

## MODULE: GIT ESSENTIALS ASSIGNMENT

Mini team workflow: Initialize a repo for 'employee-directory'; create feature branches; raise a PR; perform code review using a checklist; simulate and resolve a merge conflict.

- A Git repository named *employee-directory* was initialized.
- Feature branches were created to simulate team development.
- Pull requests were simulated using Git merge and reviewed using a checklist.
- A merge conflict was intentionally created and resolved manually.

```
MADHAV@LAPTOP-SHJ6TMRP MINGW64 ~/employee-directory (master)
$ git status
On branch master
nothing to commit, working tree clean

MADHAV@LAPTOP-SHJ6TMRP MINGW64 ~/employee-directory (master)
$ git log --oneline
25099ab (HEAD -> master) Initial commit
```

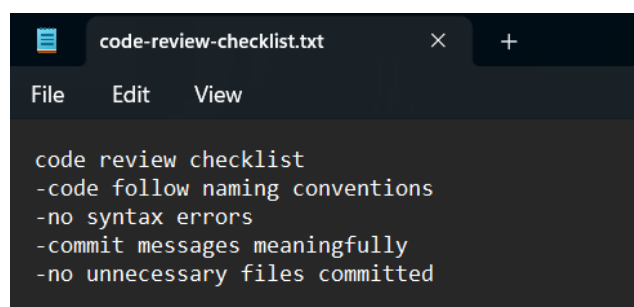
```
MADHAV@LAPTOP-SHJ6TMRP MINGW64 ~/employee-directory (feature-add-employee)
$ git commit -m 'Add employee feature'
[feature-add-employee bd09553] Add employee feature
1 file changed, 2 insertions(+), 1 deletion(-)

MADHAV@LAPTOP-SHJ6TMRP MINGW64 ~/employee-directory (feature-add-employee)
$ git branch
* feature-add-employee
  master
```

```
MADHAV@LAPTOP-SHJ6TMRP MINGW64 ~/employee-directory (feature-update-ui)
$ git commit -m 'Udate UI feature'
[feature-update-ui e15233a] Udate UI feature
1 file changed, 2 insertions(+), 1 deletion(-)

MADHAV@LAPTOP-SHJ6TMRP MINGW64 ~/employee-directory (feature-update-ui)
$ git branch
  feature-add-employee
* feature-update-ui
  master
```

```
MADHAV@LAPTOP-SHJ6TMRP MINGW64 ~/employee-directory (master)
$ git merge feature-add-employee
Updating 25099ab..bd09553
Fast-forward
 README.md | 3 ++-
1 file changed, 2 insertions(+), 1 deletion(-)
```



The screenshot shows a text editor window titled 'code-review-checklist.txt'. The editor has a menu bar with 'File', 'Edit', and 'View'. The content of the file is a code review checklist:

```
code review checklist
-code follow naming conventions
-no syntax errors
-commit messages meaningfully
-no unnecessary files committed
```

```
MADHAV@LAPTOP-SHJ6TMRP MINGW64 ~/employee-directory (master)
$ git commit -m 'add code review checklist'
[master 69bf0f6] add code review checklist
1 file changed, 6 insertions(+)
create mode 100644 code-review-checklist.txt
```

```
MADHAV@LAPTOP-SHJ6TMRP MINGW64 ~/employee-directory (master)
$ git merge feature-update-ui
warning: in the working copy of 'code-review-checklist.txt', LF will be replaced
by CRLF the next time Git touches it
Auto-merging README.md
CONFLICT (content): Merge conflict in README.md
Automatic merge failed; fix conflicts and then commit the result.

MADHAV@LAPTOP-SHJ6TMRP MINGW64 ~/employee-directory (master|MERGING)
$ git status
On branch master
You have unmerged paths.
  (fix conflicts and run "git commit")
  (use "git merge --abort" to abort the merge)

Unmerged paths:
  (use "git add <file>..." to mark resolution)
    both modified:   README.md

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   code-review-checklist.txt

no changes added to commit (use "git add" and/or "git commit -a")
```

```
MADHAV@LAPTOP-SHJ6TMRP MINGW64 ~/employee-directory (master|MERGING)
$ git commit -m 'Resolve merge conflict'
[master e262d6a] Resolve merge conflict

MADHAV@LAPTOP-SHJ6TMRP MINGW64 ~/employee-directory (master)
$ git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   code-review-checklist.txt

no changes added to commit (use "git add" and/or "git commit -a")
```

```
MADHAV@LAPTOP-SHJ6TMRP MINGW64 ~/employee-directory (master)
$ git log --oneline --graph
*   e262d6a (HEAD -> master) Resolve merge conflict
| \
|  * e15233a (feature-update-ui) Udate UI feature
* | 69bf0f6 add code review checklist
* | bd09553 (feature-add-employee) Add employee feature
|/
* 25099ab Initial commit
```