



**VELAGAPUDI RAMAKRISHNA
SIDDHARTHA ENGINEERING COLLEGE**
(Sponsored by Siddhartha Academy of General & Technical Education)

An Autonomous Institute
Approved by AICTE, New Delhi
Affiliated to JNTUK, Kakinada
ISO 9001:2015 Certified



Report

One Week Workshop

“Source Code Management & Technical Documentation”

Date: 25th September 2020

The Department of Computer Science and Engineering in collaboration with Andhra Pradesh State Skill Development Corporation (APSSDC) has organized a One Week Workshop on “Source Code Management & Technical Documentation” during 15th – 20th February 2021 for the second year students of CSE Department.



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
One Week Workshop on
“Source Code Management using GIT & GITHUB”
in collaboration with APSSDC
15th to 20th Feb 2021



VELAGAPUDI RAMAKRISHNA SIDDHARTHA ENGINEERING COLLEGE
(AUTONOMOUS) SPONSORED BY SIDDHARTHA ACADEMY OF GENERAL & TECHNICAL EDUCATION, VIJAYAWADA-520007, A.P.

A total of 207 students of second year CSE Department have attended this workshop. Three trainers have been deputed by APSSDC as resource persons for handling this workshop. Their details are:

<u>S.No</u>	<u>Name</u>	<u>Gmail</u>	<u>Mobile Number</u>
1	Piniseti Prabhu Kumari	prabhukumari.p@apssdc.in	7799098284
2	P Ambika	ambika_p@apssdc.in	9491297660
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GitHub is a website for developers and programmers to collaboratively work on code. The primary benefit of GitHub is its version control system, which allows for seamless collaboration without compromising the integrity of the original project. The projects on GitHub are examples of open-source software. The duration of this workshop is 2 Days or 12 Hours. Hence, it is scheduled in such a way that each student gets two full days of training during the one week of scheduled time.

GitHub is a hosting site where developers and programmers can upload the code they create and work collaboratively to improve it. A defining feature of GitHub is its robust version control system. The version control lets coders tweak software—potentially fixing bugs or improving efficiency—without affecting the software itself or risking the experience of any current users. Proposed changes can be easily merged into the live software after the proposals are reviewed and approved. GitHub can integrate with common platforms and services such as Amazon, Google Cloud, and Code Climate. It can highlight syntax in more than 200 different programming languages. Software Documentation / Technical Documentation is an important task during the product development so that the users need not to worry about how to use your product. From a very small project to a project with a huge number of developers, technical documentation writing is easy by using ReadTheDocs and Sphinx tools.

GitHub functions as a sort of social media site for developers and programmers. It allows your work to get out in front of the public. It is one of the largest coding communities around, so using it can provide wide exposure for your project. The more people you have to review your project, the more attention and use it is likely to attract. For instance, imagine that you have the basic skeleton for a project. The project does what you want it to do, but you're not always sure how the wider population will implement it—or if it even works for everyone. This is where GitHub users step in. When you post your project on GitHub, the wider community of programmers and hobbyists can download and evaluate your work. They can alert you to possible issues, such as conflicts or unforeseen dependency issues. They may even propose solutions to those problems, saving you the work.

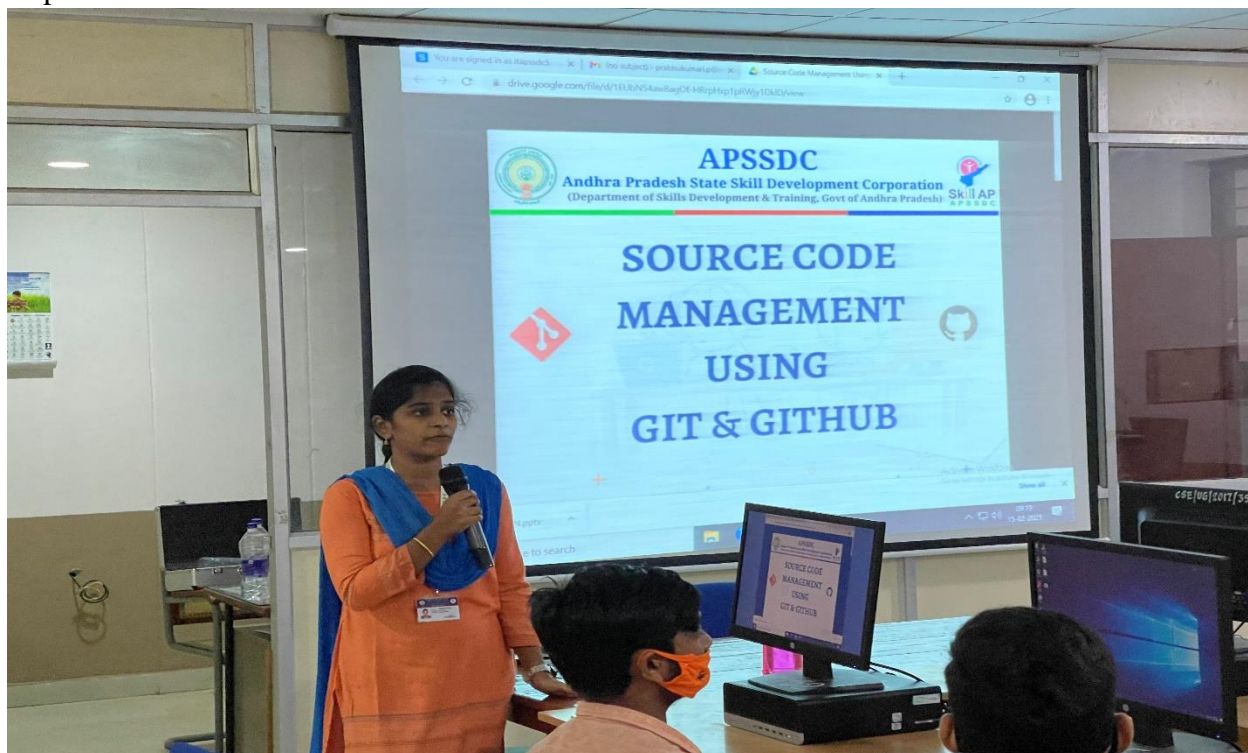
The main objectives of this course is

- ❖ To impart knowledge on version control and source management to the students & Faculty of engineering colleges across the state of Andhra Pradesh as Source Code Management and Version Control are very much important in the life of a software developer.
- ❖ To impart knowledge in using ReadTheDocs and Sphinx tools to write software documentation.
- ❖ To make the students and faculty develop their portfolio and make it available for the public to visit their portfolio using GitHubPages.
- ❖ To make the students & Faculty be able to write and share notes on the regular subjects to their peers and audience without hassle using ReadTheDocs and Sphinx.

Contents Covered under this Workshop

- **Introduction To Source Code Management**
- **Git Basics**
- Initializing repositories
- Accessing Existing Repositories
- Adding / Removing files from Staging area
- Committing the changes to repository
- Undoing the commits that are made
- **Remote**
- Creating an Account on GitHub

- Create a remote repository
- Adding the remotes
- Push, pull and fetch commands.
- **Markdown Syntax**
- Adding text of various styles and formats
- Adding images along with text
- Creating Ordered / Unordered lists-
- Adding videos/pdfs to the markdown file
- Adding links in the markdown file.
- **Git Branching**
- Uses of Branching
- Create Branch
- Switch to new Branch and back
- Merge the new branch to Master
- How to send the branch code to new branch on remote
- **Pull Requests**
- Collaborate on existing projects
- Collaborate on open source projects
- Sending pull requests and handling them
- **GitHub Pages**
- Creation of personal portfolio site
- Creating a GitHub Page using Markdown and Jekyll themes for repositories.
- **Technical Documentation**
- ReadTheDocs
- Sphinx





Dr D Rajeswara Rao, Head of the Department, Computer Science and Engineering addressed the students during the Valedictory and suggested every student must create and start uploading any coding assignments, Project based assessments to GITHUB and highlight all these in their resumes. He spoke about the impact of such practices for getting high package placements and getting settled in good MNC companies.

He also conveyed his thanks to the coordinators Mr V V N V Phani Kumar, Mr J Ranga Rao & M A R Pratap for making necessary arrangements and organizing a successful workshop.

