

## Open Source Software Engineering – Lab Capsule 1

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### 1. Objective: **Working with GitHub**

The aim of this lab sheet is to develop an understanding about the basic environment and workflow of GitHub. It also guides the students to create a repo on GitHub and initialize it with some relevant files. Additionally, it helps students to familiarize themselves with the various open source projects available on GitHub and navigate through them.

Technologies used: GitHub.com

### 2. Steps to be performed:

- Create your own GitHub account on [www.github.com](https://www.github.com)
- Create a new repository in your account. Add some files to this repo or you may just work with the ReadMe.md file.
- Search for any active open source project of your interest and navigate through the various files in that repository.

### 3. Expected Deliverables:

- The students are expected to create a repo in their GitHub login account and submit the link of the repo.
- Also, every student must identify at least 2 open source projects of their choice and provide following information about the same:
  - List the number of total contributors in each project.
  - Identify top contributors and take a snapshot of top 5 open pull requests by these contributors. Also, take a snapshot of top 5 closed pull requests by them.
  - Take a snapshot of the 5 most recent pull requests (both open and closed).
  - Analyze the files that have been proposed with changes by each (open) pull request and take a snapshot of the proposed changes.
  - Identify the number of forks that have been made of the selected repo.



#### 4. References:

- **TutorialVideo- GitHub-Basics:** This tutorial video provides a detailed step-by-step description of creating and navigating through a repo on GitHub.
- **Template-RepoDetails:** template for writing detailed information about open source projects / repositories selected.