Guide to install Git and working with GitHub

# EmbCosmos Ltd.

1. We will be using GitHub, which provides platform for software development version control using Git. Git is a distributed version-control system for tracking changes in source code during software development.

1. **Start by checking general OS and package updates:** sudo apt-get update

2. **Check for previously installed git:** git --version

3. **Installing Git:** sudo apt-get install git-core or sudo apt-get install git. Git core is a dummy package, which has git package as dependency. This is because the git-core package has been renamed to git.

4. **Next setup the configuration details of the GitHub user:**

username: embCosmo e-mail: [gagansekhon993@gmail.com](mailto:gagansekhon993@gmail.com) pass: Karnal104g@@gan

use commands – git config --global user.name “username”

git config --global user.email “email”

5. **Create a local repository:**  git init “repository\_name”

6. **create readme file:** gedit README. You can use any other editor expect gedit

7. **Git Index:** This is a staging area between working directory and remote repository. Stage changes and then commit them together.

Example: git add README, git add sample.c

8. To commit use git commit -m “message”

9. Make repository on GitHub with the same name as local repository

10. **connect to remote repository:** git remote add origin <https://github.com/user_name/repository_name>

11. Pushing files in local to remote: git push origin master

Q: Difference in push and commit: commit is making changes to local repository, push is to remote repository.

12. To check the status of the repository: git status

13. To undo the changes in a repository use git checkout\* not sure how this works