Training Day14 Report:

02 July 2024

Keys Takeways:

1. Explored FCS (File Control System)

• **Objective**: To understand the basics of version control and explore functionalities of a file control system.

· Activities:

- Learned the core concepts of version control such as commits, branches, and repositories.
- Familiarized with common version control systems like Git. Set up a local repository using Git and practiced basic commands like git init, git status, git add, git commit.

2. Forked a Website Repository

• **Objective**: To create a personal copy of a remote repository for independent development.

· Activities:

- Visited a hosting service like GitHub.
- Selected a repository to fork.
- Used the "Fork" button on GitHub to create a copy of the repository under a personal account.
- The forked repository was then available for modifications and personal contributions.

3. Cloned the Repository

• **Objective**: To make a local copy of the forked repository.

Activities:

- Used the command git clone <repository_url> to clone the forked repository to a local machine.
- Verified that the repository was successfully cloned by checking the directory structure and files.

4. Pushed Changes to the Repository

• **Objective**: To upload local changes to the remote repository.

· Activities:

- Made modifications to the cloned repository files.
 Used git add
 to stage the changes.
- o Committed the changes with git commit -m "message". o Used git push to push the committed changes to the remote repository.

5. Pulled Updates from the Repository

• **Objective**: To fetch and merge changes from the remote repository.

Activities:

- Checked for updates in the remote repository using git fetch.
 Merged the fetched changes into the local repository using git merge.
 - o Alternatively, used git pull to fetch and merge updates in one step.

6. Explored TOTP (Time-based One-Time Password)

• **Objective**: To understand the working and implementation of TOTP for enhancing security.

Activities:

 Learned about the TOTP algorithm and its reliance on time and shared secret keys.

- Explored popular TOTP apps like Google Authenticator, Authy,
 Microsoft Authenticator, LastPass Authenticator, and Duo Mobile.
 Set up TOTP for an online account:
 - Enabled 2FA in the account's security settings.
 - Scanned the provided QR code using a TOTP app to add the account.
 - Verified the setup by entering the generated TOTP code.
- Practiced using the TOTP code for logging in, ensuring familiarity with entering the code within the validity period.

