# Java With DSA And System Design

Name: Chaitanya K Assignment : Day 3

# **Assignment Questions**

- 1. What is Git?
- 2. What do you understand by the term 'Version Control System'?
- 3. Whatis GitHub?
- 4. Mention some popular Git Hosting services.
- 5. Different types of version control systems
- 6. What benefits come with using Git?
- 7. What is a Git repository?
- 8. How can you initialize a repository in Git?

#### **Answers**

#### 1. What is Git?

Git is a version control system (vcs) which is used to store, maintain and track the software and the changes made to it by the developers. It is also used to collaborate with other developers.

## 2. What do you understand by the term 'Version Control System'?

Version Control System sounds like it is a system or software which can track/store all the history versions of files or data. It is used to maintain the data and track the changes to the files.

#### 3. What is GitHub?

GitHub is a cloud based Git repository which provides hosting service for software development and version control for developers. It also provides the Distributed Version Control System which is mostly used by developers now a days.

#### 4. Mention some popular Git Hosting Services?

GitHub, Gitlab, BitBucket, Perdorce, Beanstalk, Codebase and Amazon AWS Commit.

#### 5. Different types of version control systems?

Types of version control system:

- 1. Local Version Control System
- 2. Central Version Control System
- 3. Distributed Version Control System

## 6. What benefits comes with using Git?

Benefits of using Git:

- 1. It helps to store the code
- 2. It helps to track the code changes and maintains each and every version of it.
- 3. It helps developers to work in a collaborative manner.
- 4. It has branches and trunk architecture, which helps us to work on different small features without disturbing the main trunk.

#### 7. What is a Git repository?

Git repository is a place where Git stores all the versions of the code and maintains/tracks the changes of the code. It helps the developer to work on any previous version or current that he is willing to work.

## 8. How can you initialize a repository in Git?

# Java With DSA And System Design

Name: Chaitanya K Assignment : Day 3

A repository can be initialized in Git by using the command 'git init'. This command can be used during the initial setup of the project.