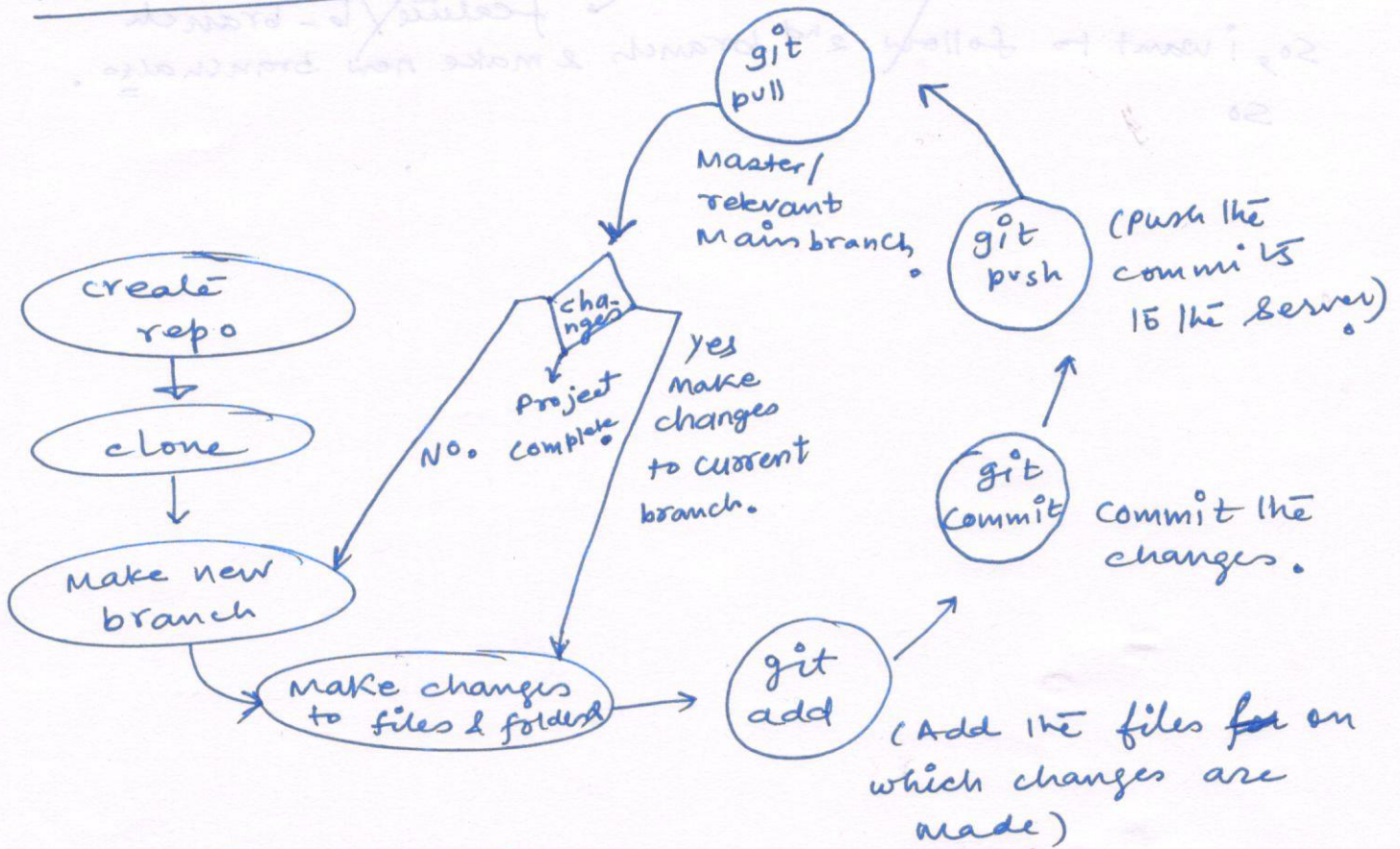1) **Introduction**

GIT workflow

Figure 1 depicts the workflow of GIT

2) **few Git Commands**

1) clone the repo from Git hub

2) ↳ **Master branch**

   1) **Create a new branch**

   a)   git branch < name of new branch >

Note :- Still you will be in master branch only.

[OR] b) git checkout -b <name of new branch>

Note :- this will switch to the new branch

Example → git branch feature / first_new_branch

[OR]

c) If we want to make new branch + follow anyother branch as well.

git checkout -b feature <name of new branch> < name of branch which is to be followed>

Example   make new branch feature/newbranch & follow feature/branch

feature / old_branch

git checkout feature/new_branch feature/old_branch
        -b

Let's move to new branch

↳ first_branch

1) git checkout feature / first_branch

2) Now make changes to this branch (i.e. edit files/folders/add new file & folders etc).

3) Now [add] the files for which Editing has been done.

. git add   commandlib/src/file1.cpp

git add   < name of file/ path of relative path of
                                            file> ...

4) Now [commit] the changes

Syntax   git commit -m " [#< issue_number>] <commit -
                                            message>

Example   git commit -m " [#26] initial commit."
                            " initial commit."

Note: 1) first commit msg must be " initial commit."

2) second commit onwards information about task done or relevant comment will be these in commit msg.

5) Now [push] the changes to the Server

git push origin < branch name>

Example → git push origin feature/ first_branch

GIT Commands - cheat sheet

1) **New branch**
   1) `git branch <name of branch>`
   2) `git checkout -b <name of branch>`
   3) `git checkout -b <name of branch> <followed branch>` to be

2) **clone repo**
   `git clone < Link >`

3) **Add**
   `git add <relative path to files> ...`

3) **commit**
   `git commit -m "[#<issueNumber] <commit msg.>"`

4) **Push**
   `git push origin <name of branch>`

5) **To pull** (ideally move to master then pull.)
   `git pull --all [OR] git fetch --all`

6) **To rebase** (from feature branch)
   `git rebase <origin/master`
   [OR] `git rebase <relevant main branch>`

7) **Again to push the changes to server after solving conflicts**
   `git push -f origin <name of branch>`

8) **Incase of MUltiple conflicts**
   solve first conflict then
   `git rebase --continue` then solve next
   conflict or done.