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NAO ID: 3319

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In-Mexico Program Backend
Developer Certification

GitHub and Digital Repository
Management:

Develop – Sprint 2

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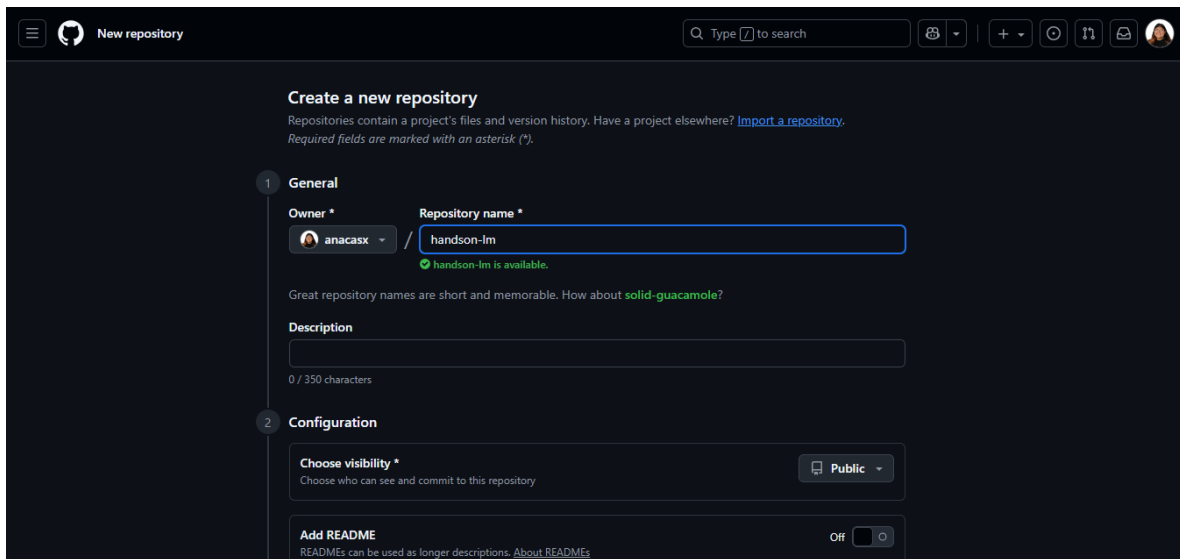
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Executive Summary

This report shows the how is to upload a local project to GitHub, create a branch for changes, modify project files, and manage a Pull Request for review and merging. Screenshots to illustrate the process are included.

Setting Up the Repository

A new repository is created on GitHub to host the project we already have locally. The repository name must match the project name.



The screenshot shows the GitHub 'Create a new repository' interface. The 'General' tab is active, showing the repository name 'handson-lm' entered in the 'Repository name' field. A green checkmark indicates 'handson-lm is available'. The 'Description' field is empty. The 'Configuration' tab is also visible, showing the 'Choose visibility' dropdown set to 'Public' and the 'Add README' toggle set to 'Off'.

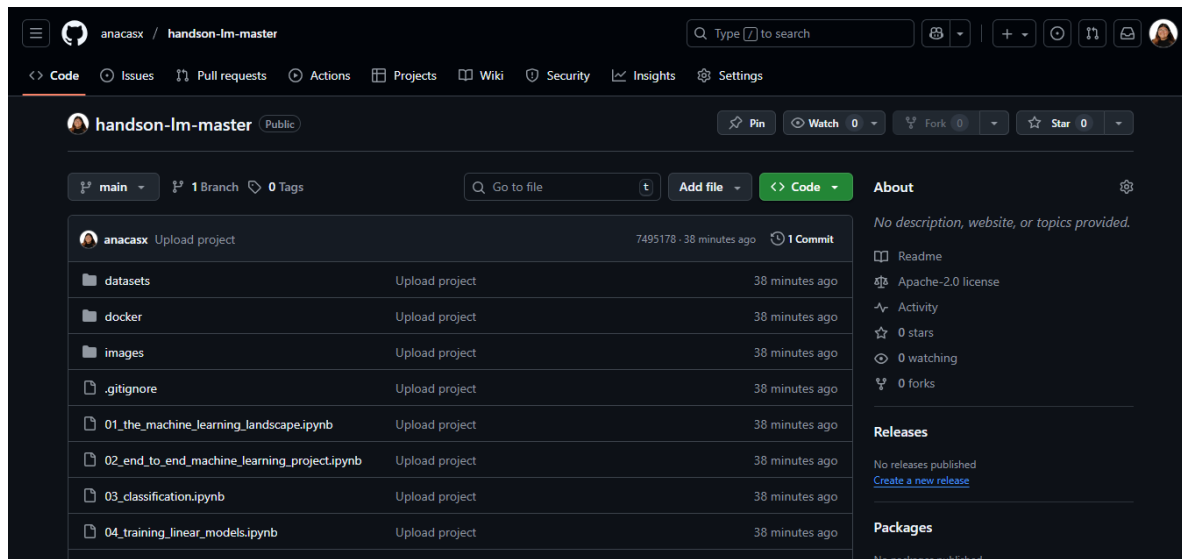
The local project is uploaded via the terminal.

```
Xoch@DESKTOP-J714T83 MINGW64 ~/Documents/handson-ml-master (master)
$ git remote add origin https://github.com/anacasx/handson-lm-master.git

Xoch@DESKTOP-J714T83 MINGW64 ~/Documents/handson-ml-master (master)
$ git branch -M main

Xoch@DESKTOP-J714T83 MINGW64 ~/Documents/handson-ml-master (main)
$ git push -u origin main
Enumerating objects: 66, done.
Counting objects: 100% (66/66), done.
Delta compression using up to 4 threads
Compressing objects: 100% (62/62), done.
Writing objects: 100% (66/66), 14.79 MiB | 2.74 MiB/s, done.
Total 66 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/anacasx/handson-lm-master.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.
```

Once this is done, we can view the files on GitHub.



Branching and Modifying Files

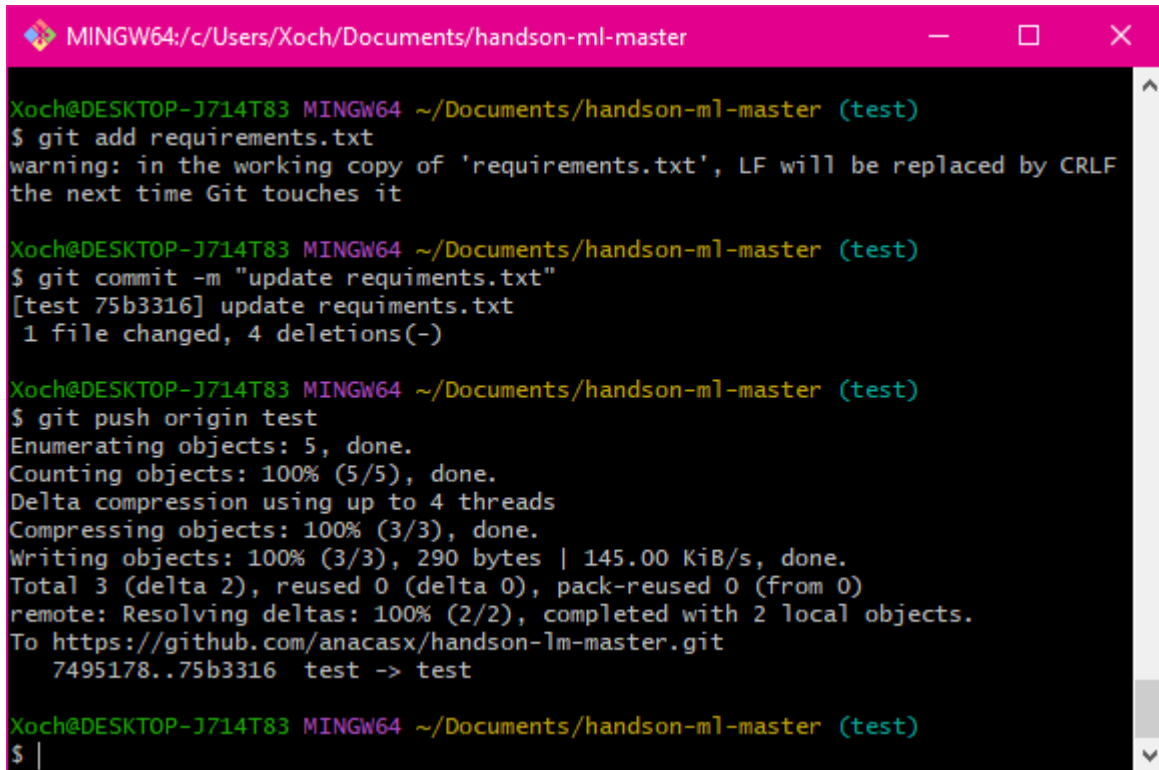
To create a new branch, use the command `git checkout -b branch_name`.

```
MINGW64:/c/Users/Xoch/Documents/handson-ml-master
Xoch@DESKTOP-J714T83 MINGW64 ~/Documents/handson-ml-master (main)
$ git checkout -b test
Switched to a new branch 'test'

Xoch@DESKTOP-J714T83 MINGW64 ~/Documents/handson-ml-master (test)
$ git push -u origin test
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'test' on GitHub by visiting:
remote:   https://github.com/anacasz/handson-1m-master/pull/new/test
remote:
To https://github.com/anacasz/handson-1m-master.git
 * [new branch]      test -> test
branch 'test' set up to track 'origin/test'.

Xoch@DESKTOP-J714T83 MINGW64 ~/Documents/handson-ml-master (test)
$
```

As part of the activity, the requirements.txt file was modified, which we uploaded to GitHub in the new branch for changes.



```
MINGW64:/c/Users/Xoch/Documents/handson-ml-master

Xoch@DESKTOP-J714T83 MINGW64 ~/Documents/handson-ml-master (test)
$ git add requirements.txt
warning: in the working copy of 'requirements.txt', LF will be replaced by CRLF
the next time Git touches it

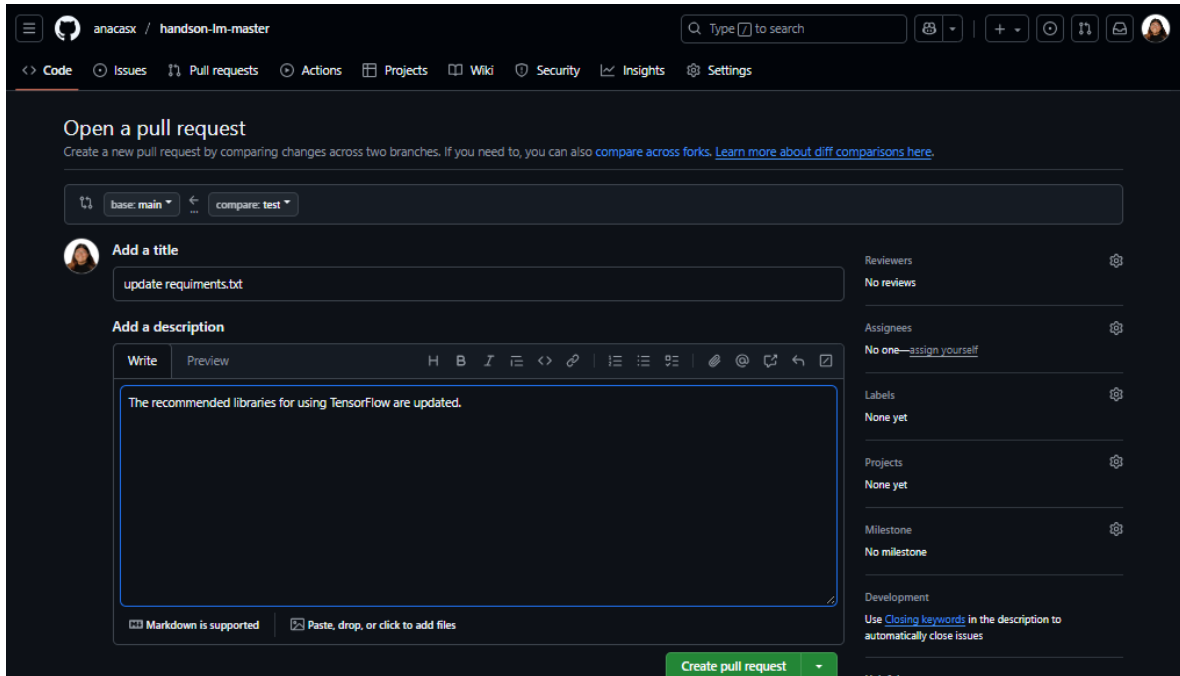
Xoch@DESKTOP-J714T83 MINGW64 ~/Documents/handson-ml-master (test)
$ git commit -m "update requiments.txt"
[test 75b3316] update requiments.txt
1 file changed, 4 deletions(-)

Xoch@DESKTOP-J714T83 MINGW64 ~/Documents/handson-ml-master (test)
$ git push origin test
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 290 bytes | 145.00 KiB/s, done.
Total 3 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To https://github.com/anacasx/handson-1m-master.git
7495178..75b3316 test -> test

Xoch@DESKTOP-J714T83 MINGW64 ~/Documents/handson-ml-master (test)
$ |
```

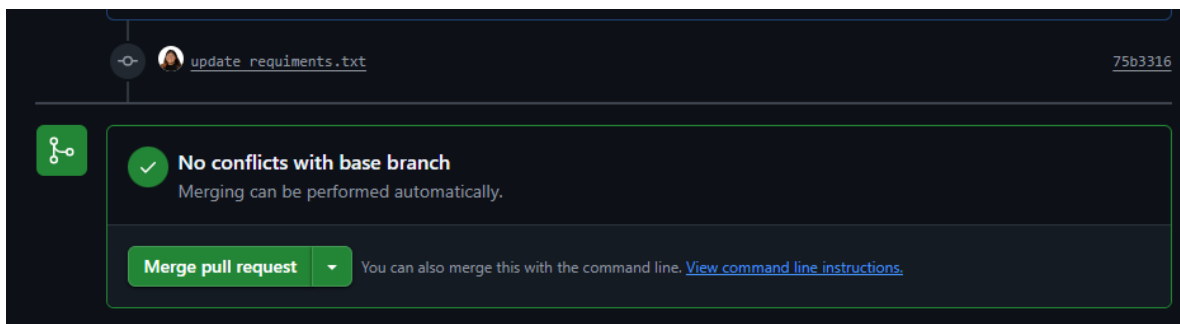
Pull Requests and Collaboration

On GitHub, we can see that a Pull Request can be opened. For this, we need a title and a comment describing the change, and we can also indicate if it is relevant to the main branch.



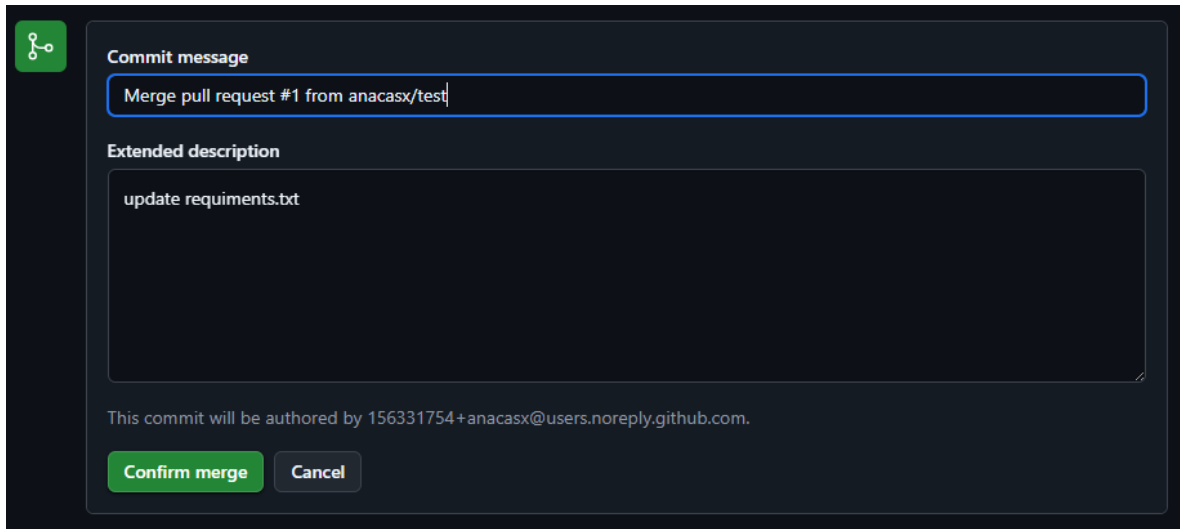
The screenshot shows the GitHub interface for opening a pull request. At the top, the repository name 'anacax / handson-1m-master' is visible. Below the navigation bar, the 'Pull requests' tab is selected. The main heading is 'Open a pull request', with a subtext explaining that it creates a new pull request by comparing changes across two branches. A dropdown menu shows 'base: main' and 'compare: test'. Below this, there are two main sections: 'Add a title' and 'Add a description'. The title field contains 'update requirements.txt'. The description field has a rich text editor with the text 'The recommended libraries for using TensorFlow are updated.' and a 'Write' tab selected. To the right of these fields, there are several configuration options: 'Reviewers' (No reviews), 'Assignees' (No one—assign yourself), 'Labels' (None yet), 'Projects' (None yet), and 'Milestone' (No milestone). At the bottom right, there is a 'Development' section with a note about using closing keywords. A green 'Create pull request' button is located at the bottom right of the form.

This Pull Request is pending and visible so that one of the repository collaborators can review it.



The screenshot shows the status bar of a pull request. At the top, the file 'update_requirements.txt' is listed with a commit hash '75b3316'. Below this, there is a green checkmark icon and the text 'No conflicts with base branch', followed by 'Merging can be performed automatically.' At the bottom, there is a green 'Merge pull request' button and a link to 'View command line instructions'.

When someone opens this request, they can see the description of the issue or correction and decide whether it warrants a merge.



A screenshot of a GitHub merge confirmation dialog. On the left is a green icon with a white branching diagram. The main area has a dark background. At the top, 'Commit message' is written above a text input field containing 'Merge pull request #1 from anacax/test'. Below this, 'Extended description' is written above a larger text area containing 'update requiments.txt'. At the bottom, a line of text states 'This commit will be authored by 156331754+anacax@users.noreply.github.com.' Below this text are two buttons: a green 'Confirm merge' button and a grey 'Cancel' button.

Once confirmed, a notification is sent indicating that the Pull Request has been successfully merged and closed.

