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 <file> to stage the changes.
  - 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**:
  - Checked for updates in the remote repository using git fetch.
  - Merged the fetched changes into the local repository using git merge.
  - 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.