Git Branching

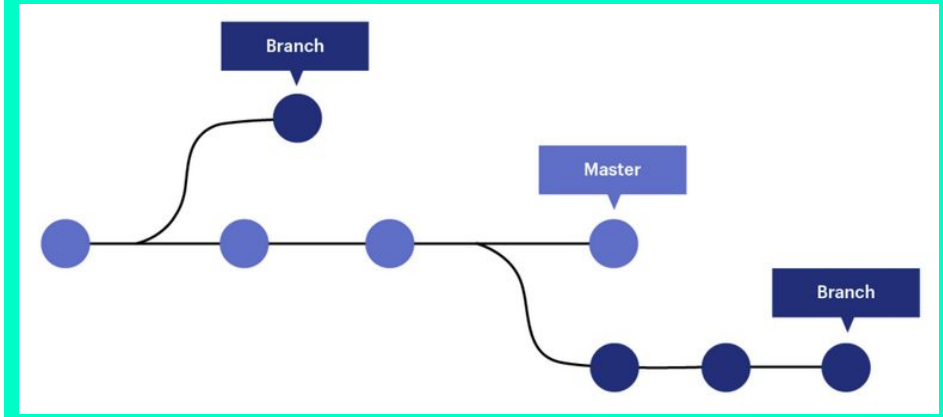
Problems

1. Simultaneous Changes
2. Overwriting Changes
3. Conflicting Changes
4.Manual Conflict Resolution

If You don't create a branch you may face more issues and conflicts with other dev.

Why its imp ?

1. Isolation
2. Parallel Development
3. Version Control
4. Testing and experimentation
5. Collaboration



Commands

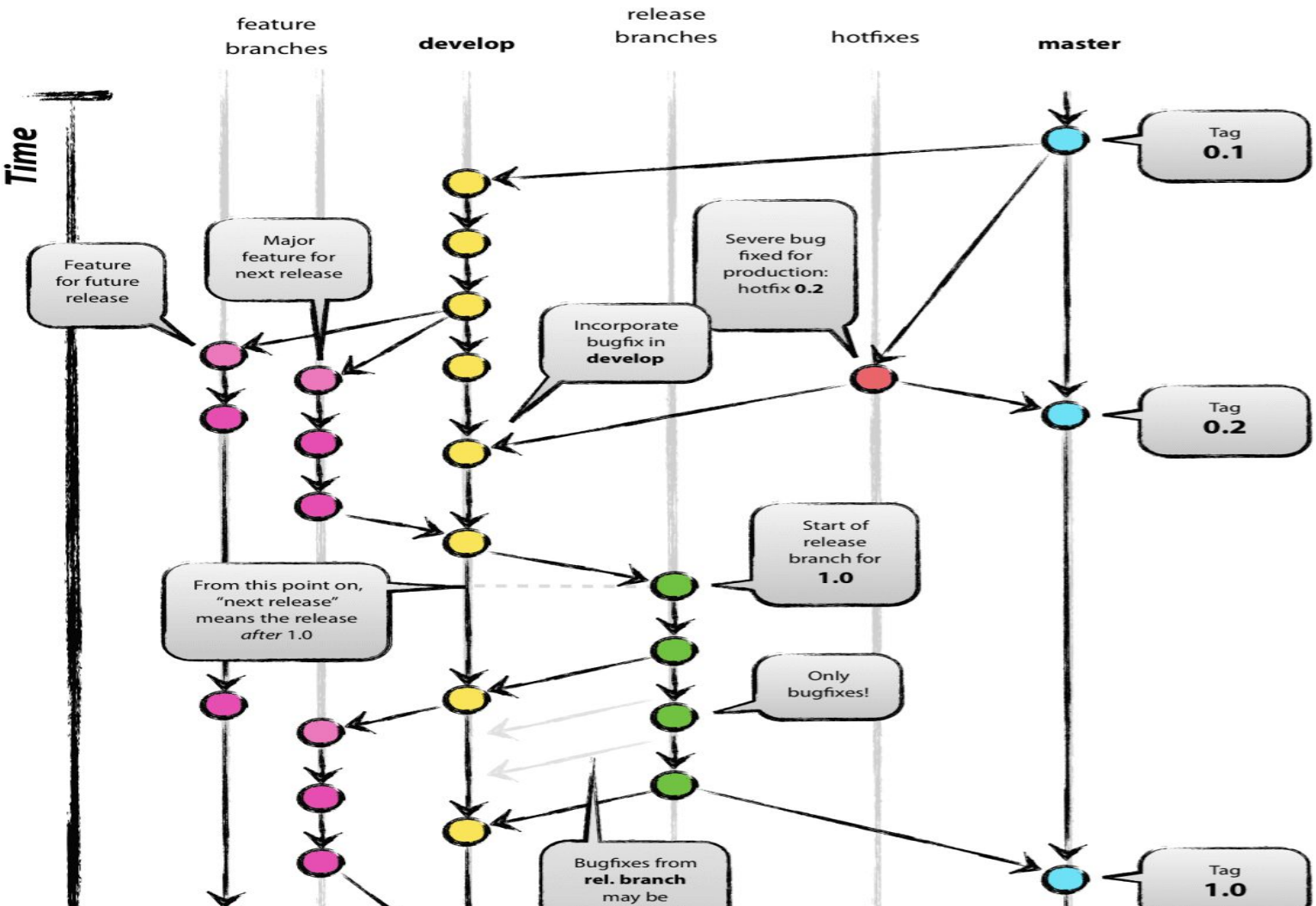
git branch : it lists all the branches in the repository

git checkout . : It reverts modifications to files and brings the working directory back to the state of the last commit. The dot (.) refers to the current directory.

git checkout branch_name : This command is used to switch to an existing branch in the repository. It allows you to work on the code contained within that specific branch.

Now the Question is How to create a Branch ?

```
git checkout -b branch_name
```


feature branches
develop
release branches
hotfixes
master
Time
Tag 0.1
Feature for future release
Major feature for next release
Severe bug fixed for production: hotfix 0.2
Incorporate bugfix in develop
Tag 0.2
Start of release branch for 1.0
From this point on, "next release" means the release after 1.0
Only bugfixes!
Bugfixes from rel. branch may be
Tag 1.0

Type of branches -

1.feature
2.release
3.hotfix

1.git add . vs git add filename

2.git checkout -b branch_name vs git checkout branch vs git checkout .

FINALLY THE WORKFLOW OF CREATING A FILE AND ALL

1.git add filename.txt
2.git status
3.git add .
4.git commit -m "commit message"
5.git push