**Project Repository Workflow**

**(For all Team members)**

**1. Cloning the Repository**

Each team member should clone the repository to their local machine.

# Clone the repository (done by each team member)

git clone https://github.com/PatelManarth/AIDI2000-Final\_Project

**2. Checking Out Their Respective Branches**

Each team member should switch to their respective branch to start working.

# Checkout the respective branch (example for Manarth)

git checkout manarth-branch

**3. Making Changes and Committing**

Team members make changes, add them to the staging area, and commit them to their respective branches.

# Make changes to the code

# Stage the changes for commit

git add .

# Commit the changes with a descriptive message

git commit -m "Description of changes"

**4. Pushing Changes to Remote Branch**

After committing, team members push their changes to their respective branches on the remote repository.

# Push changes to the remote branch

git push origin manarth-branch

**5. Creating a Pull Request**

Team members should create a pull request (PR) to merge their changes into the finalize-branch. This can be done using the GitHub/GitLab web interface:

1. Navigate to the repository on GitHub/GitLab.
2. Go to the "Pull Requests" tab.
3. Click on "New Pull Request".
4. Select the base branch as finalize-branch and compare it with the branch containing the changes (e.g., manarth-branch).
5. Create the pull request.

**(For all Team Lead)**

**6. Merging PRs in finalize-branch (only once the changes are reviewed by Team Lead)**

As the team lead, you will review and merge the PRs into the finalize-branch. This can be done using the GitHub/GitLab web interface or the command line.

* **Using the Web Interface:**
  1. Review the pull request.
  2. If everything is fine, click on "Merge pull request".
  3. Confirm the merge.
* **Using the Command Line:**

# Checkout the finalize-branch

git checkout finalize-branch

# Pull the latest changes from finalize-branch

git pull origin finalize-branch

# Merge a team member's branch into finalize-branch (example for Manarth's branch)

git merge manarth-branch

# Push the merged changes to the remote finalize-branch

git push origin finalize-branch

**7. Final Merge to main**

After all changes are consolidated in the finalize-branch, merge it to main.

# Checkout the main branch

git checkout main

# Pull the latest changes from the main branch

git pull origin main

# Merge finalize-branch into main

git merge finalize-branch

# Push the merged changes to the remote main branch

git push origin main

**Summary of Commands**

1. **Clone repository**: git clone https://github.com/PatelManarth/AIDI2000-Final\_Project
2. **Checkout branch**: git checkout <branch-name>
3. **Make changes**: git add . and git commit -m "message"
4. **Push changes**: git push origin <branch-name>
5. **Create Pull Requests**: Use the web interface to create a PR to finalize-branch
6. **Merge PRs to finalize-branch**:

git checkout finalize-branch

git pull origin finalize-branch

git merge <branch-name>

git push origin finalize-branch

1. **Merge finalize-branch to main**:

git checkout main

git pull origin main

git merge finalize-branch

git push origin main