

Project name: Automate Git add, commit and push

Overview: This bash script will first initialize a git repository in the current directory. Then, it will ask the user for the file name. The user's response will be stored in the variable `file_name`. The script will then check if the file exists. If the file does not exist, the script will print an error message and exit. Finally, the script will add the file to the git repository, commit the changes with the commit message that the user entered, set the main branch, add the remote repository that the user entered, and push the changes to the remote repository.

User stories:

As a user, I want to be able to initialize a git repository in the current directory.

As a user, I want to be able to add a file to the git repository.

As a user, I want to be able to commit the changes to the git repository.

As a user, I want to be able to set the main branch of the git repository.

As a user, I want to be able to add a remote repository to the git repository.

As a user, I want to be able to push the changes to the remote repository.

- The script :

```
#!/bin/bash

# Declare variables
file_name=""
commit_message=""

# Initialize a git repository
git init

# Ask the user for the file name
echo "Enter the file name on the system: "
read file_name

# Check if the file exists
if [[ ! -f "$file_name" ]]; then
    echo "The file $file_name does not exist."
    exit 1
fi

# Add the file to the git repository
git add $file_name

# Ask the user for the commit message
echo "Enter the commit message: "
read commit_message

# Check if the user entered a value
if [[ -z "$commit_message" ]]; then
    echo "You must enter a commit message."
    exit 1
fi
```

```
# Check if the user entered a value
if [[ -z "$commit_message" ]]; then
    echo "You must enter a commit message."
    exit 1
fi

# Commit the changes
git commit -m "$commit_message"

# Set the main branch
git branch -M main

# Add the remote repository
git remote add origin git@github.com:Turkimans/test.git

# Push the changes to the remote repository
git push -u origin main

# Print a message to the user
echo "The push process is completed."
|
```

After run the script in command line :

```
[root@78e8b6979d0f turkimanss]# touch test8.txt
[root@78e8b6979d0f turkimanss]# ls
github222.sh github333.sh github444.sh output.txt test test8.txt test.txt turkimansour.txt
[root@78e8b6979d0f turkimanss]# bash github222.sh
Reinitialized existing Git repository in /root/turkimanss/.git/
Enter the file name on the system:
test8.txt
Enter the commit message:
test
[main 3b56686] test
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 test8.txt
fatal: remote origin already exists.
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 251 bytes | 7.00 KiB/s, done.
Total 2 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:Turkimans/test.git
   37b10a4..3b56686  main -> main
Branch 'main' set up to track remote branch 'main' from 'origin'.
The push process is completed.
[root@78e8b6979d0f turkimanss]#
```

The file that was pushed in github :

The screenshot displays the GitHub web interface for a repository named 'test' by user 'Turkimans'. On the left, the 'Files' sidebar shows a directory tree with a 'test' folder and several files: 'github222.sh', 'github333.sh', 'github444.sh', 'output.txt', 'test.txt', 'test8.txt' (which is highlighted), and 'turkimansour.txt'. The main area shows the selected file 'test / test8.txt'. It includes the repository name 'Turkimans test', tabs for 'Code' and 'Blame', and statistics indicating '0 lines (0 loc) · 0 Bytes'. The content area below is currently empty.

