

## Git issue

To successfully manage a project, any project, you have to plan in advance; just reacting to new inputs and generally doing whatever you feel like is a perfect recipe for disaster.

A GitHub project is no different; you have to keep track of your actions before even thinking about doing them. That's why GitHub has an awesome feature called Issues. We are going to discuss them in this section and learn how to manage them properly.

During all the sections of this course, you are both the developer and the project manager; but in a big project, you might not be included in the planning phases. However, for now, you are temporarily promoted to project manager and lead developer (in addition to being the only developer), congratulations! One of the duties of the project manager is to plan in advance all the tasks that need to be done. The plans don't need to be very precise yet (in the real world they never are), but it is necessary to have a list of all the tasks that need to be done. Those tasks can be either new features, bug fixing, or just a team discussion. In GitHub, those tasks are called Issues.

An issue is used to track new feature development, bug fixing, or new ideas that a team member suggested. They are the brick and mortar of GitHub project management; in theory, no action should be done with an issue being attached to it. The aim of each action you take should be the resolving of an issue.

Long gone are the days where planning the next steps was done by boring team meetings; now you know exactly what will be your next steps, and most importantly, what everybody else is doing. Suggesting new ideas to your coworkers is easier than ever; just open an issue to discuss it with your team without using another app or email client. The biggest plus for using issues is that the history is kept forever—each feature, each bug, and each discussion.

## Creating an Issue

The best way to learn about issues is to directly interact with them. Therefore, let's head back to our GitHub project page and deal with them.

When you open your GitHub project page, you directly arrive on the "Code" part of the project. It is the part where your project files are shown.

# todo add screenshots

Just below the project name are many tabs that show all the sections of your project. You will mostly work on "Code," "Issues," "Pull Requests," and "Projects." However, for now, let's focus on Issues. Go ahead and click on issues to begin. You should arrive at an empty section like the one shown below because your project has no issues yet.

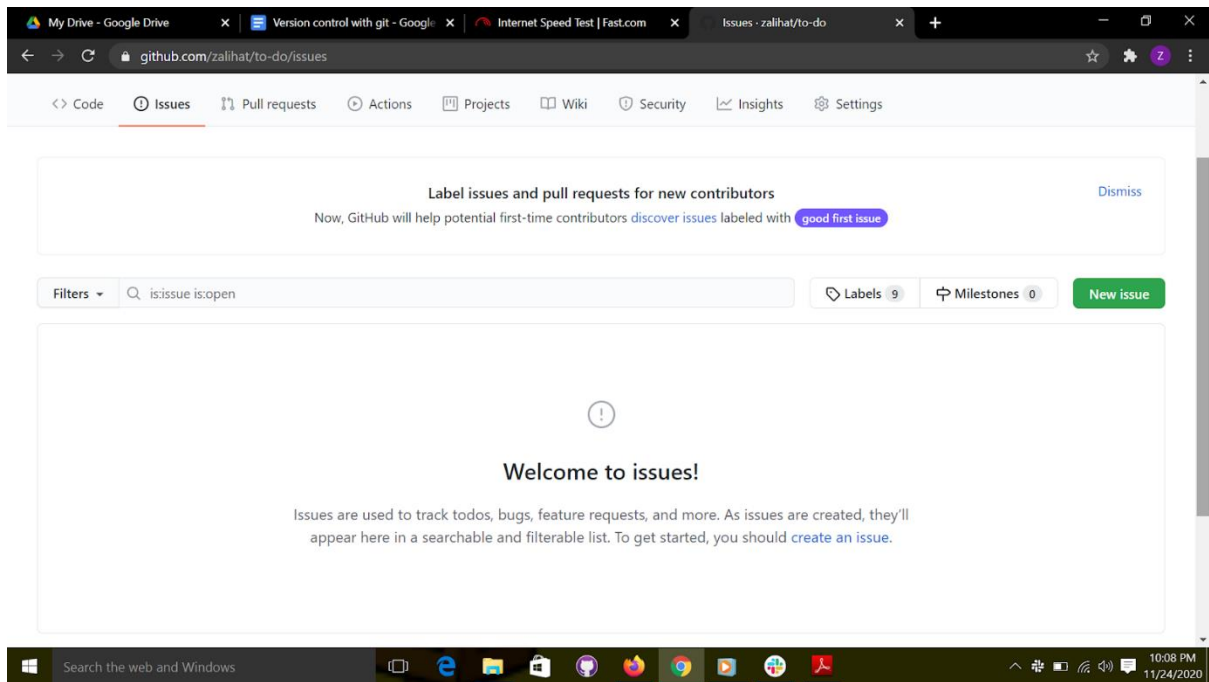


Figure 16: git issues

There are many calls to action there about creating a new issue. Click one of them, and you will see a form similar to mine as shown below.

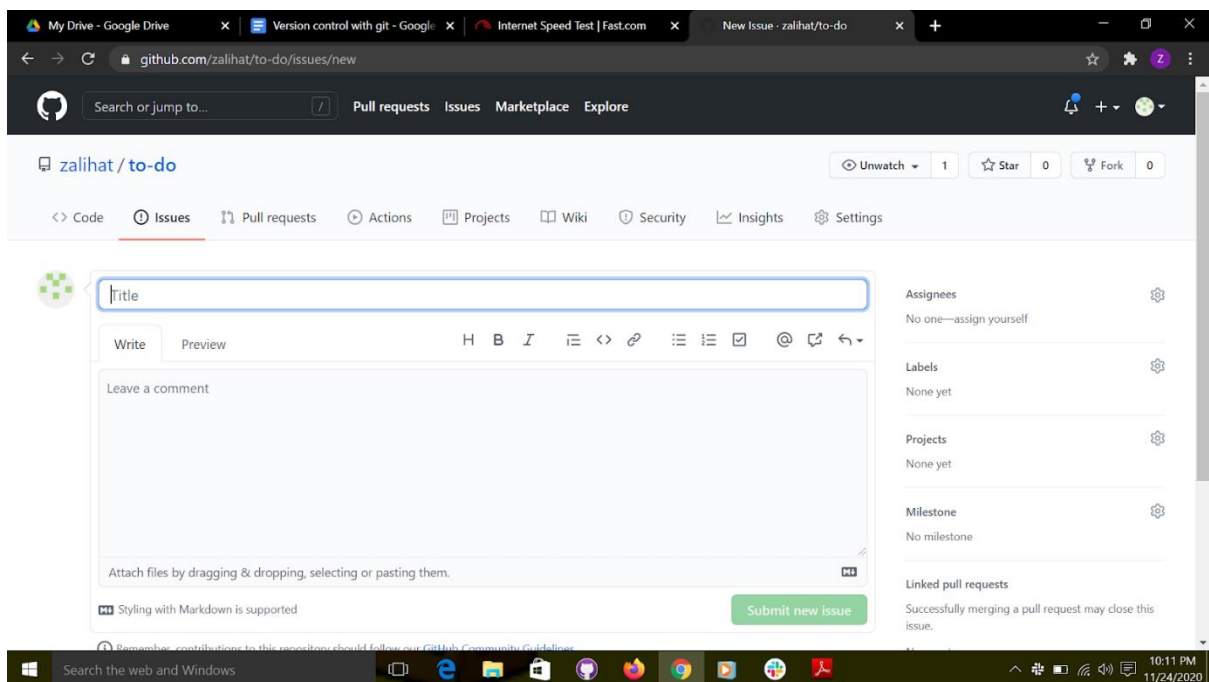


Figure 17: create a new issue

The form is pretty simple; and only the title is mandatory. There is also a comment section below the title, if you need more room to explain. Let's go ahead and fill our first issue with the basic stuff; don't change the values on the right side just yet.

For our first issue, we are starting a discussion about the technology we will use for our product. Issues aren't needed for features and bug tracking only; they are also used to start a discussion and share ideas. Go ahead and fill your first issue like mine as shown below; I titled mine "Data collection".

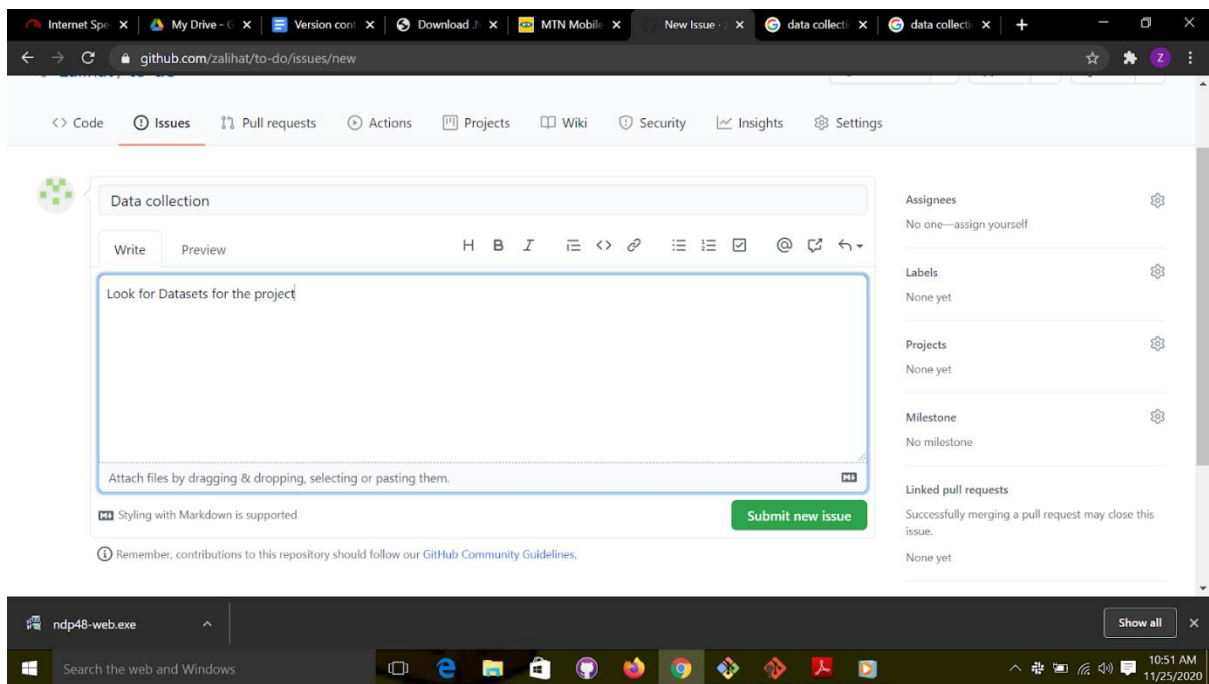


Figure 18: Git issue form

Now that we filled out the basic info about the issue, submit it. You will then be redirected to the detailed view of your new issue. It should be similar to my issue shown below,

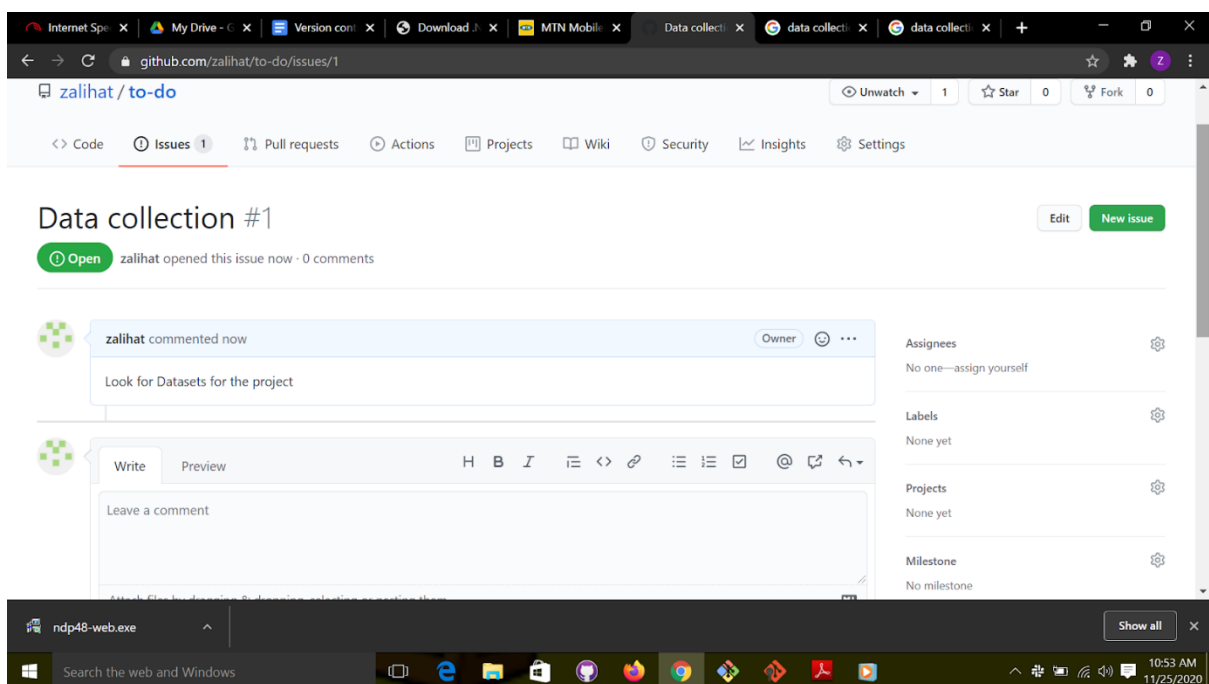


Figure 19: Detailed view of a git issue.

The first thing to note is that your issue has been given a number. Each issue has a unique number, and those numbers are not recycled. This means that even if you delete an issue, its number will never be reused. This number is important, as you will see in this section.

The details page also includes a comment section where team members can discuss the idea. It even includes a limited number of emojis that you can use as a substitute to commenting. For example, if you agree with someone, giving them a thumbs-up is better than commenting or writing “me too”! It would clog the communication and stall the

conversation.

At the bottom right side of the page is a “subscribe” button. If you choose to subscribe to an issue, you will receive notifications about the changes done to it. You will also receive new comments and news about milestones reached.

Since you are the only member of the team, you won’t do much discussion. Just add a comment or a reaction image and close the issue. Closing the issue won’t delete it; it will just mark it as completed. Deleting issues is not advised because keeping a history of the project is needed, and issues are the best way to keep track of changes. Also remember; if your repository is public, anyone can read your comments. Hence, please be kind and rewind any unpleasanties that might arise.

After commenting and closing the issue, you will go back to the issue details page, and it will look similar to mine as shown below,

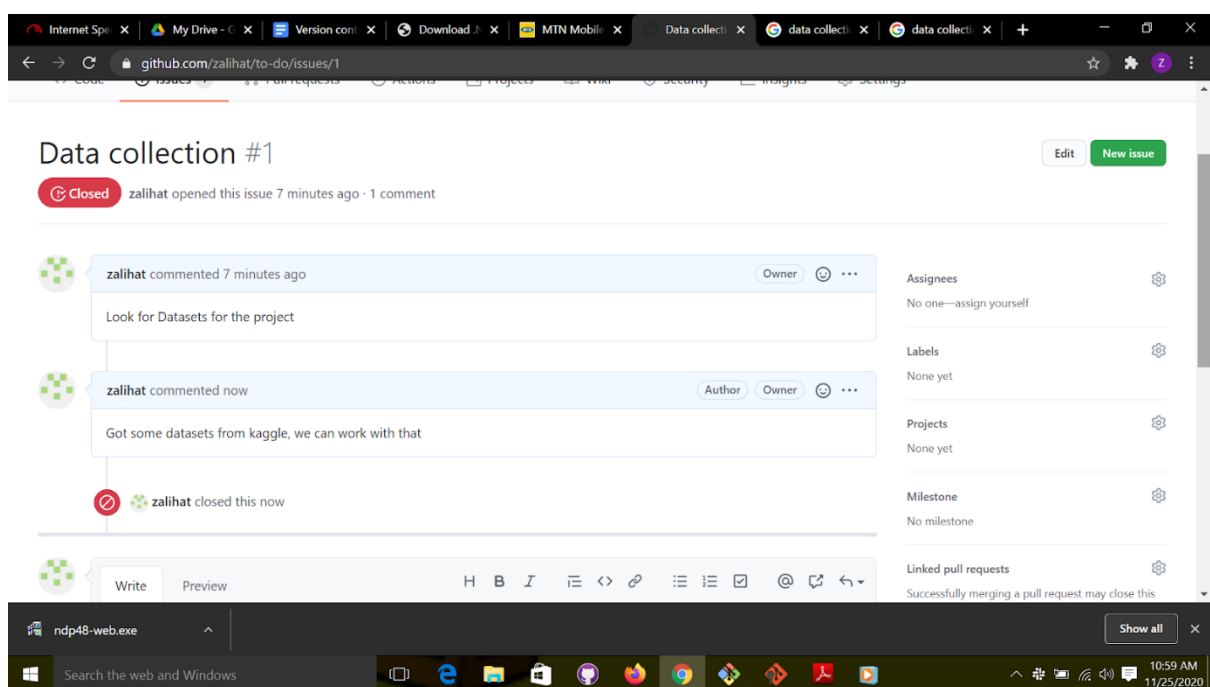


Figure 20: Closed issue