# 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.
- o 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 <file> to stage the changes.
- o Committed the changes with git commit -m "message".
- 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:

- o 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.
- o 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.

