GIT Users Guide

1. ## How to install Git from the terminal?

   Before you going to proceed with further options you first need to install git in your machine. Just type the below command in your terminal to install it.

   ```
   sudo apt-get install git
   ```

2. ## How to add SSH key in Git?

   - After installing git, open terminal type
   ```
   ssh-keygen -t rsa -C "XXXX@hitasoft.com" -b 4096
   ```
   - Next, you will be prompted to input a file path to save your SSH key pair, now click **Enter .**
   - Now copy generated SSH key using this command
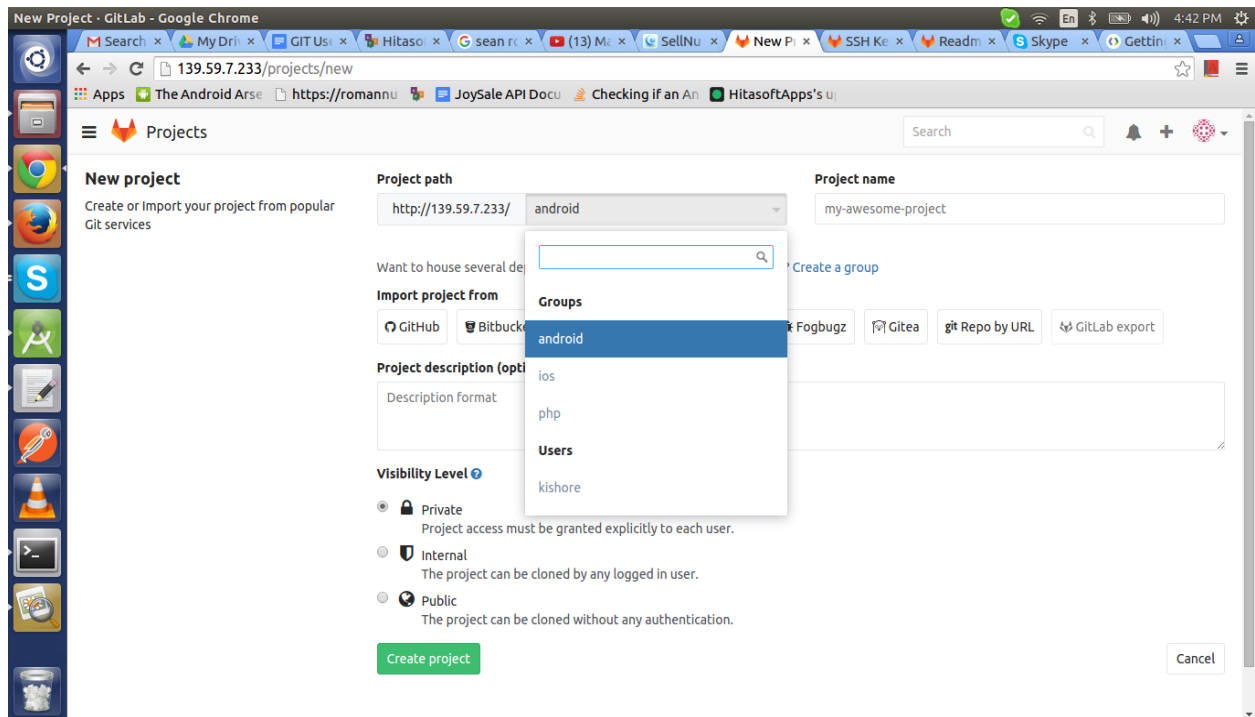   pbcopy < ~/.ssh/id_rsa.pub

     To copy ssh key use this command:
      cat ~/.ssh/id_rsa.pub

   Then copy that key and open this link http://139.59.7.233/profile/keys and paste your key in the 'key' section and give a relevant 'Title'.

3. ## How to create project/repository in Git? http://ccc/projects/new

   - To create a new project, open this link Then choose your project domain (PHP, ios or android) and type your project name.
   - Choose visibility level as private and click Create project button.

4. How to push existing source code to Git remote server?

- Open a terminal and move to your project directory

  `cd project_folder`

- Initialize Git

  `git init`

- Configure your username and email

  `git config --global user.name "kishorekumar"`

- Add your remote repository

  `git remote add origin git@139.59.7.233:android/Howzu.git`

  (or)

  `git remote add origin http://139.59.7.233/android/Howzu.git`

- Now add files and commit, Then push the committed change to origin

  `git add .` (use `git add -f .` if git restricts some files)

  `git commit -m "initial commit"`

  `git push -u origin master`

5. How to checkout from remote to local repository?

- Create a new directory and move to your project directory in terminal

  `cd project_folder`

- Initialize Git

  `git init`

- Add your remote repository

  `git remote add origin git@139.59.7.233:android/Howzu.git`

  $$(or)$$

  `git remote add origin http://139.59.7.233/android/Howzu.git`

- Fetch the source code from origin

  `git fetch`

- Now type your username and password and mention the branch name

  `git checkout development`

6. How to check the changed files?

`git status`

7. How to add single/multiple files?

`git add my_file`

`git add myfile2 myfile3`

8. How to remove/delete files?

- `git rm file1.txt`
- Commit and push changes to remote repo

  `git commit -m "remove file1.txt"`

  `git push origin branch_name`

9. How to commit with staging?

```
git commit -am "My first commit"
```

10. How to create & switch to a new branch?

```
git checkout -b branch_name
```

11. How to merge the source from one to another branch?

- Here I am going to merge the code from a development branch to master branch

```
git checkout development
git pull
git checkout master
git pull
git merge --no-ff --no-commit development
```

- If conflicts notified, we can run **git status** to check details about the conflicts and try to solve them. Once we solve the conflicts, or there are not any conflicts, we commit and push them.

```
git commit -m 'merge development branch'
git push
```

12. Git Commit a single file

```
git commit -m notes file-path
git push origin branch_name
```

Example:
```
git commit -m "First Commit" /opt/lampp/htdocs/project/index.html
```

13. How to update a local repo with a remote origin

- Check your current branch

```
git branch
```

- Then update your local branch with the remote branch

```
git pull origin branchname
```

- Now, you can push your code to the remote repo if you have already committed your local changes

```
git push origin branchname
```

If you haven't committed yet, first do commit and then do git pull and push.