IoT Chapter 3 Assignment

Multiple Choice Questions

1. What is version control?
   a) A method to monitor software usage
   b) A tool to track changes in software development
   c) A programming language
   d) An operating system

2. Who developed Git?
   a) Mark Zuckerberg
   b) Bill Gates
   c) Linus Torvalds
   d) Steve Jobs

3. Which version control system was developed for the Linux kernel project?
   a) SVN
   b) Mercurial
   c) Git
   d) CVS

4. Which of the following is NOT a GitHub terminology?
   a) Push
   b) Pull Request
   c) Fork
   d) Compile

5. What does a Git 'commit' represent?

   a) A temporary change in the code

   b) A saved change in the repository

   c) A deletion of code

   d) An undo action

6. Which of the following is the correct order of operations in Git?

   a) Edit -> Commit -> Stage -> Push

   b) Stage -> Edit -> Commit -> Push

   c) Edit -> Stage -> Commit -> Push

   d) Commit -> Stage -> Edit -> Push

7. Which of the following is true about a centralized version control system?

   a) Every developer has a copy of the entire codebase

   b) The version history is maintained on a central server

   c) Changes are made directly on the main branch

   d) It does not require an internet connection

8. What is the purpose of the staging area in Git?

   a) To permanently save changes

   b) To review changes before committing

   c) To delete unwanted changes

   d) To push changes to the remote repository

9. What is the 'master' branch in Git?

   a) A feature branch for experimental code

   b) The default branch where the final version of code resides

   c) A backup branch

   d) A deleted branch

10. Which command would you use to initialize a new Git repository?

a) git init

b) git start

c) git create

d) git repo

True/False Questions With Explanation

1. Version control is only useful for large software projects.   F

2. A 'fork' in GitHub permanently separates your copy of a repository from the original.   F

3. A 'pull request' is used to request the deletion of a repository.   F

4. A 'remote repository' is stored on your local machine.   F

5. The 'clone' operation in Git creates a new branch.   F

6. Git can only be used for code versioning, not for documents or other files.   F

7. The 'init' command in Git is used to start tracking an existing repository.   F

8. In a centralized version control system, all changes are made directly on the central server.   T

9. A 'branch' in Git is a parallel version of the main repository.   T

10. A 'commit' in Git is identified by a unique hash.   T