

Lab Task: "Perform a Hotfix"

Scenario: A typo has been discovered in the production (main branch) documentation. The word "implementation" is misspelled as "implimentation" in the README.md file. This is a critical error that needs to be fixed immediately and deployed to production.

Your Task: Simulate the process of creating and deploying a hotfix.

Instructions:

1. **Discover the Issue:** Verify the typo exists on the main branch.

```
git checkout main
git pull origin main
# Use a text editor to find and confirm the typo in README.md
```

2. **Create a Hotfix Branch:** Branch directly from main.

```
git checkout main
git pull origin main # Ensure you are up-to-date
git checkout -b hotfix/critical-readme-typo
```

3. **Make the Fix:** Correct the typo in the README.md file using a text editor.

4. **Commit the Fix:**

```
git add README.md
git commit -m "fix: correct critical typo in README"

- Changed 'implimentation' to 'implementation'
- This was causing confusion for users"
```

5. **Push and Create PRs:** This is a special case.

```
git push -u origin hotfix/critical-readme-typo
```

- You need **TWO** Pull Requests:

- **PR #1:** Merge hotfix/critical-readme-typo into main (for production).
- **PR #2:** Merge hotfix/critical-readme-typo into dev (so the bug doesn't reappear in the next release).

6. **Merge and Clean Up:** A reviewer will approve and merge both PRs. Once merged:

```
git checkout main
git pull origin main # Get the update
git checkout dev
git pull origin dev # Get the update here too
git branch -d hotfix/critical-readme-typo # Delete the local branch
```

Git Message Convention

Commit Message Format

<type>: <subject>

<body>

<footer>

Types:

- **feat**: New feature
- **fix**: Bug fix
- **docs**: Documentation changes
- **style**: Formatting, missing semi-colons, etc.
- **refactor**: Code refactoring
- **test**: Adding tests
- **chore**: Maintenance tasks

Examples:

feat: implement user registration

- Add registration form component
- Create user service
- Implement validation rules

Closes #123

fix: resolve memory leak in data service

- Properly unsubscribe from observables
- Add cleanup in ngOnDestroy

Fixes #456

Branch Naming Convention

- `feature/<description>`: New features
- `hotfix/<description>`: Urgent production fixes
- `release/<version>`: Release preparation
- `bugfix/<description>`: Non-urgent bug fixes