



What are we going to see in this session?

- Merge
- Merge branches
- Merge conflicts
- Git rebase
- Merging on GitHub





Merge

- In the real world, though you are working in different branches you may need to combine it with "Master" branch at one point in time.
- This process is called "Merging Branches"



Merge Branches

- ✓ Step 1 : Create code with some features into it
- ✓ Step 2 : Commit the code to Master branch as "Version 0"
 - `git add`
 - `git commit -m "Version 0"`
- ✓ Step 3 : Create new branch and checkout to that branch
 - `git branch dev`
 - `git checkout dev`
- ✓ Step 4 : Add some additional feature to your code and make commit
 - `git add`
 - `git commit -m "Version 1"`
- ✓ Step 5 : Merge your Master branch with dev
 - `git checkout <branch-name>`
 - `git merge dev`

Now both branches have same contents.

Version 0	Version 1
<pre>#!/bin/bash # Main code a=100; echo "value =" \$a</pre>	<pre>#!/bin/bash # Main code a=100; echo "value =" \$a # Added feature b=250; echo "value =" `expr \$a + \$b`</pre>



Merge Conflicts

Solving conflicts are more like, when two persons modified the same line in an file.

- ✓ Step 1 : Modify some line in code at Master branch
- ✓ Step 2 : Checkout to dev branch and Modify the same line
- ✓ Step 3 : Try merging both branched now
 - `git checkout <branch-name>`
 - `git merge dev`
- ✓ Step 4 : Solve the conflicts before proceeding.
- ✓ Step 5 : While solving the conflicts you can compare the conflicts and either accept any one of the change.
- ✓ Step 6 : Once conflict is solved, go-ahead and add and commit the files again and then do merge.
 - `git add .`
 - `git commit`
- ✓ Command to abort merge if incase required `"git merge -abort"`



Git Rebase

Git Rebase is going to help us to copy the new changes from one branch to other.

- ✓ Step 1 : Add some additional feature to your Master branch code.
- ✓ Step 2 : Commit the changes
- ✓ Step 3 : Checkout to dev branch
- ✓ Step 4 : You might not find the changes which are recently made in Master.
- ✓ Step 5 : To update all changes & updated code use rebase command as below
 - `git rebase <branch from where the update code should be copied>`



Merging on GitHub

Merging part can be carried out from GUI also in GitHub.



End of this topic !

Any questions?

TERRAFORM