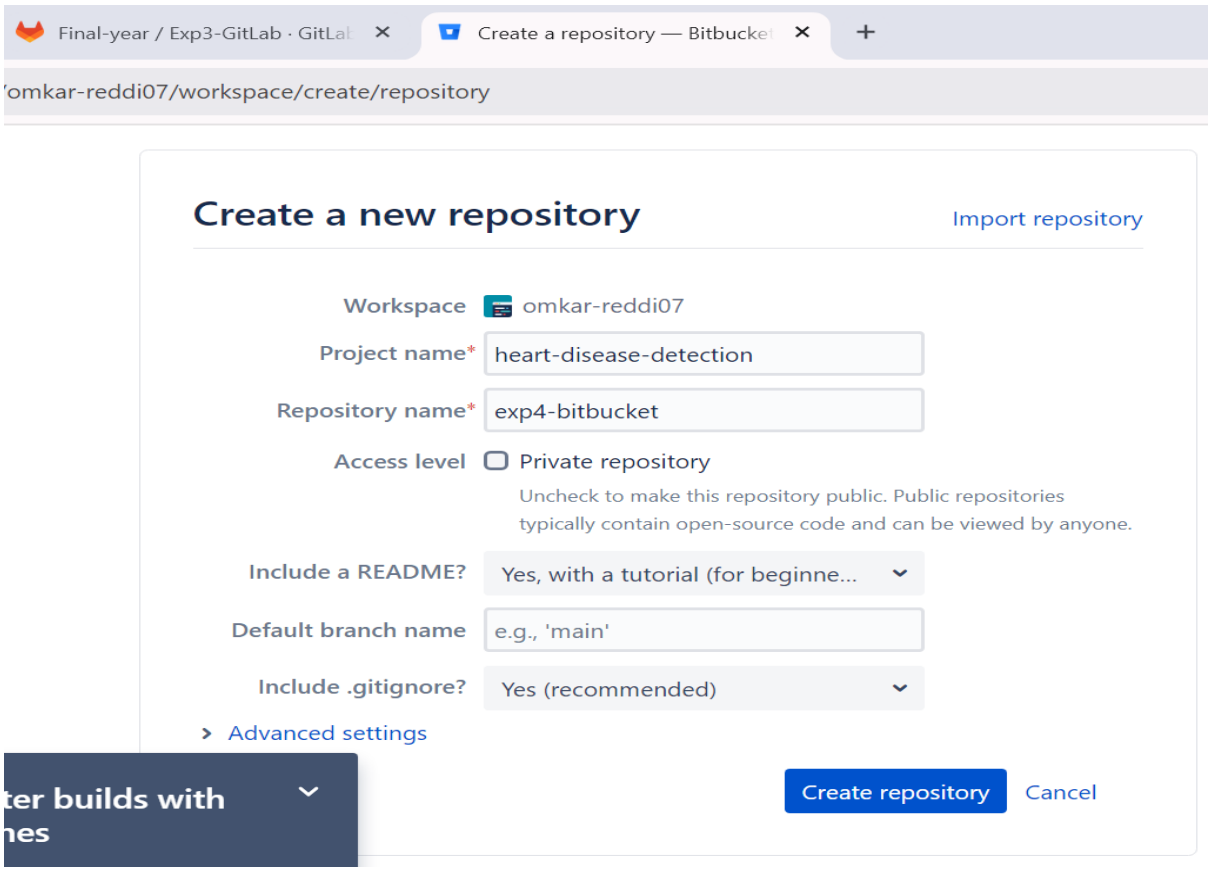
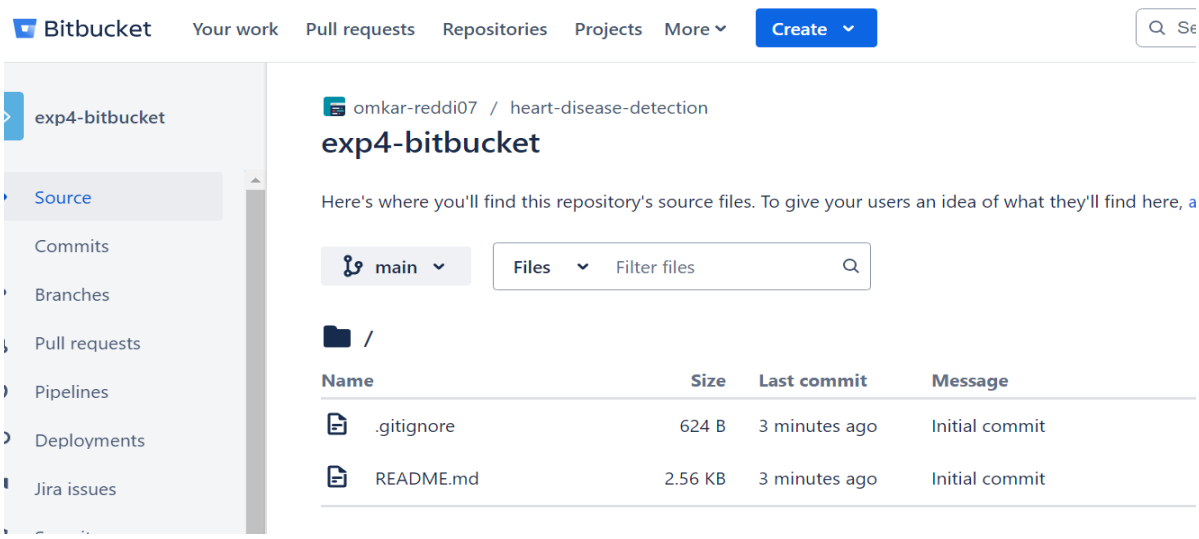
Experiment No. 4

Title: Implement BitBucket Operations using Git.

Step 1: Creating a Repository





Step 2: Cloning the Repository

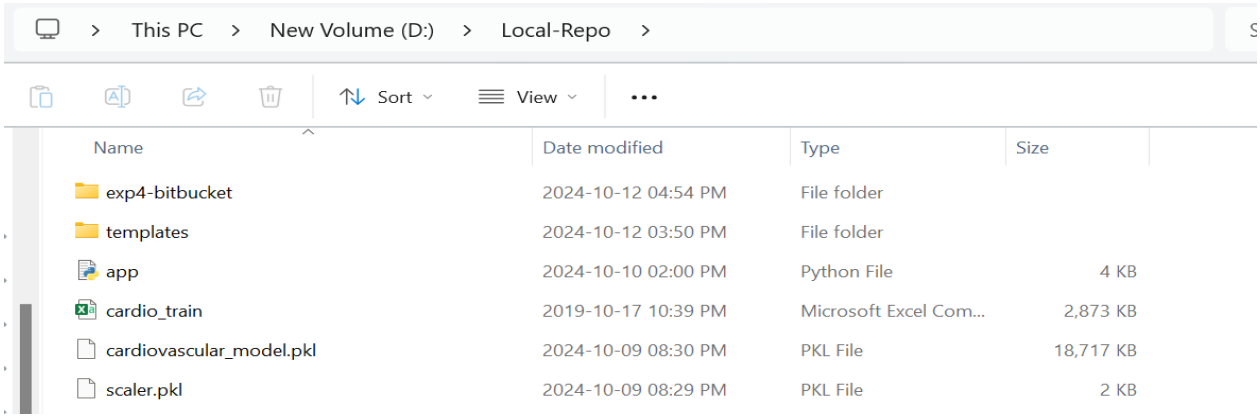
Navigate to the directory where you want to clone the repository:

```
OMKAR@LAPTOP-UU9CTA9O MINGW64 /d
$ cd Local-Repo

OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo (master)
$
```

Copy the repository URL from Bitbucket & command to clone the repository to your local machine :

```
OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo (master)
$ git clone https://omkar-reddi07-admin@bitbucket.org/omkar-reddi07/exp4-bitbuck
et.git
Cloning into 'exp4-bitbucket'...
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (4/4), done.
remote: Total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (4/4), done.
```



Step 3: Making Changes and Creating a Branch

Navigate into the cloned repository:

```
OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo (master)
$ cd exp4-bitbucket

OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo/exp4-bitbucket (main)
$
```

Create a new text file named example.txt using a text editor :

```
OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo/exp4-bitbucket (main)
$ nano example1.txt

OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo/exp4-bitbucket (main)
$ nano example2.txt

OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo/exp4-bitbucket (main)
$ nano example3.txt
```

Check the status of the repository:

```
OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo/exp4-bitbucket (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        example1.txt
        example2.txt
        example3.txt

nothing added to commit but untracked files present (use "git add" to track)
```

Stage the changes for commit:

```
OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo/exp4-bitbucket (main)
$ git add example1.txt
warning: in the working copy of 'example1.txt', LF will be replaced by CRLF the next time Git touches it

OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo/exp4-bitbucket (main)
$ git add example2.txt
warning: in the working copy of 'example2.txt', LF will be replaced by CRLF the next time Git touches it

OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo/exp4-bitbucket (main)
$ git add example3.txt
warning: in the working copy of 'example3.txt', LF will be replaced by CRLF the next time Git touches it
```

Commit the changes with a descriptive message:

```
OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo/exp4-bitbucket (main)
$ git commit -m "Adding content example1.txt, example2.txt and example3.txt"
[main b527412] Adding content example1.txt, example2.txt and example3.txt
 3 files changed, 3 insertions(+)
 create mode 100644 example1.txt
 create mode 100644 example2.txt
 create mode 100644 example3.txt
```

Create a new branch named feature:

```
OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo/exp4-bitbucket (main)
$ git branch feature
```

Switch to the "feature" branch:

```
OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo/exp4-bitbucket (main)
$ git checkout feature
Switched to branch 'feature'

OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo/exp4-bitbucket (feature)
$
```

Step 4: Pushing Changes to Bitbucket

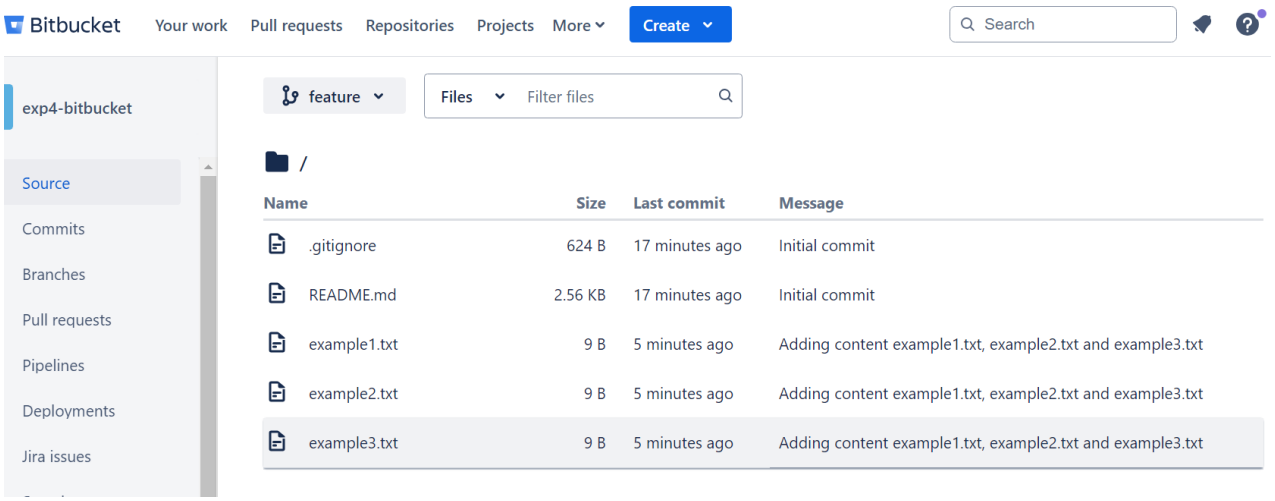
Add the repository URL as a remote:

```
OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo/exp4-bitbucket (feature)
$ git remote add origin https://omkar-reddi07-admin@bitbuket.org/omkar-reddi07/exp4-bitbuket.git
error: remote origin already exists.
```

Push the "feature" branch to Bitbucket:

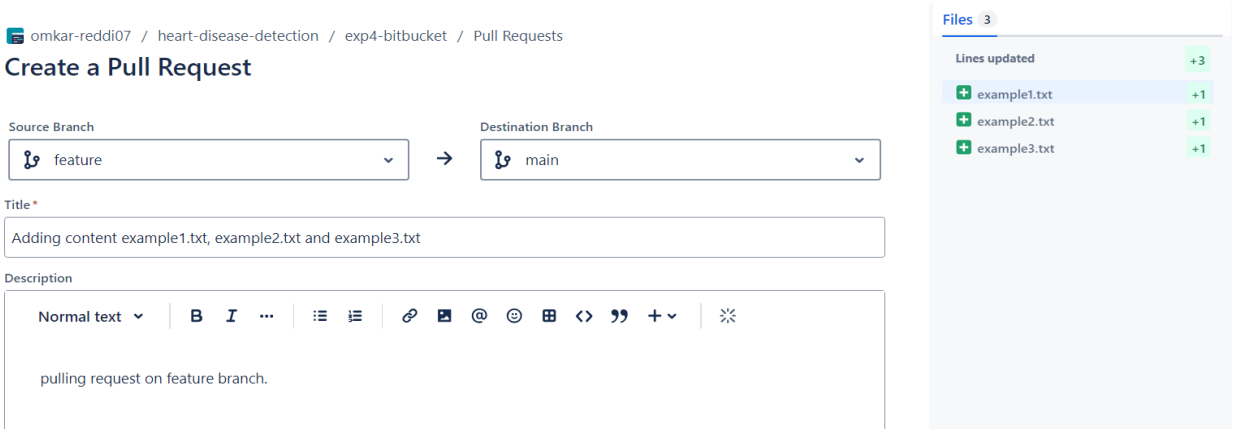
```
OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo/exp4-bitbucket (feature)
$ git push origin feature
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (5/5), 434 bytes | 434.00 KiB/s, done.
Total 5 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create pull request for feature:
remote:   https://bitbucket.org/omkar-reddi07/exp4-bitbucket/pull-requests/new?source=feature&t=1
remote:
To https://bitbucket.org/omkar-reddi07/exp4-bitbucket.git
 * [new branch]      feature -> feature
```

// Branch : feature

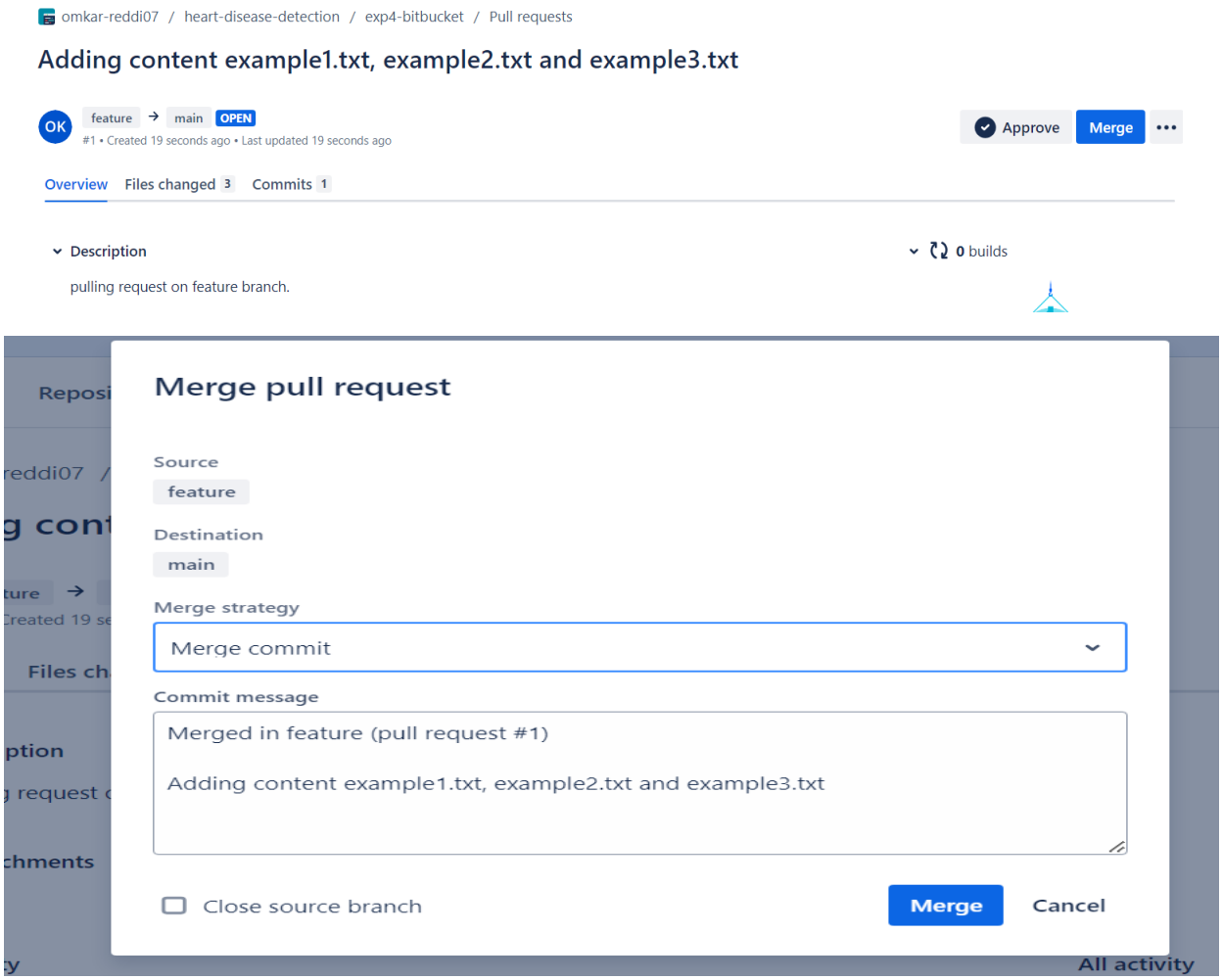


Step 5: Collaborating through Pull Requests

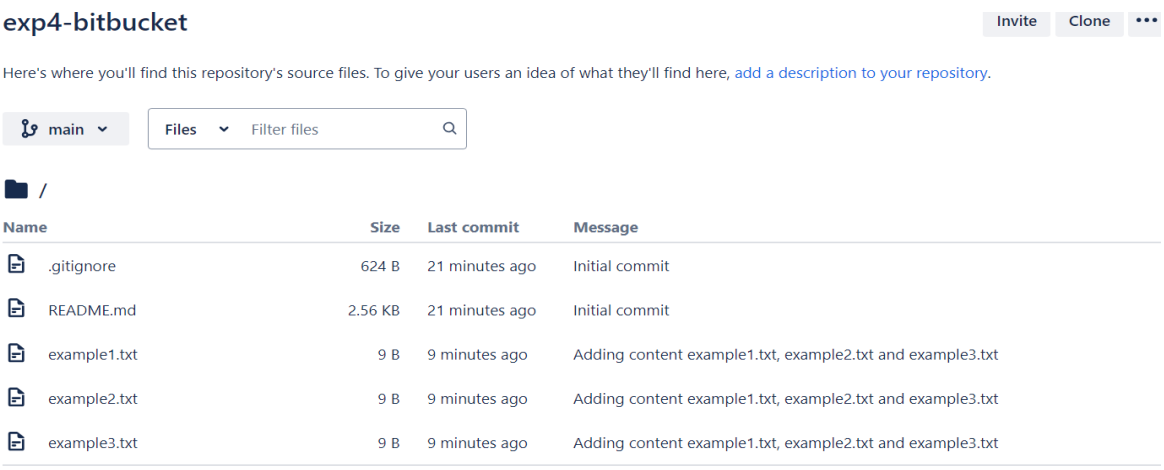
Create a pull request on Bitbucket:



Review and merge the pull request:



// Branch : main

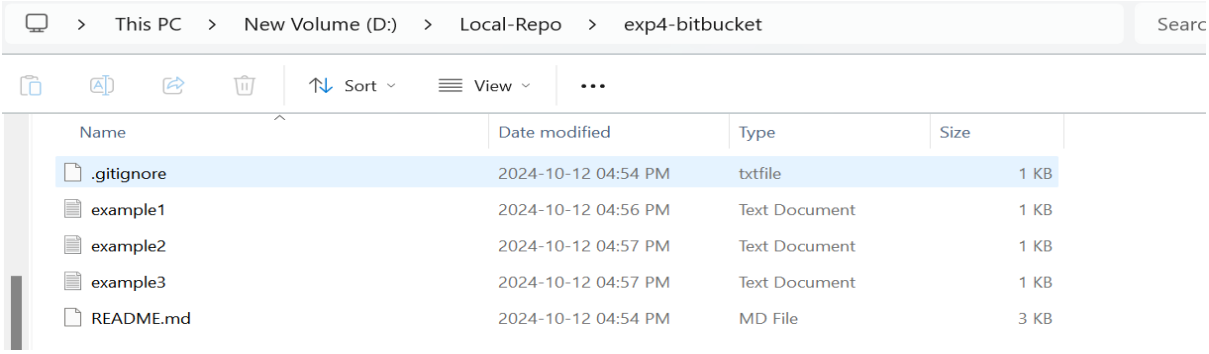


Step 6: Syncing Changes

After the pull request is merged, **update your local repository :**

```
OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo/exp4-bitbucket (feature)
$ git checkout main
Switched to branch 'main'
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo/exp4-bitbucket (main)
```

```
OMKAR@LAPTOP-UU9CTA9O MINGW64 /d/Local-Repo/exp4-bitbucket (main)
$ git pull origin main
remote: Enumerating objects: 1, done.
remote: Counting objects: 100% (1/1), done.
remote: Total 1 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (1/1), 250 bytes | 62.00 KiB/s, done.
From https://bitbucket.org/omkar-reddi07/exp4-bitbucket
 * branch            main       -> FETCH_HEAD
   03d5b77..dc914b9  main       -> origin/main
Updating b527412..dc914b9
Fast-forward
```

This will pull the latest changes from the remote main branch to your local repository.