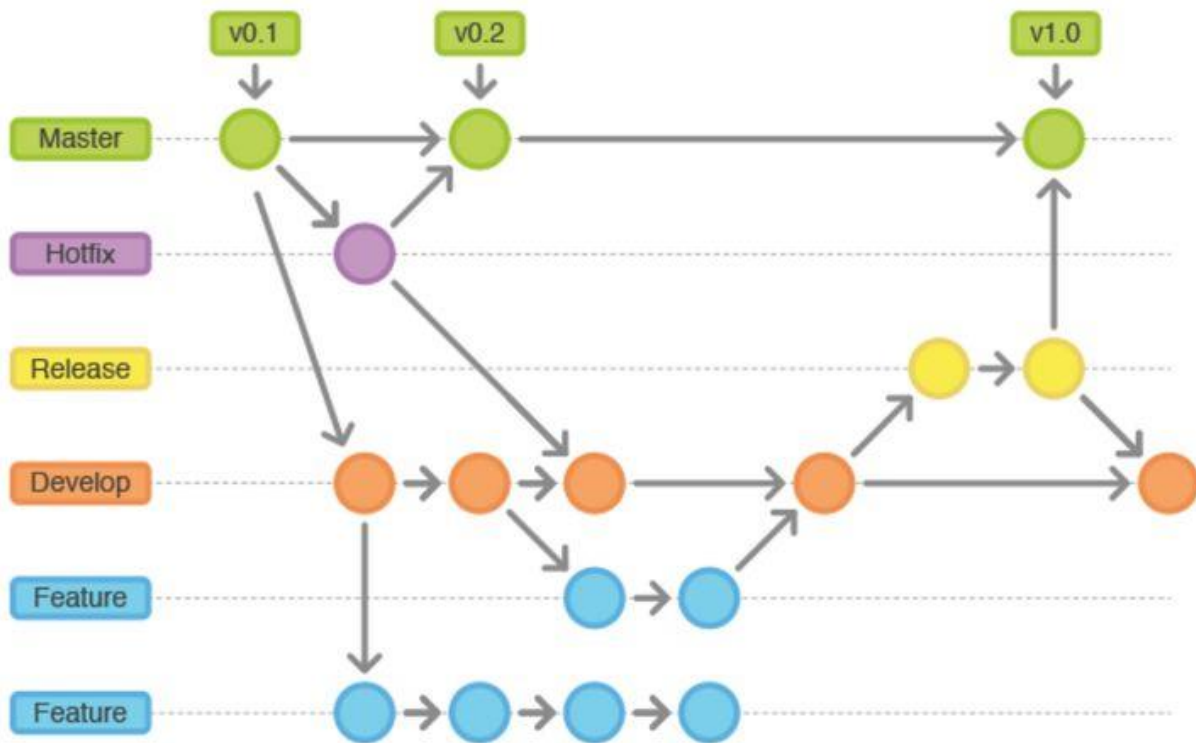


## GIT FLOW WORKFLOW

### Simulation Of Collaborative Environment



Figure(1): shows git flow workflow phases in high level view.

- **A brief description of my project:**

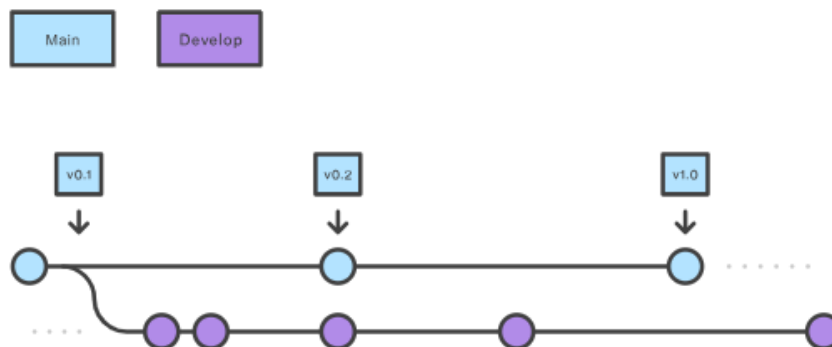
In my project I simulated 3 collaborators that are working on the same project simultaneously and no one of them aware about the other changes and commits.

Collaborator 1 is working on a feature branch, collaborator 2 is working on a release version and collaborator 3 is working on a bug in release version (Hotfix).

- **The Implementation of git flow:**

Commands that are common with all collaborators:

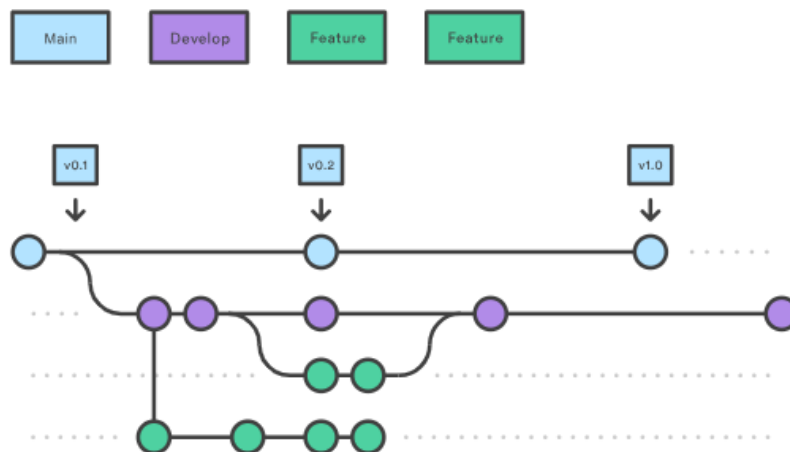
1. mkdir folder\_name
2. cd folder name
3. git clone repo
4. git flow init



Figure(2): Illustrates what happened after command no.4

For collaborator 1:

1. `git flow feature start f_collaborator1`
2. `echo "Feature by Collaborator 1" > f_collaborator1.txt`
3. `git add f_collaborator1.txt`
4. `git commit -m "A Feature done by collaborator1"`
5. `git flow feature finish f_collaborator1`
6. `git push origin main develop --tags`

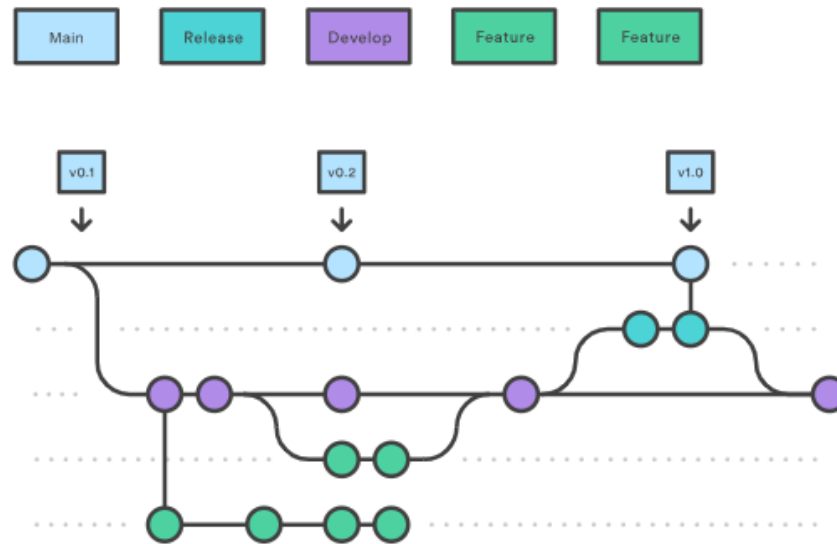


Figure(3): shows the flow of feature branch.

For collaborator 2:

1. `git flow release start v1.0`
2. `echo "v1.0 release" > v1_collaborator2.txt`
3. `git add v1_collaborator2.txt`
4. `git commit -m "A version released by collaborator2"`
5. `git flow release finish v1.0`
6. `git pull origin develop`
7. `git add .`

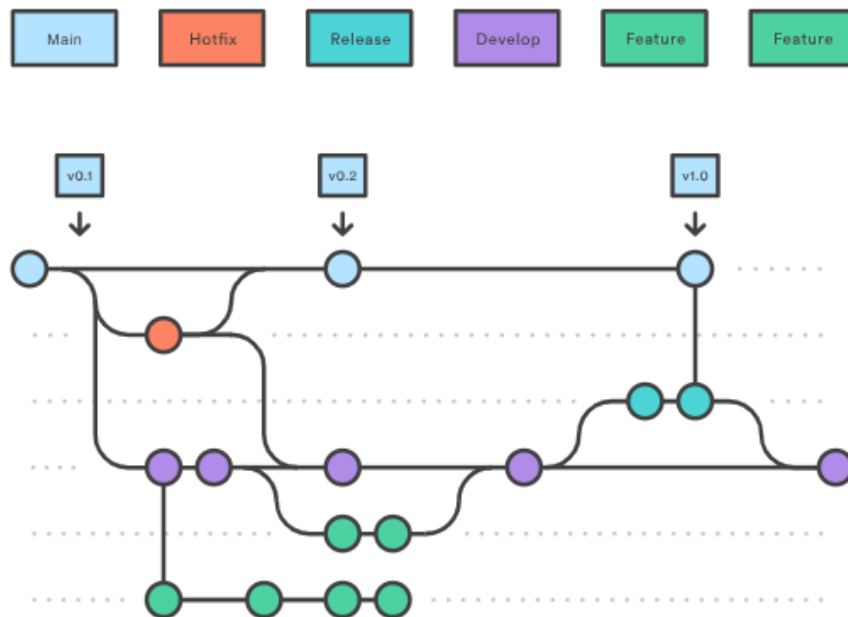
8. `git commit -m "resolved conflicts by collaborator1"`
9. `git push origin main develop --tags`



Figure(4): Shows the flow of the release branch.

For collaborator 3:

1. `git flow hotfix start hotfix_collaborator3`
2. `echo "Hotfix by Collaborator 3" > hotfix_collaborator3.txt`
3. `git add hotfix_collaborator3.txt`
4. `git commit -m "Hotfix by Collaborator 3"`
5. `git flow hotfix finish hotfix_collaborator3`
6. `git pull origin develop`
7. `git checkout main`
8. `git merge develop`
9. `git push`



Figure(5): shows the flow of the hotfix branch.

### Challenges and Solutions:

Maybe if there are multiple collaboratives and each want to do more than one features and releases and hotfixes.

So you might try as much as you can to keep up to dated and perform pull command whenever you trying to push something so you make sure that conflicts is managed.

- **Learning experience:**

This experience was really useful and excited, and actually this is my first time to use such git extension in cmd, I used to do my github operations from the IDE, so maybe now I have one other way to deal with git and github.