Distributed Version Control using Git

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Configuration tools:

Set the configuration for user information for all the local repositories.

\$ git config -global user.name "[name]"

Set the username you want attached your commit transactions.

\$ git config -global user.email "[email]"

Set the email you want attached your commit transactions.

Create a repository:

Start a new repository.

\$ git init [Project-name]

Creates a new local repository with the specified name

Make changes:

Review edit and modify a commit transaction.

\$ git status

Lists all new or modified files to be committed.

\$ git add [files]

Snapshots files for versioning.

\$ git commit -m "message"

Records file snapshots permanently in version history.

\$ git commit -a -m "message"

Snapshots files for versioning and also records them permanently in version history.

\$ git mv [source-path] [destination-path]

Rename or move the file from source to destination. Also supports wild card character * for bulk operations.

\$ git rm [path]

Removes the file specified in path.

Undo changes:

Undo changes in working directory, staged index and reverting commits.

\$ git checkout -- [path]

Undo changes in your working directory.

\$ git reset HEAD [path]

Undo changes in your un-staged files.

\$ git commit --amend -m "message"

Undo changes in last commit. Remember any changes in message or data will also change checksum.

\$ git checkout < Checksum> [-- index.html]

Undo changes in the filename specified with respect to checksum.

\$ git revert < Checksum>

Undo the changes till the checksum provided.

\$ git reset --soft HEAD <Checksum>

Reset the position of HEAD pointer as per the checksum provided. Do not reset working directory and staging index.

\$ git reset --mixed HEAD <Checksum>

Reset the position of HEAD pointer as per the checksum provided. Resets staging index but do not reset working directory.

\$ git reset --hard HEAD <Checksum>

Reset the position of HEAD pointer as per the checksum provide. Also resets working directory and staging index.

\$ git clean -n

Removes only untracked files.

\$ git clean -f

Removes only untracked files forcefully.