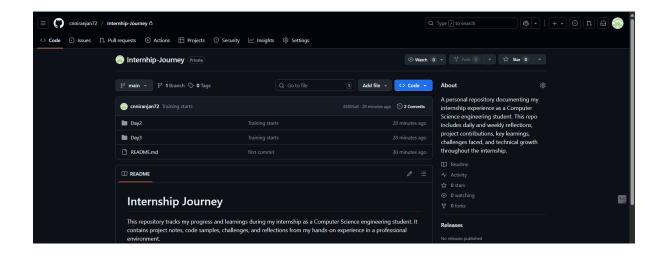
#### **AeroAspire -SDE Intern Training**

#### **NIRANJAN C N**

# Day 3-Sep 24



#### Steps:

### For Commit in a new repository

- Create repository
- Name repository
- Initialize files and folders (git init)
- Add files to be pushed (git add ./filename)
- Add a commit message (git commit -m "Message")
- Add a url to act on(git remote add origin <a href="https://github.com/reponame.git">https://github.com/reponame.git</a>)
- Push Files(git push -u origin main)

## For creating branch:

- Check main branch status(git checkout main)
- Pull for any changes(git pull)
- · Check for conflicts
- Create and switch to a new feature branch(git checkout -b feature-branchname)
- Work on new branch
- Push files from new branch(git push -u branch-name)
- Check for main branch(git checkout main)
- Pull for any changes(git pull)
- Solve merge conflicts in merge editor
- Check for incoming and current data in files locally

- Merge changes(git merge branch-name)
- Finally push(git push)

#### Questions

- What is the workflow from making changes → staging → commit → push?
  - a. Edit files in project folder
  - b. Use git add <files> to include what all files needs to be pushed
  - c. **Use git commit -m "message"** to commit the push like contribute in repository
  - d. Use git push to push the files or folders to the git repository
- 2. What is a merge conflict: what causes it, and how do you resolve?
  - a. Merge conflict is a kind of warning that occurs when there are multiple branches and the changes in particular files are different from each other
  - b. These changes need to be combined to obtain the complete file but the conflict occurs due to code similarity, repetitive blocks, additional code etc.
  - c. Here Git cant decide itself what content to retain and what not so a merge conflict occurs which has to be solved manually
  - d. We resolve it manually like I mentioned checking for incoming and current code
  - e. Accept what part of the code to retain on the local file
  - f. And then overcome merge conflict by pushing it finally
  - g. Merge conflict occurs not only due to multiple branches but also when multiple collaborators commit to a particular repository
- 3. Describe what happens under the hood with git commit: what objects are stored? (briefly)
  - a. Git reads the files, checks for any changes in files at the local device and saves changes as a new commit along with a commit message
  - b. It also holds time stamps, push information
  - c. It also holds commit history as a temporary store