Application: Few lines of code to provide the functionality.

**Types of Application**

Standalone/Desktop Application:

Web Application: Which we can access from anywhere but required internet connection.

Dynamic Application: They see data as per user login

Interpraise Web Application:

**Software development lifecycle**

Plan: Management will plan the works with JIRA Tickets

Code: Development team will write the code as per the requirements

Test: Tester will test the code and if it is ok then we can deploy on the server where application is available.

Build: After testing the code build will convert the code as per server understanding. It may be Binary files/executable/Artifacts.

Deployment: set of servers in which the application will run and making the environment available at the time of deployment.

Operations: Has all access, stable application required

Monitor: For debugging

**DevOps [Development + Operation]**

DevOps is a practice that allows team to manage the entire application development life cycle, that is development, testing, deployments and monitoring.

Tools + Communication + Faster delivery/deployment with automation and less error

*This will eliminate the need for AGILE and Traditional Waterfall method.*

**Principle of DevOps:**

1. Continuous Version Control: Should maintain/track the code changes.  
   Tools: GIT GITHUB BITBUCKET GITLAB SVN
2. Continuous Integration:   
   tools: Jenkins (Not a build tool) will integrate with build tools like Maven, Gitlab CICD pipelines, GitHub actions, Bamboo, Circle CI, TeamCity
3. Continuous Delivery: Used an automation tool to deploy the code in DEV/Test/PRE-PROD/Stagging server and manually deploy to production
4. Continuous Deployment: Complete automation no manual process involved
5. Configuration Management:
6. Continuous Monitoring
7. Communication and Collaboration