

Source Control for test automation with Glt

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A. Purpose

The purpose of this document is to know how to clone, pull, push the automation code & Also, to facilitate the integrating of the automation work between the team members

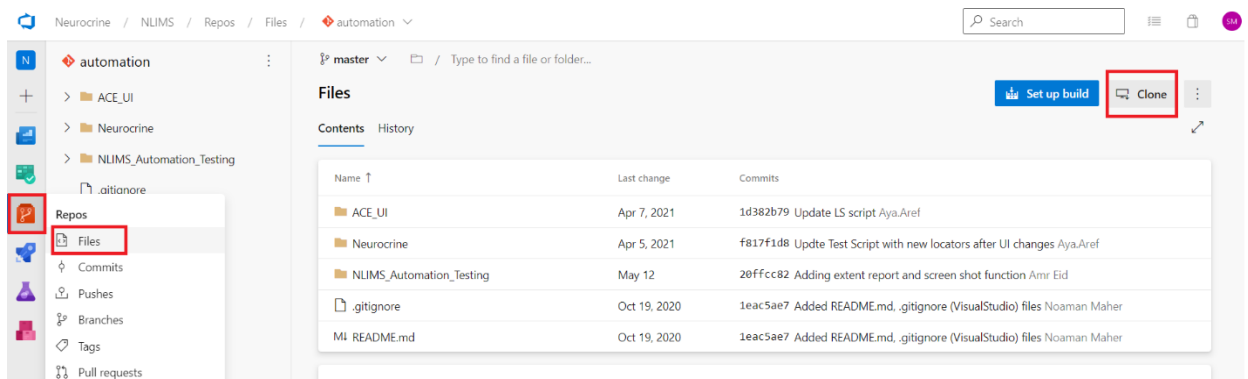
B. Prerequisites:

1. Make sure that your visual studio version is 16.8.0 or higher
 - In case you have lower version, you will have to update it
 - Press on window then type "visual studio installer" & then select the update option
2. Make sure you have .Net Framework 5
 - In case you have lower version
 - Go to : <https://dotnet.microsoft.com/en-us/download/dotnet/5.0>
 - Select the latest version: i.e., 5.0.16
 - Then download the Windows version i.e., x64

C. Steps

1. Clone your project

1. Open TFS: <https://projects.integrant.com/TFS/Neurocrine/NLIMS>
2. From Repos>> Click on files then press on clone



3. Copy the link

Clone Repository



Command line

HTTPS

SSH

https://projects.integrant.com/TFS/Neuro

Copy clone URL to clipboard

[Manage SSH Keys](#) | [Learn more about SSH](#)

IDE

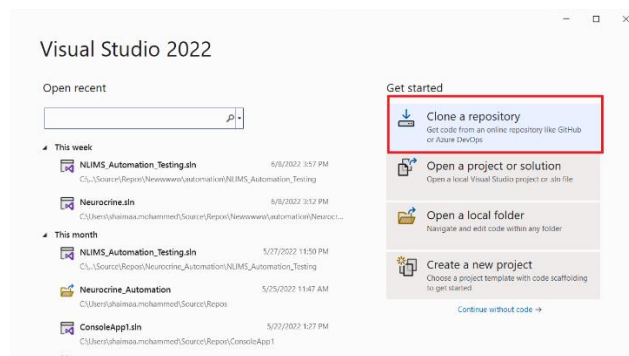


Clone in VS Code

▼

Having problems authenticating in Git? Be sure to get the latest version
 ⓘ [Git for Windows](#) or our plugins for [IntelliJ](#), [Eclipse](#), [Android Studio](#) or [Windows command line](#).

4. Open Microsoft visual studio & select to “clone a repository”



3. Past the URL you just copied in step 4 & past it
 - A. Take care about the local path that will be saved in

Clone a repository

Enter a Git repository URL



Repository location

https://projects.integrant.com/TFS/Neurocrine/NLIMS/_git/automation

Path

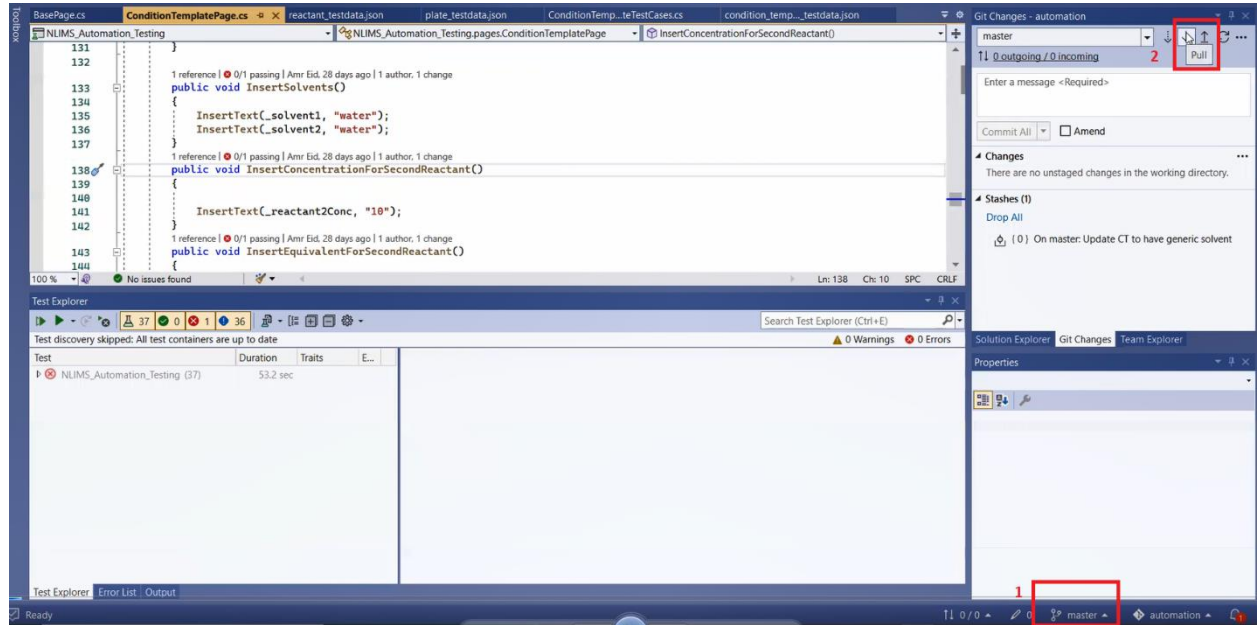
C:\Users\shaimaa.mohammed\Source\Repos\automation

Browse a repository

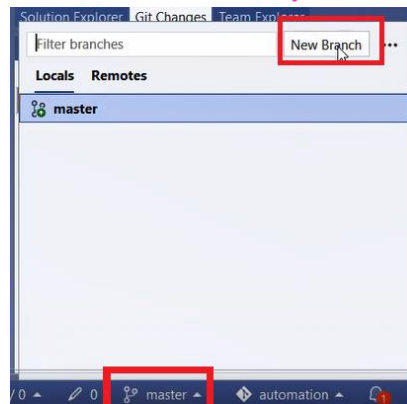
 Azure DevOps
  GitHub

7. Now you have the project on your local machine 😊

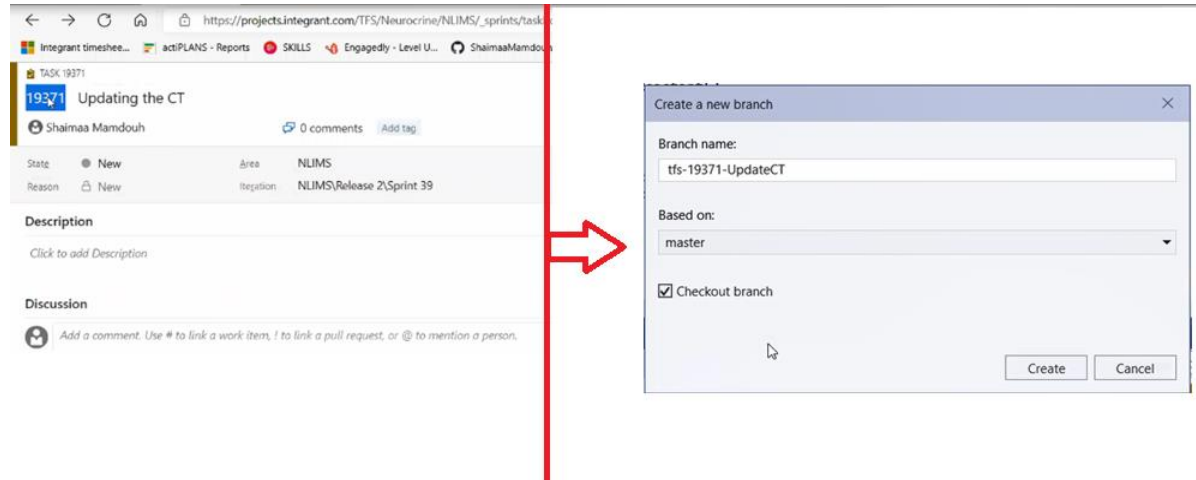
2. Make “Pull” before creating any new branch to get the latest changes done on the master



3. Create new branch per feature



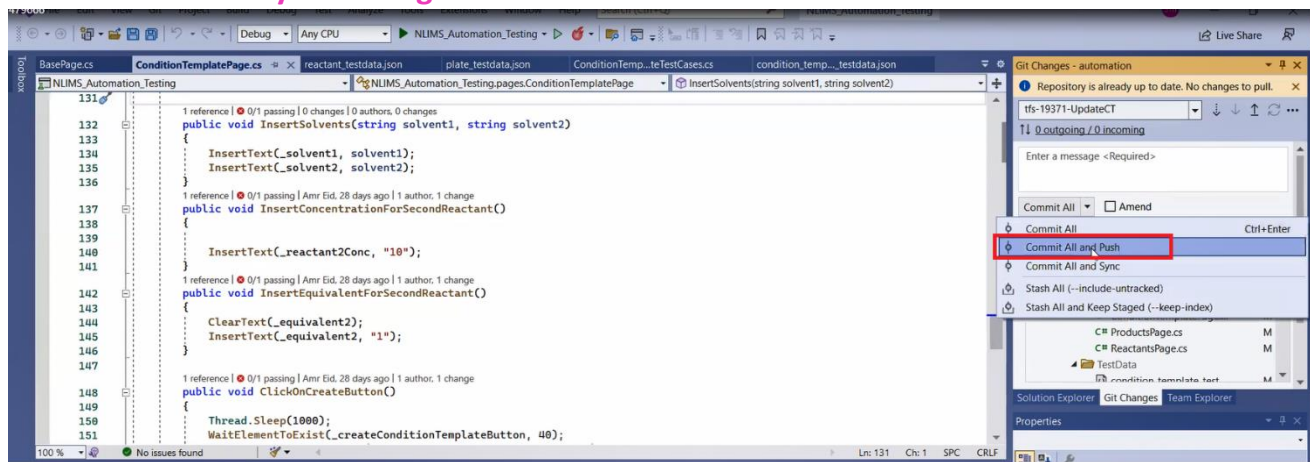
- You must create new the new branch on the master
- Branch name must have the following naming convention:
 “tfs-TaskNumberOnTFS-featureName”



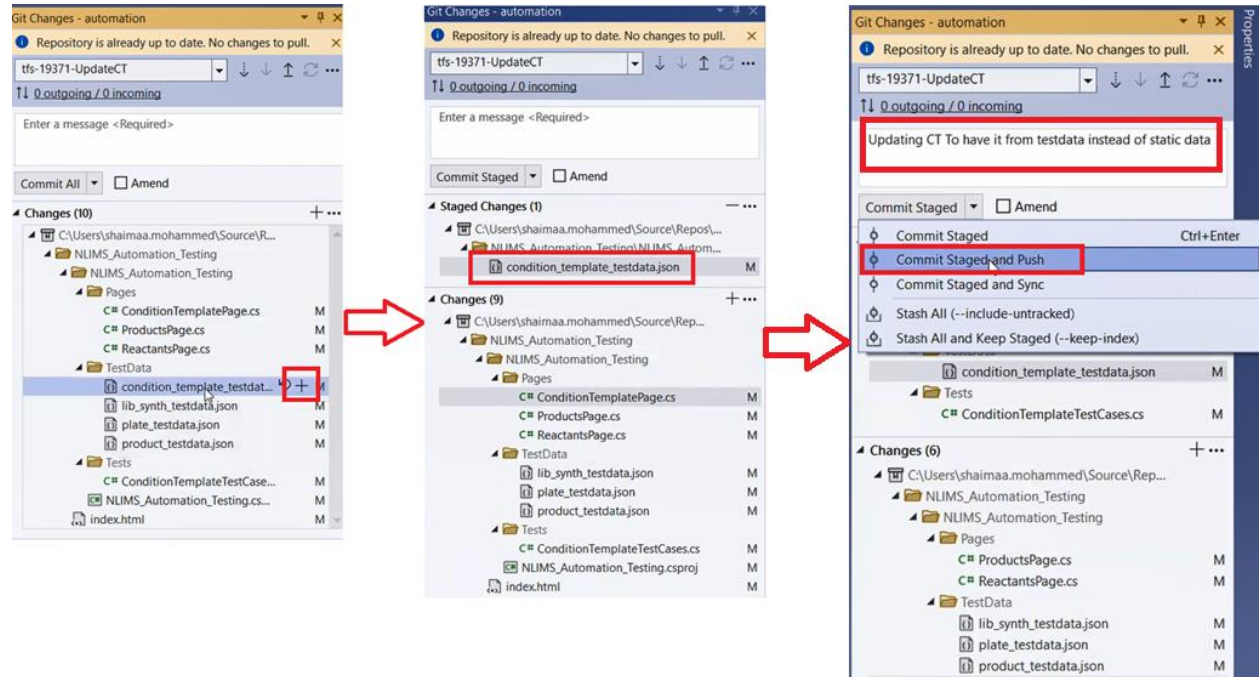
4. You can commit your work

- If you commit your work, it still saved on your local machine only

5. It's time to Push your changes

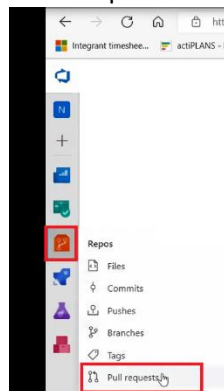


Hint: you can pick some files to be staged then pushed

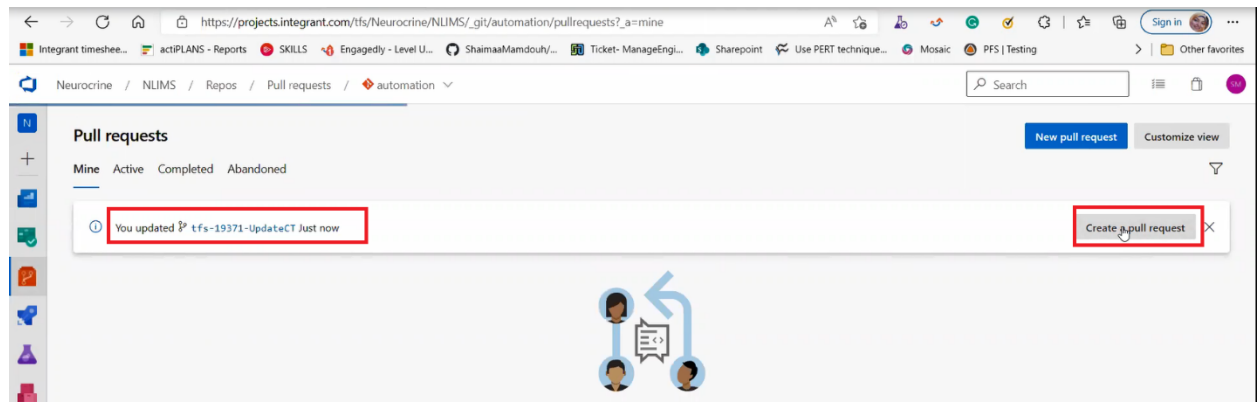


D. Create pull requests from TFS

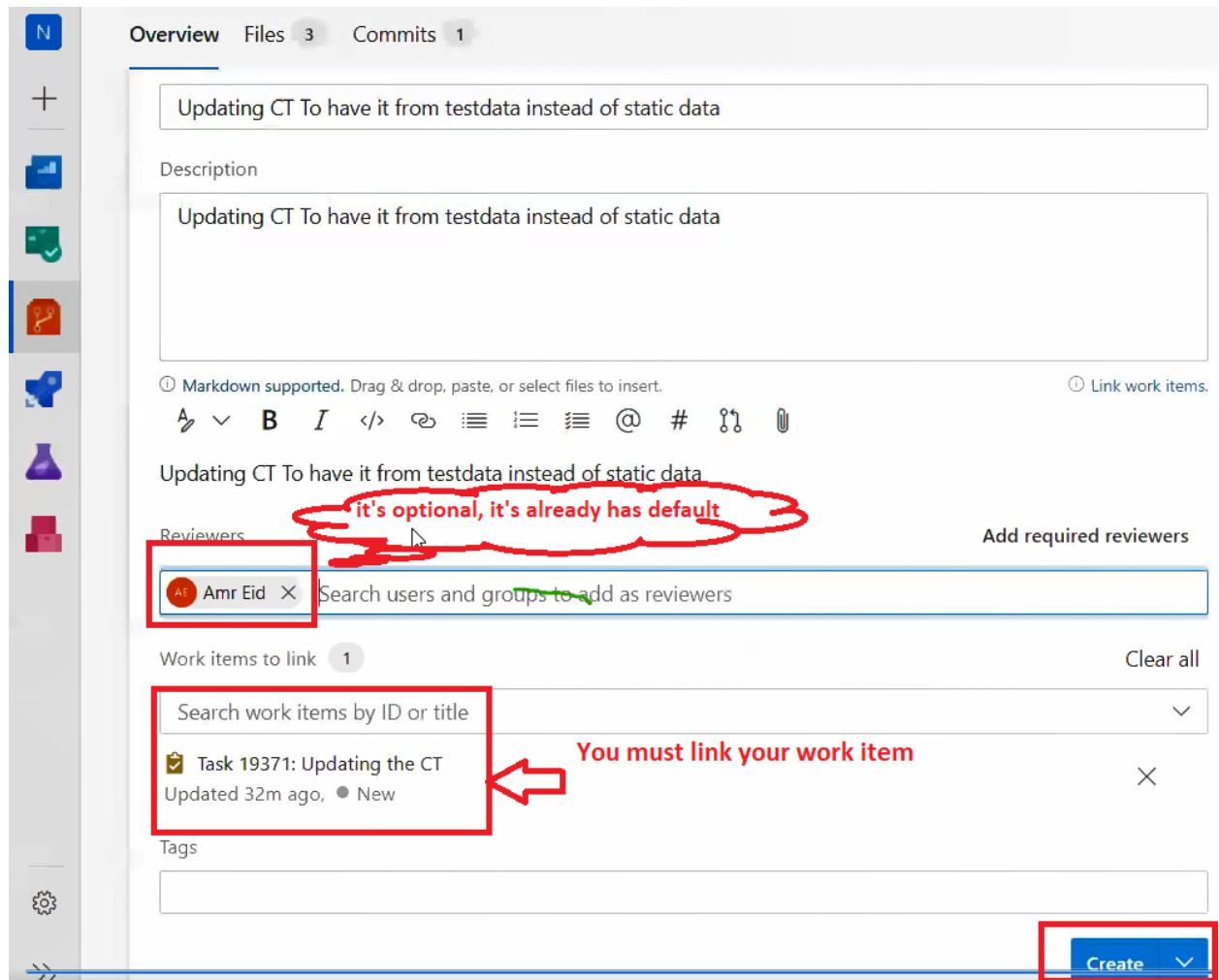
1. From Repo >> Click on pull requests



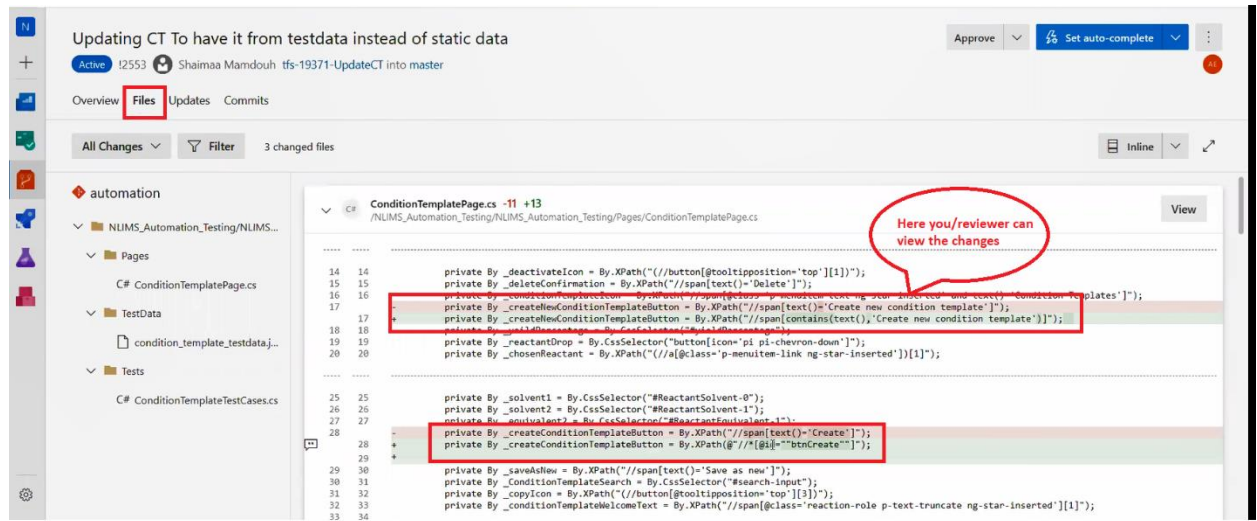
2. Click on Create a pull request



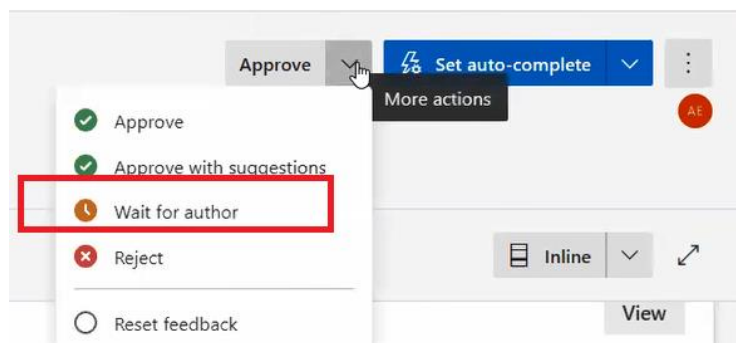
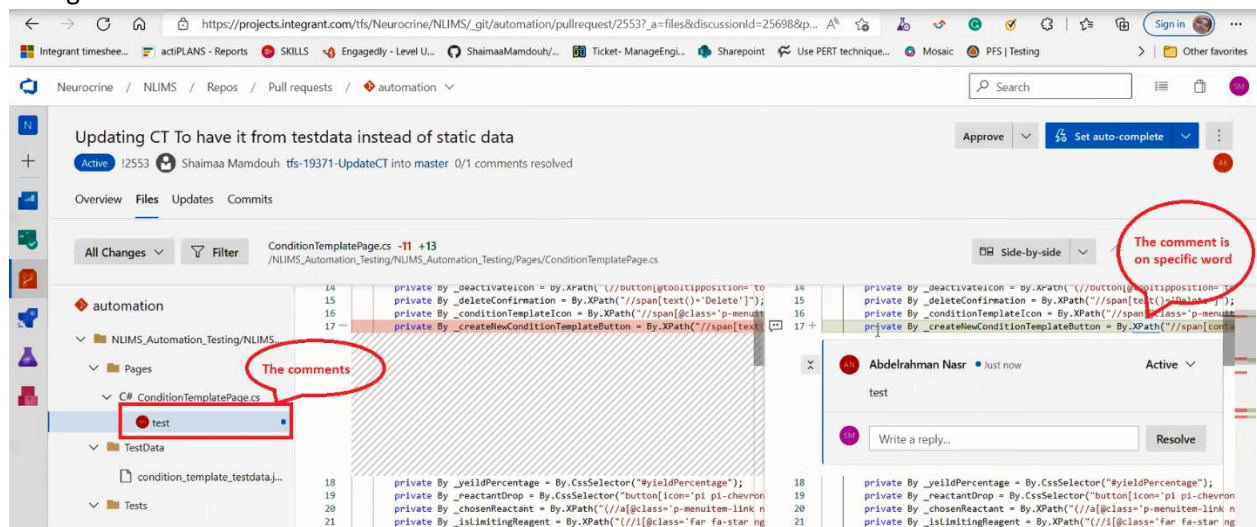
3. Fill the mandatory fields & don't forget to link your work item



4. Then the reviewer can review the changes

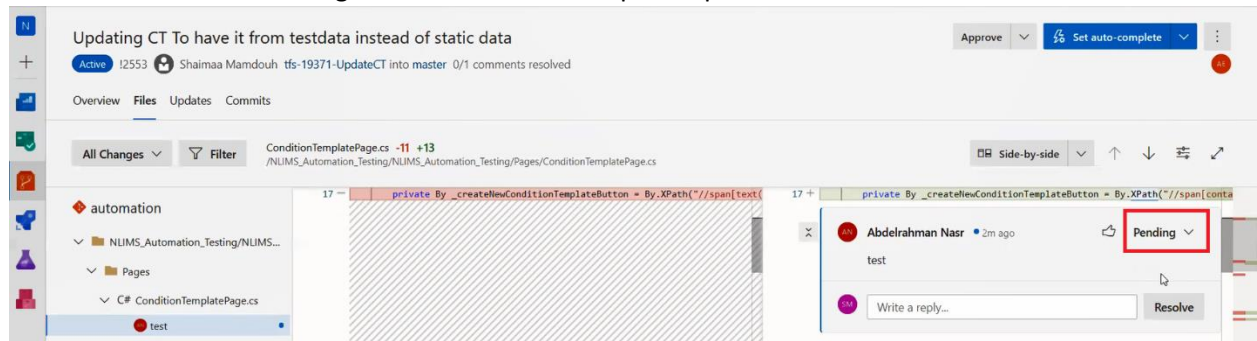


5. If the reviewer has some comments on this pull request, he will add the comments & change the status to be: "Wait for author"



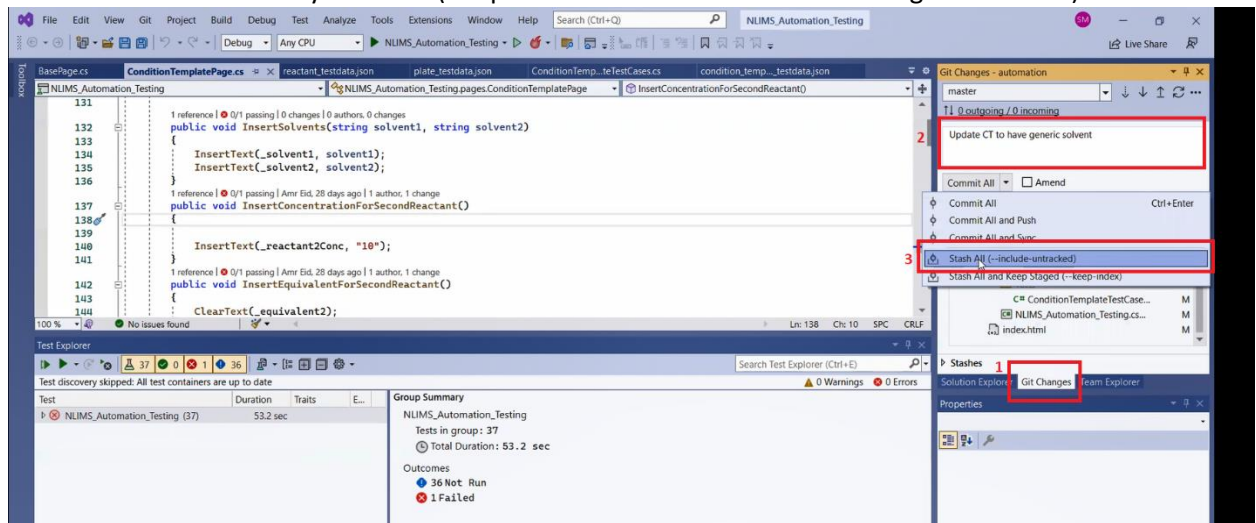
6. Then you have to update your code based on the reviewer comments & push the changes, Then change the comment status to be "Pending"

A. Hint: The new changes will be on the same pull request



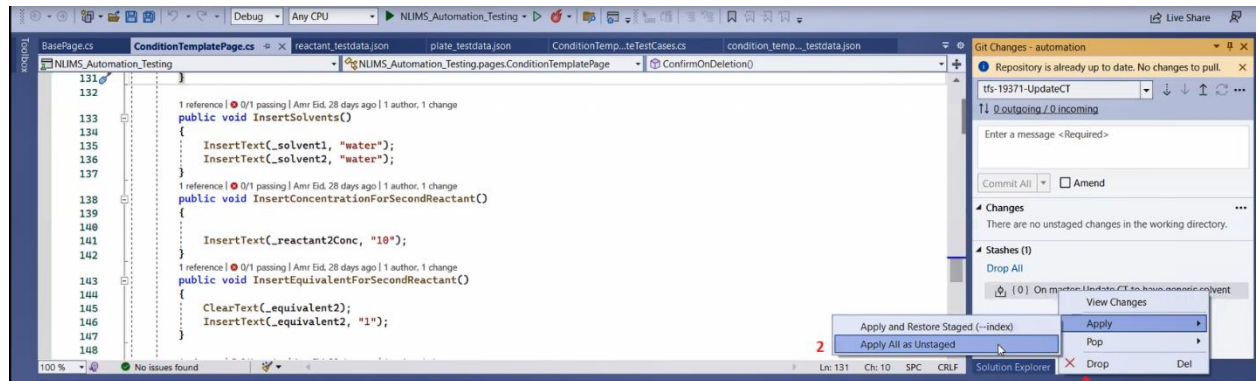
E. Tips & tricks:

- Every feature should have its branch
- You **can't** pull & update then push to the master directly (No permission allowed for this)
- If you made changes on the master branch & forget to create your own branch you can follow the below steps:
 - You can stash your work (Keep it on the local machine till creating new branch)



II. Create the new branch

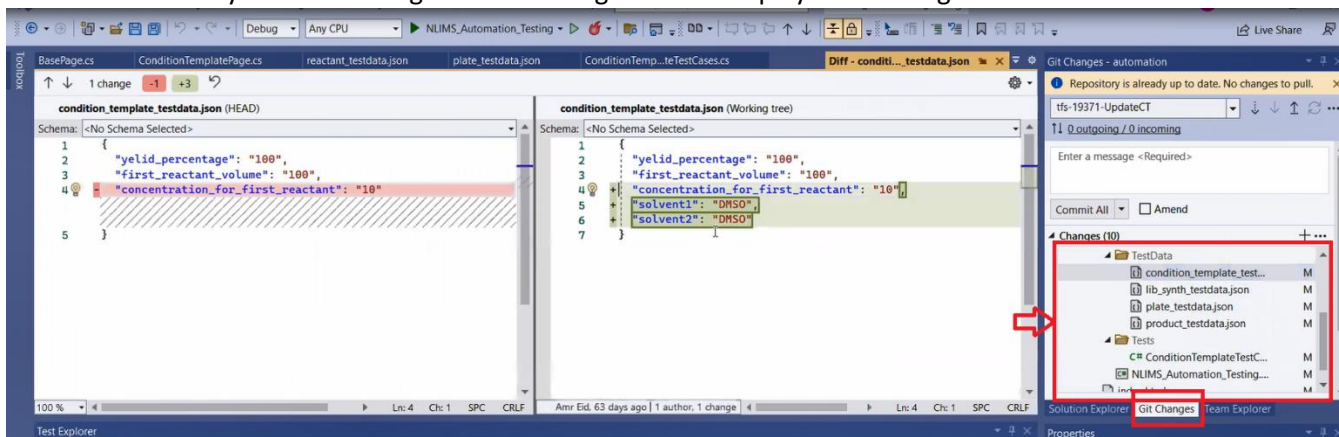
III. Move the stashed work to the created branch



1- Select "Git changes"

D. To view the changes, you made

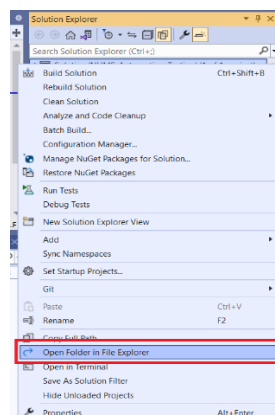
- I. Click on "Git changes" & all the changed files will be displayed to you
- II. By double clicking on it the changes will be displayed in the right



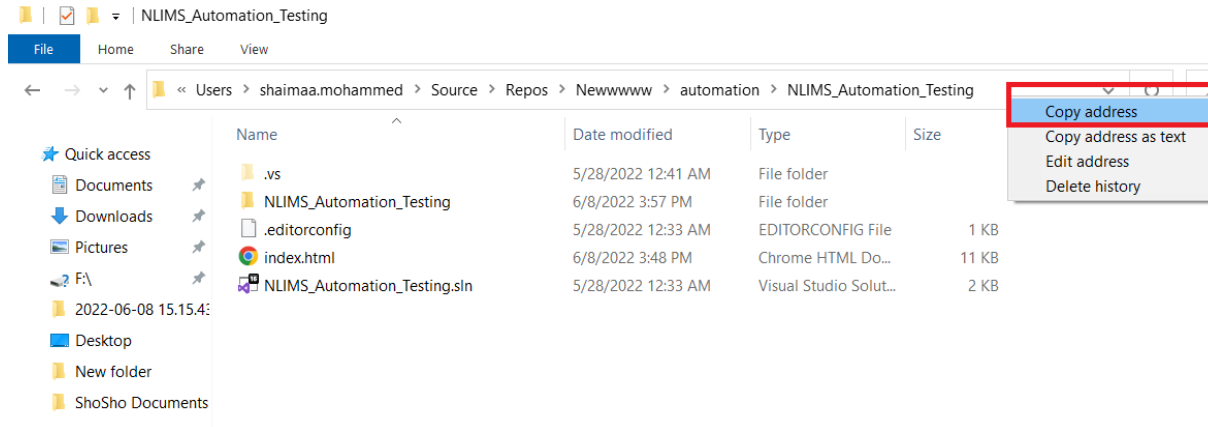
E. Anyone can make comments on you pull request(s) & it must only be approved by the default/selected reviewer.

F. If you create branch by mistake not on the master, you can delete it by follow the below steps:

- I. Navigate to the solution path
 - i. From solution explorer, select "Open folder ..."



ii. Copy the address



iii. Open Git Bash and navigate to the copied address

```

MINGW64:/c/Users/shaimaa.mohammed/Source/Repos/Newwww/automation/NLIMS_Automation_T...
Shaimaa.Mamdouh@EG-SHIAMAAM MINGW64 ~
$ cd /c/Users/shaimaa.mohammed/Source/Repos/Newwww/automation/NLIMS_Automation_Testing

Shaimaa.Mamdouh@EG-SHIAMAAM MINGW64 ~/Source/Repos/Newwww/automation/NLIMS_Automation_Testing (fs-19371-UpdateCT)
$
  
```

iv. Navigate to master branch

```

MINGW64:/c/Users/shaimaa.mohammed/Source/Repos/Newwww/automation/NLIMS_Automation_T...
Shaimaa.Mamdouh@EG-SHIAMAAM MINGW64 ~
$ cd /c/Users/shaimaa.mohammed/Source/Repos/Newwww/automation/NLIMS_Automation_Testing

Shaimaa.Mamdouh@EG-SHIAMAAM MINGW64 ~/Source/Repos/Newwww/automation/NLIMS_Automation_Testing (fs-19371-UpdateCT)
$ git checkout master
Switched to branch 'master'
M       NLIMS_Automation_Testing/NLIMS_Automation_Testing/Pages/ProductsPage.cs
M       NLIMS_Automation_Testing/NLIMS_Automation_Testing/Pages/ReactantsPage.cs
M       NLIMS_Automation_Testing/NLIMS_Automation_Testing/TestData/lib_synth_testdata.json
M       NLIMS_Automation_Testing/NLIMS_Automation_Testing/TestData/plate_testdata.json
M       NLIMS_Automation_Testing/NLIMS_Automation_Testing/TestData/product_testdata.json
M       NLIMS_Automation_Testing/index.html
Your branch is up to date with 'origin/master'.

Shaimaa.Mamdouh@EG-SHIAMAAM MINGW64 ~/Source/Repos/Newwww/automation/NLIMS_Automation_Testing (master)
$
  
```

v. Now delete the wrong created branch (Git branch -d "branchName")

```
MINGW64:/c/Users/shaimaa.mohammed/Source/Repos/Newwww/automation/NLIMS_Automation_T...  —  □  ×

Shaimaa.Mamdouh@EG-SHIAMAAM MINGW64 ~
$ cd /c/Users/shaimaa.mohammed/Source/Repos/Newwww/automation/NLIMS_Automation_Testing

Shaimaa.Mamdouh@EG-SHIAMAAM MINGW64 ~/Source/Repos/Newwww/automation/NLIMS_Automation_Testing (tfs-19371-UpdateCT)
$ Git checkout master
Switched to branch 'master'
M       NLIMS_Automation_Testing/NLIMS_Automation_Testing/Pages/ProductsPage.cs
M       NLIMS_Automation_Testing/NLIMS_Automation_Testing/Pages/ReactantsPage.cs
M       NLIMS_Automation_Testing/NLIMS_Automation_Testing/TestData/lib_synth_testdata.json
M       NLIMS_Automation_Testing/NLIMS_Automation_Testing/TestData/plate_testdata.json
M       NLIMS_Automation_Testing/NLIMS_Automation_Testing/TestData/product_testdata.json
M       NLIMS_Automation_Testing/index.html
Your branch is up to date with 'origin/master'.

Shaimaa.Mamdouh@EG-SHIAMAAM MINGW64 ~/Source/Repos/Newwww/automation (master)
$ Git branch -d tfs-19371-UpdateCT
Deleted branch tfs-19371-UpdateCT (was 20ffcc8).

Shaimaa.Mamdouh@EG-SHIAMAAM MINGW64 ~/Source/Repos/Newwww/automation (master)
$
```