomcat
- Docker
- K8S
- Jenkins
- Prometheus & Grafana
- EFK/ELK ( App Log monitoring)
- SonarQube

Linux OS + Shell Scripting **AWS Cloud DevOps Tools** Projects