

Lab Notebook

Team 33

UNIVERSITY NAME

Maulana Abul Kalam Azad University of Technology

ASSIGNMENT DETAILS

- **Topic:** Create a Git Repository Containing Lab Notebook in a LaTeX File
- **Subject:** Software Tools and Techniques
- **Team no:** 33
- **GitHub Repo Link:** <https://github.com/nasim888/LaTeX>

Team Members

- | | |
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1 Lab Assignment 1: Calculator Program

Task: Create a local repository, build a C program for a calculator in the local repository, commit the changes, and publish it as a public repository on GitHub.

Procedure:

1. Initialize Local Repository:

- Open the terminal (or command prompt) and navigate to the directory where you want to create your project.
- Run the command: `git init` to initialize a new Git repository.

2. Create the C Program:

- Create a new file named `calculator.c` in your project directory.
- Write the C code for the calculator program, ensuring it can perform basic arithmetic operations like addition, subtraction, multiplication, and division.
- Save the file.

3. Stage and Commit Changes:

- Stage the file for commit by running: `git add calculator.c`
- Commit the file with a descriptive message: `git commit -m "Add basic calculator program"`

4. Publish on GitHub:

- Log in to your GitHub account and create a new public repository.
- In the terminal, link your local repository to the remote GitHub repository by running: `git remote add origin <repository-URL>`
- Push your local commits to GitHub with the command: `git push -u origin main`

5. Verify the Repository:

- Open your GitHub repository in a web browser to ensure the `calculator.c` file is present and the commit message is correctly displayed.

2 Lab Assignment 2: Mind Reader Application

Task: Your professor created a mind reader application and wants you to try it out. After running the program, you found the submit button looks dull. You renamed it "Chin Tapak Dum Dum," but the button became disproportionate. Your task is to fix the button issue and create a pull request with the solution.

Procedure:

1. Clone the Repository:

- Open GitHub Desktop or use the terminal to clone the repository: `https://github.com/GeekAyan/STT`
- Run the command: `git clone https://github.com/GeekAyan/STT.git`
- Navigate to the project directory.

2. Run the Application:

- Follow the instructions provided in the `README.md` file to set up and run the mind reader application using your preferred Integrated Development Environment (IDE).
- Observe the application's user interface, particularly the submit button.

3. Identify and Rename the Button:

- Locate the submit button code in the application's source files.
- Rename the button text to "Chin Tapak Dum Dum."
- Notice that the button has become disproportionate due to the increased text length.

4. Fix the Button Size:

- Analyze the layout code that controls the button's appearance.
- Adjust the width and height properties, or use appropriate CSS/JavaFX adjustments to make the button proportionate.
- Test the application to ensure the button now displays correctly and does not affect other UI elements.

5. Commit and Push the Changes:

- Stage the modified files with: `git add .`
- Commit the changes with a descriptive message: `git commit -m "Fix button size after renaming to 'Chin Tapak Dum Dum'"`
- Push the changes to your forked repository on GitHub.

6. Create a Pull Request:

- Go to your GitHub repository and click on "Compare pull request."
- Write a brief description of the changes made and submit the pull request to the original repository.

7. Review and Merge:

- Wait for the repository owner to review your pull request.
- If accepted, your changes will be merged into the main project.