Putting a new project into repository:

1) First create a repository on the GitHub website
2) Then run the following commands (inside the particular folder your project is) :
   - **git init** - this command will initialise a git file inside the project folder you are about to upload to git and all the further communication will be through this file but we don't have to do anything with this file.
   - **git add .** - This will add all the new files and changes to git file so that in the further steps these changes could be pushed to the repo.
   - **git commit . -m "first" -** Here we are committing all the changes we have made and the files we have added. The statement after the "-m" is the comment or the label you give to this particular change.
   - **git remote add origin http://xyz** : This line we can get from the GitHub web page where we created the new repository. This line basically tells to which repository we need to push the code to.
   - **git push -u origin master** : Finally this line will push your code to the master branch (main branch) of the repository and now you can see the code on the web page of your repository.

If you want to push changes to already existing repository:

1) There are two things that either you have already done the above steps or you have downloaded the folder from github and in both cases you will have the git file which is used for communication so no need to run git init command
2) Also the command were we are adding the remote origin is written in the file so no need to run that command again.
3) Now only 3 commands are left and we have to run only them i.e:
   - **git add .**
   - **git commit . -m "second"**
   - **git push origin master (no need for the -u in this command)**

If there is some change in the repository but your local folder is behind the updates :

1) We can check the status of our local folder compared to the online repository by doing - **git status**
2) Now that you have to update changes from the online repository to your local folder it is opposite to pushing i.e. pulling which we can do as:
   git pull origin master
3) Now if you get error that "**either commit your changes or stash them"** this means that the case is **"Nikhil has done a change in xyz.py file of the repository by replacing A = A to A = B and pushed the change to the repository. Now on the other side in your local folder you have changed A = A to A = C and now you are trying to pull the changes to your local folder so git is asking please specify either you want to stash(remove) your change (A = C) and make it A=A again or you want to push your change to the repository (i.e make the A=B of the repository to A=C) now it is on you what you want to do."**
   To stash your changes - **git stash**
   To push - follow the procedure given above

Open Source Contribution - Git Commands

1. Fork the repository.

2. Clone your forked copy of the project.

```
git clone https://github.com/<your_user_name>/<project-name>.git
```

3. Navigate to the project directory.

```
cd <project-name>
```

4. Add a reference(remote) to the original repository.

```
git remote add upstream
https://github.com/<project-admin-name>/<project-name>.git
```

5. Check the remotes for this repository.

```
git remote -v
```

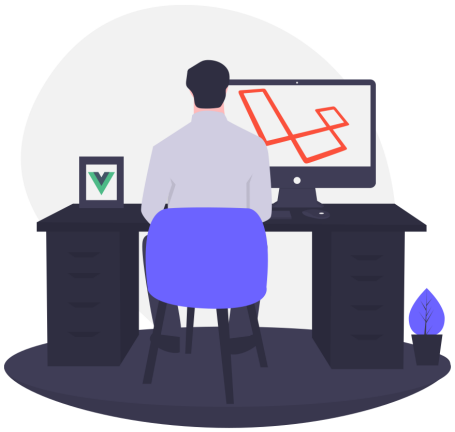
6. Always take a pull from the upstream repository to your master branch to keep it at par with the main project(updated repository).

```
git pull upstream main
```

7. Create a new branch.

```
git checkout -b <your_branch_name>
```

8. Perform your desired changes to the code base.



9. Track your changes✔️ .

```
git add .
```

10. Commit your changes .

```
git commit -m "Relevant message"
```

11. Push the committed changes in your feature branch to your remote repo.

```
git push -u origin <your_branch_name>
```

12. To create a pull request, click on `compare and pull requests`. Please ensure you compare your feature branch to the desired branch of the repo you are suppose to make a PR to.

13. Add appropriate title and description to your pull request explaining your changes and efforts done.

14. Click on `Create Pull Request`