Getting Started with Git and GitHub

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The document assumes an account is already created on GitHub. If not created, visit the url [<https://github.com/join>] and create a GitHub account for free.

# Configuring the GitHub Desktop tool for Windows

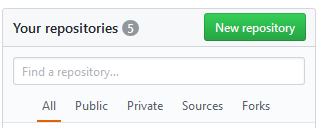
1. Download the GitHub Desktop tool for windows from the following URL [[https://desktop.github.com](https://desktop.github.com/)]
2. Install the tool.
3. Select “Sign in to GitHub.com”, enter the credentials and sign in.
4. Enter a name that will be assigned to the present device when doing changes inside the repo ([e.g.john@personallaptop](mailto:e.g.john@personallaptop)).
5. Provide an email that will be visible as part of the change that you make inside the repository.
6. Mark or un-mark the “Yes, submit anonymized usage data” and click the “Finish” button.
7. The GitHub Desktop tool is configured successfully. Now you can start working on repositories.

# Creating a repository on local device and pushing it into GitHub

1. Open the GitHub Desktop tool and select File-> New Repository option from the top menu.
2. Enter the repository name in the “Name” field (e.g. my-first-repo).
3. Enter a description under the “Description” field (e.g. My first git repository).
4. Provide a local path to where the repository is to be stored (a folder with the repo name will created inside the path that you provide).
5. Select tickbox corresponding to “Initialise this repository with a README.
6. Leave the “Git Ignore” drop-down menu.
7. From the “License” drop-down menu select “MIT License” as the license of the repository (you can find additional info about the various kinds of licenses available by visiting the url [[https://choosealicense.com](https://github.com)].
8. Click on the “Create Repository” button at the bottom of the window.
9. Now click on the “Publish repository” on the top right to publish the repo onto github.com.
10. In the pop up window, under the GitHub.com tab, verify if the name of the repo is what you’ve given in the beginning (my-first-repo) and description as well.
11. Untick the “Keep this code private” options (private repos are not free).
12. Leave the “Organisation” drop down menu as none and click on the “Publish repository” button (if there is no organisation drop down menu ignore this step).
13. You have successfully created and published your first git repository on github.com.

# Creating a repository on GitHub website

1. Sign-in to GitHub (url [<https://github.com>] ) and go to your dashboard (click the Octocat logo on the top left of the website )
2. Create a new repository by clicking the “New Repository” button on the right side.



1. Name the repository as my-first-repo.
2. You can fill the description field which is not mandatory with a small description (e.g. My first git repository).
3. Select the repo type as a Public repo (private repos are paid).
4. Select the tick-box corresponding to “Initialize this repository with a README”.
5. Select “None” for the “Add .gitignore” option.
6. Select “MIT License” as the license type. (The MIT license will generally be suitable for most of the projects. You can read about the different licenses by clicking the info icon next to the “Add a license” dropdown list or by following the url [[https://choosealicense.com](https://github.com)].
7. Click on “Create Repository” to create the repo.

# Cloning a repository owned by you

1. Select File-> Clone Repository from the top menu.
2. Under the “GitHub.com” tab, select the repository created under the section “Creating a Repository” with the name “my-first-repo”.
3. Change the local path or leave it unchanged as desired. The local path is where the folder containing the repository files will be stored on the device that you’re using currently.
4. Press “Clone” button on the bottom of the window.
5. Wait for the cloning process to complete.
6. You have successfully cloned a repo on to your local device.
7. Now click “Fetch Origin” button on the top right to synchronise the origin and the local repositories.

# Cloning a repository owned by someone else

1. Select File -> Clone repository option from the top menu.
2. Select the “URL” tab on top.
3. Now open the repository to be clone inside a browser.
4. Copy the URL of the repository from the web browser (e.g. url [<https://github.com/puthukkaden/vlsi-design-flow-workshop>]) and paste the URL under the “Repository URL or GitHub username and repository” field.
5. In the Local Path field, give the path to where the repository is to be stored followed by the repository name (e.g. D:\github\vlsi-design-flow-workshop). A new folder with the repository name will be created and the files of the repository will be stored inside that folder.