VISVESVARAYA TECHNOLOGICAL UNIVERSITY
"JNANA SANGAMA", BELAGAVI – 590018

Ability Enhancement Course Report
on
GitHub: AI-Powered Developer Platform

Submitted by

SADHGUNA AITHAL   *4SF21IS080*

In partial fulfillment of the requirements for V Semester of

BACHELOR OF ENGINEERING
IN
INFORMATION SCIENCE & ENGINEERING

<u>Under the Guidance of</u>

Mrs. Akhila Thejaswi R

Assistant Professor
Department of Information Science & Engineering

SAHYADRI
College of Engineering & Management
An Autonomous Institution
Mangaluru – 575 007

SAHYADRI

College of Engineering & Management
An Autonomous Institution
Mangaluru – 575 007

Department of Information Science & Engineering

CERTIFICATE

This is to certify that

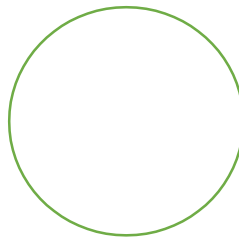Ms./Mr. _____Sadhguna Aithal_____ USN __4SF21IS080_____ has

satisfactorily completed **Ability Enhancement Course** Experiments on

GitHub: AI-Powered Developer Platform (21CS594) in partial fulfillment for the **Fifth**

Semester of Bachelor of Engineering in **Information Science & Engineering** during the

Academic Year 2023 - 2024.

Date: **Marks**

Head of the Department   Signature of the Staff Member
In charge of the Batch

Sahyadri Campus, Adyar, Mangaluru – 575007

CONTENTS

Sl. No.	Date	Experiments	Page	Marks	
				Max.	**Awarded**
1		**Setting Up and Basic Commands** Initialize a new Git repository in a directory. Create a new file and add it to the staging area and commit the changes with an appropriate commit message.			
2		**Creating and Managing Branches** a) Create a new branch named "feature-branch." Switch to the "master" branch. Merge the "feature-branch" into "master." b) Write the commands to stash your changes, switch branches, and then apply the stashed changes.			
3		**Collaboration and Remote Repositories** a) Clone a remote Git repository to your local machine. b) Fetch the latest changes from a remote repository and rebase your local branch onto the updated remote branch. c) Write the command to merge "feature-branch" into "master" while providing a custom commit message for the merge.			
4		**Git Tags and Releases** Write the command to create a lightweight Git tag named "v1.0" for a commit in your local repository.			
5		**Advanced Git Operations** Write the command to cherry-pick a range of commits from "source-branch" to the current branch.			

Sl. No.	Date	Experiments	Page	Marks	
				Max.	Awarded
6		**Analysing and Changing Git History** a) Given a commit ID, how would you use Git to view the details of that specific commit, including the author, date, and commit message? b) Write the command to list all commits made by the author "JohnDoe" between "2023-01-01" and "2023-12-31." c) Write the command to display the last five commits in the repository's history. d) Write the command to undo the changes introduced by the commit with the ID "abc123".			

Staff Member I/C   Head of the Department