

Git Source Control

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Prerequisites

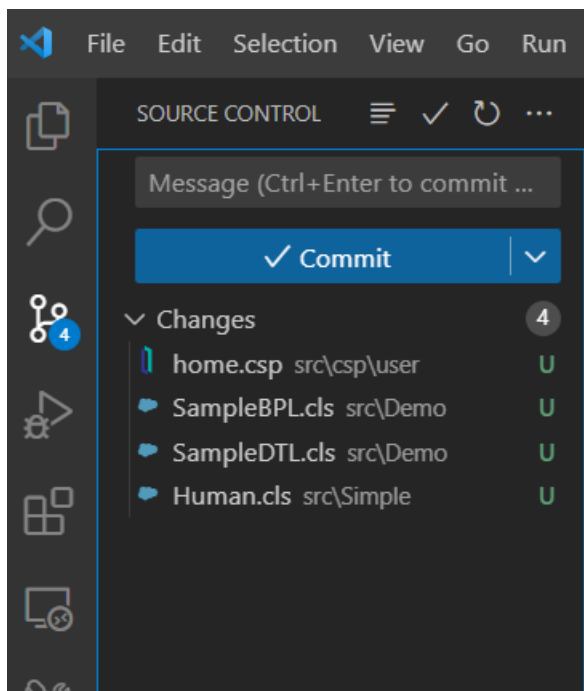
- GitHub Account
- Valid GitHub Repository
- A local project folder
- VS Code
 - GitHub Extension

1. Using VSCode Git Source Control

Go to Source Control on left panel, and you will see that the files created are not staged.

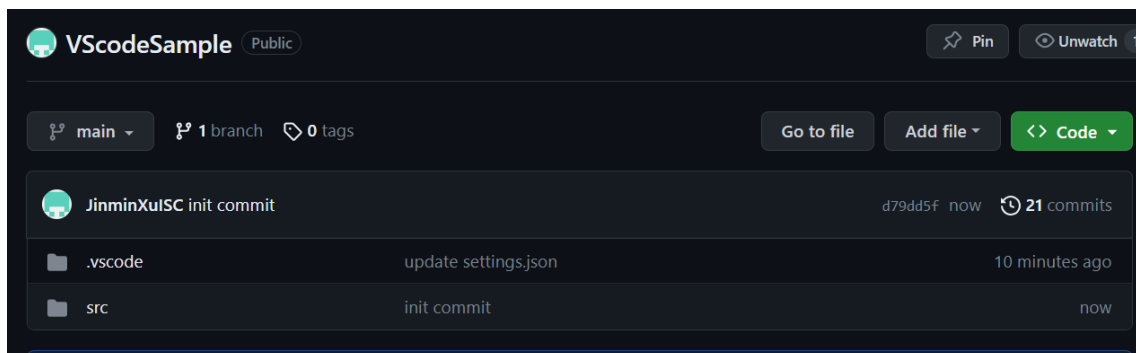
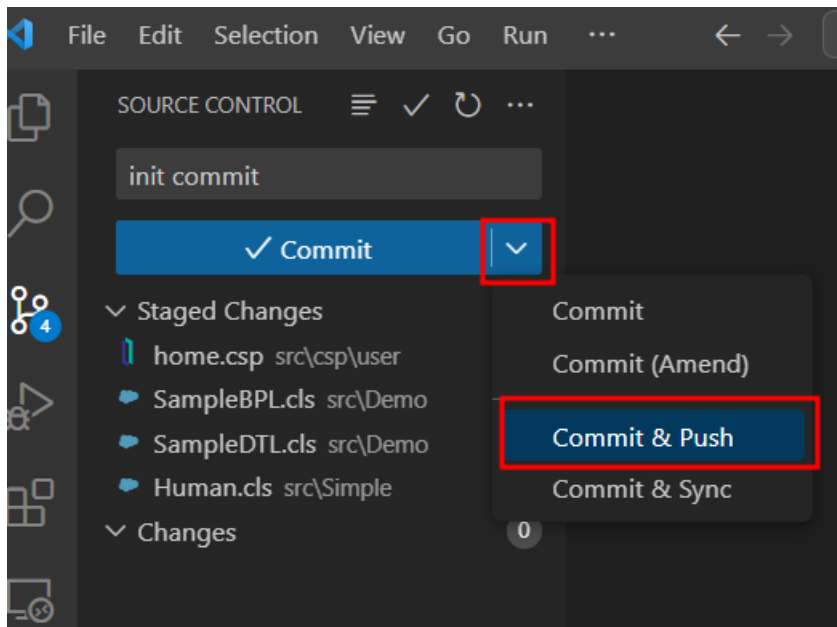
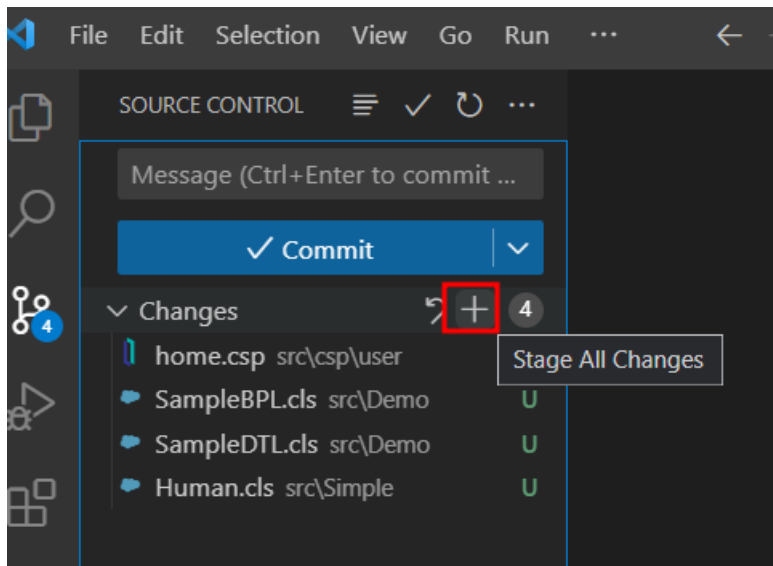
Note: If you haven't, don't forget to set your git username & email in git config,

- To set username `git config --global user.name <your username>`.
- To set email `git config --global user.email <email>`.



Click the "+" icon (you can do either each or one by one) and leave comments.

You can either do "commit" or "commit & push" to make it to the GitHub repository immediately.

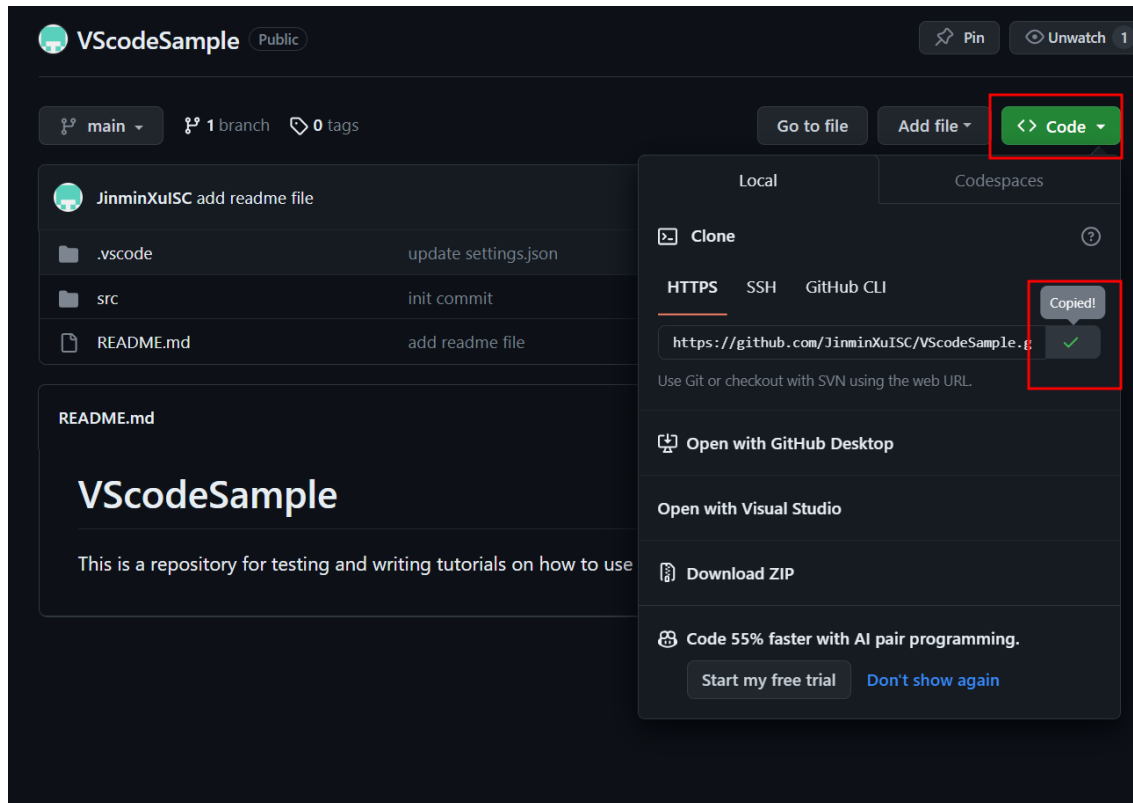


2. Set your team of developers up to start developing git source-controlled applications on their PC's using IRIS and VSCode

2.1 Clone repository to the local directory

In this example, the file repository created in the previous step will be used.

Code > copy the URL under HTTPS.



Open CLI (sitting at the correct file directory you wish to store), **enter the command** "git clone <URL you copied>".

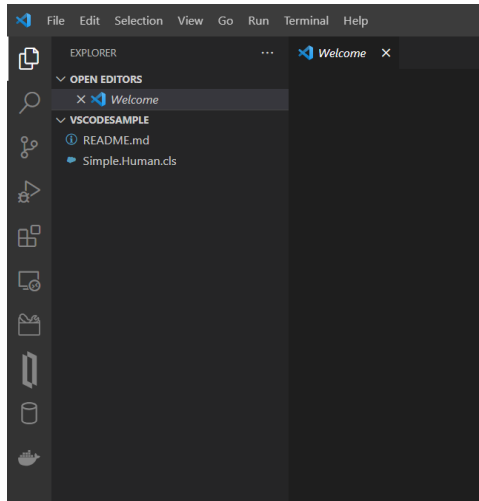
```

C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19044.3324]
(c) Microsoft Corporation. All rights reserved.

C:\Users\jxu\playground>git clone https://github.com/JinminXuISC/VSCodeSample
Cloning into 'VSCodeSample'...
remote: Enumerating objects: 6, done.
remote: Counting objects: 100% (6/6), done.
remote: Compressing objects: 100% (5/5), done.
remote: Total 6 (delta 0), reused 3 (delta 0), pack-reused 0
Receiving objects: 100% (6/6), done.

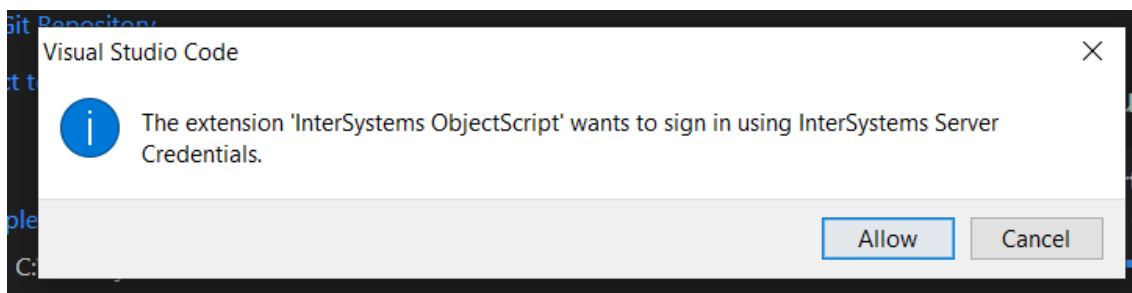
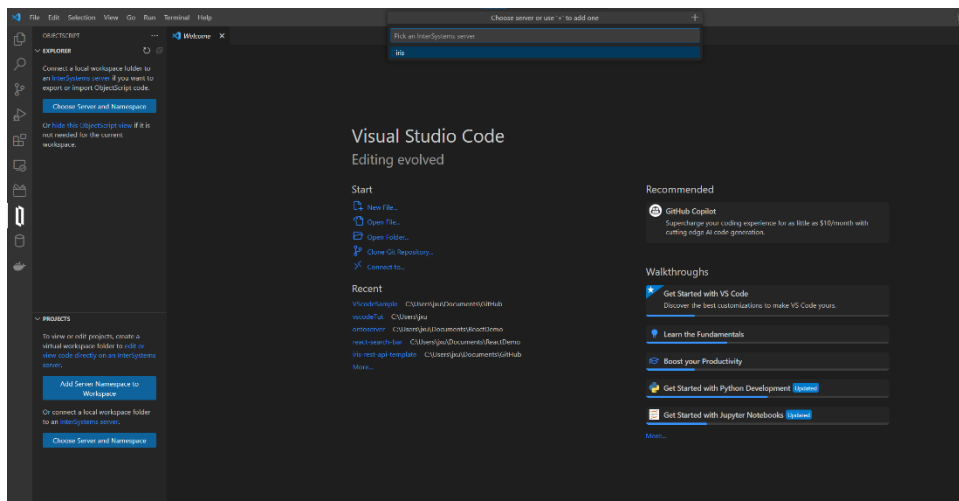
C:\Users\jxu\playground>
  
```

Open the **Github repository cloned** (project folder) in the VS Code Explorer.

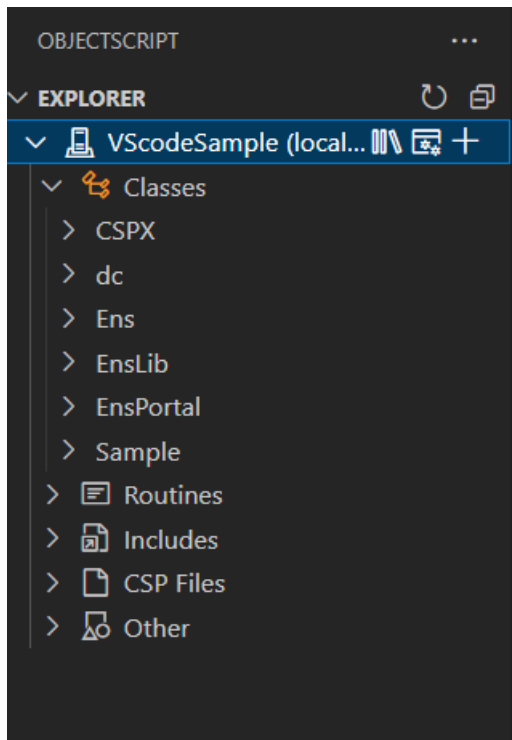


2.2 Import and Compile

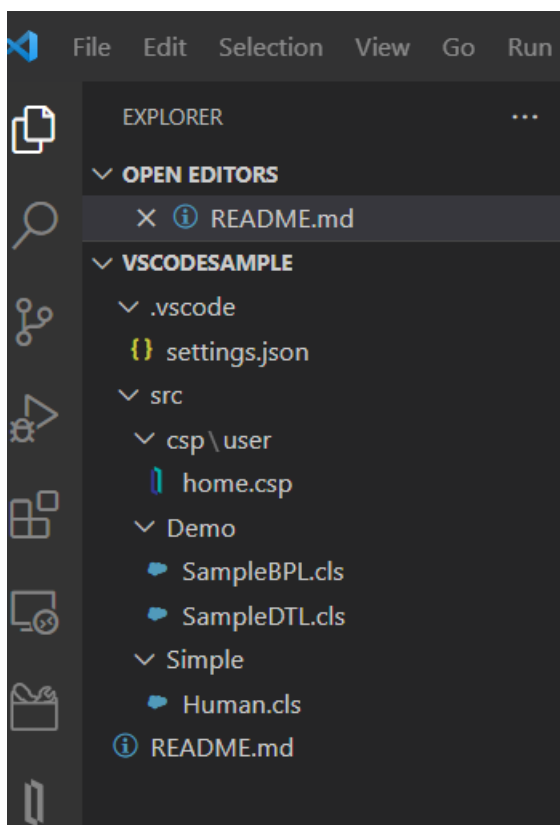
Click ObjectScript (The InterSystems Logo) at the left panel > Choose Server and Name Space > Select Server > Click Allow > Enter the password for IRIS instance > choose the namespace.



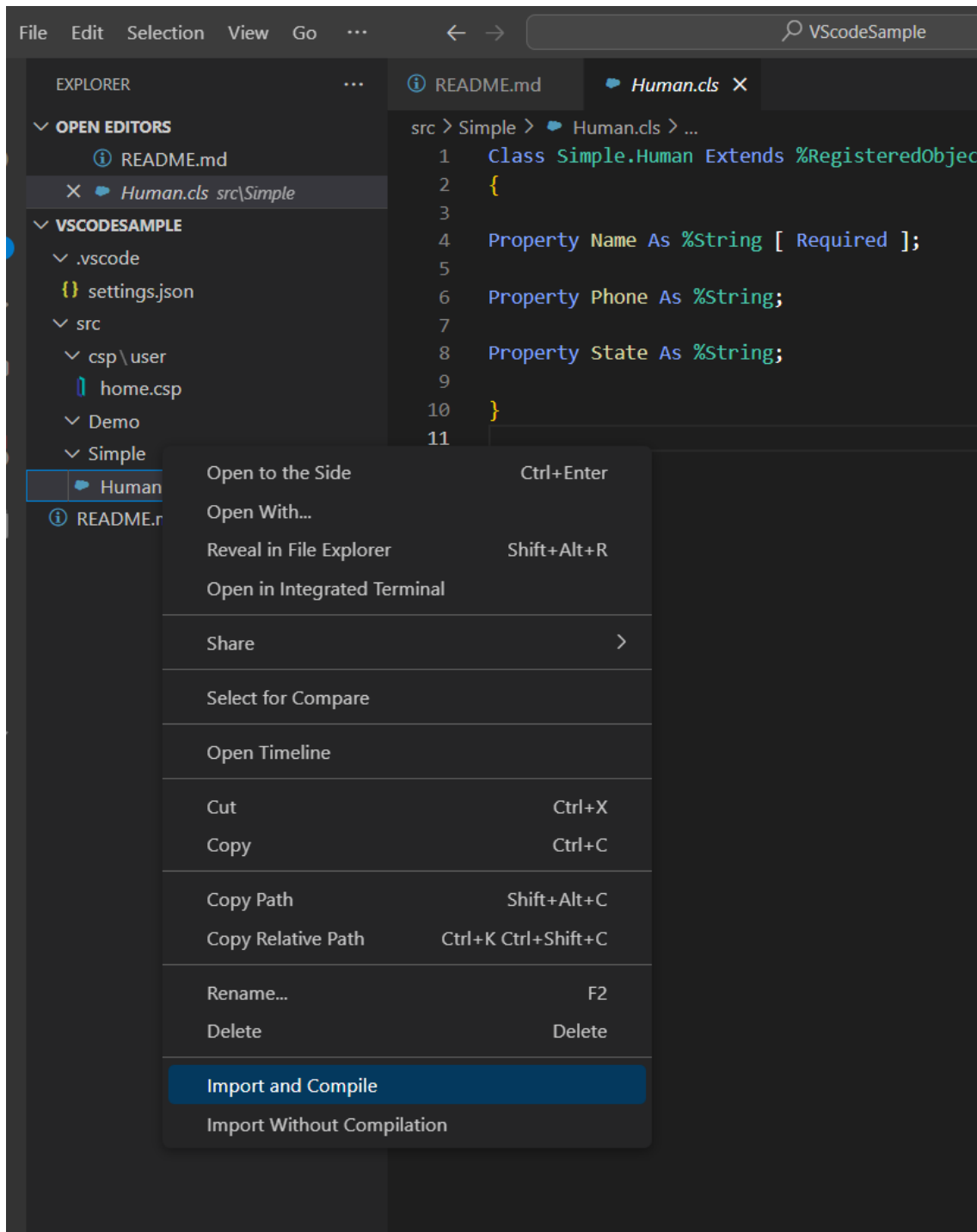
After logging in, there is **no class file** related to Github Repository cloned in this IRIS instance.



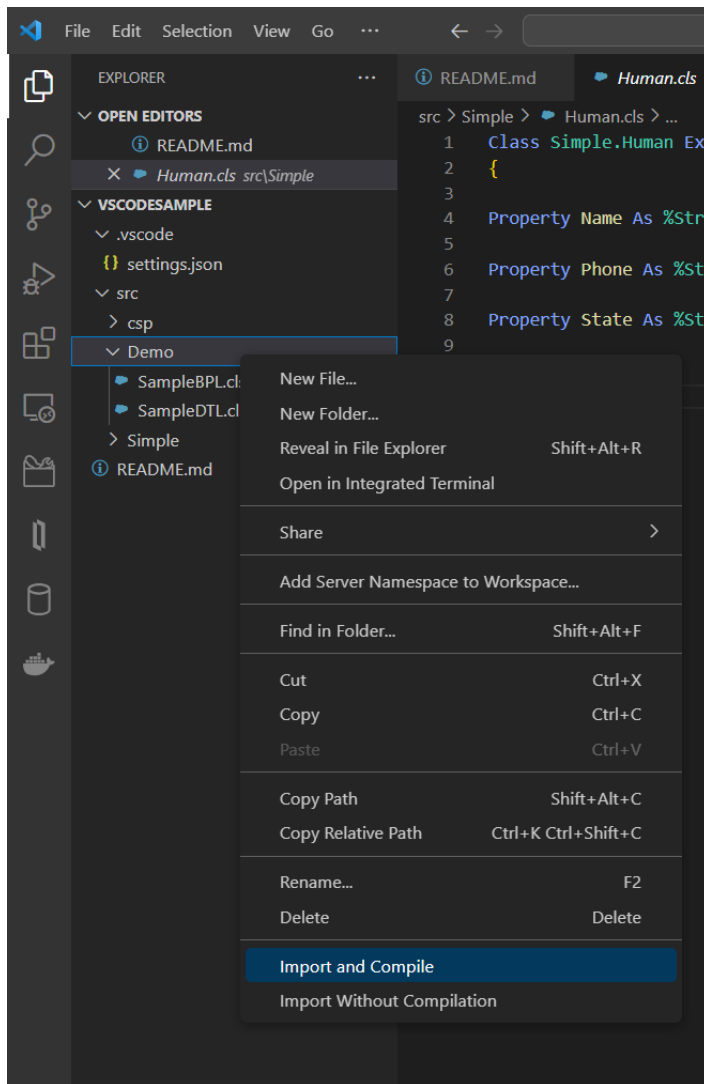
Back to VS Code Explorer.



Right-click the files you would like to import into IRIS, Open the "src" folder Simple > Human.cls.
Choose Import and Compile.

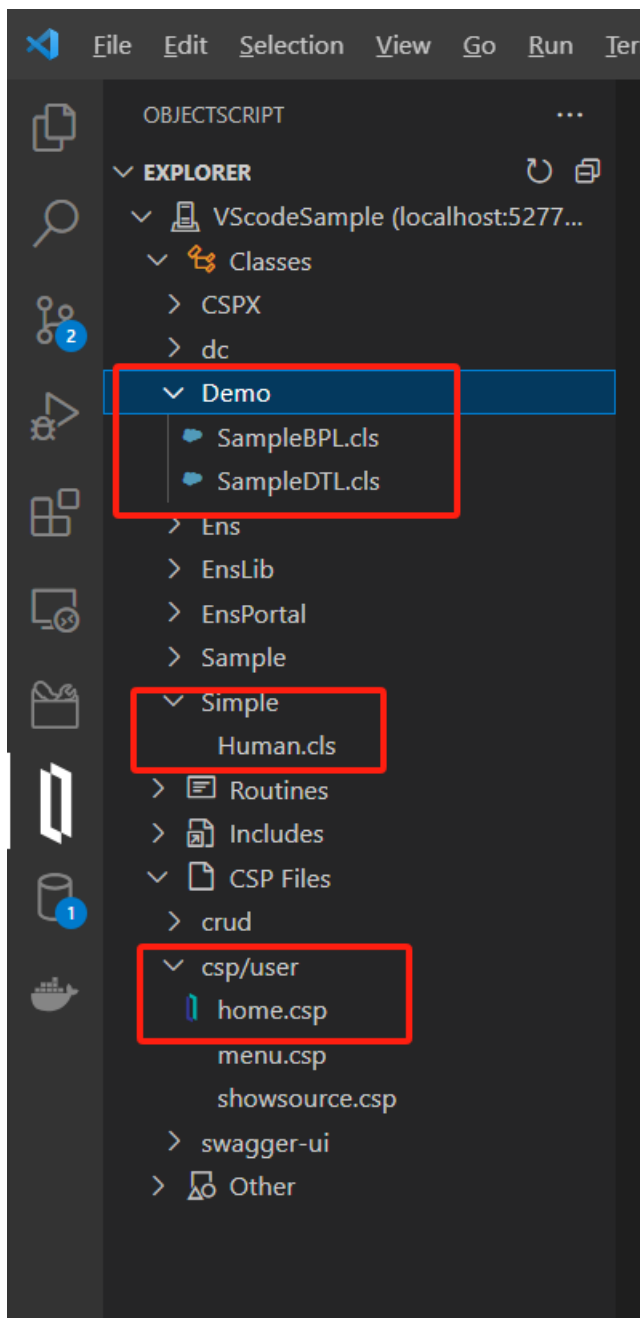


Repeat the steps above, import and Compile DPL, DTL and CSP.



Click Objectscript extension. Once you refresh the server, you will see the `Simple.Human.cls`, the Demo package (BPL DTL) , and `home.csp` under the "Classes". They have compiled and persisted into our IRIS instance.

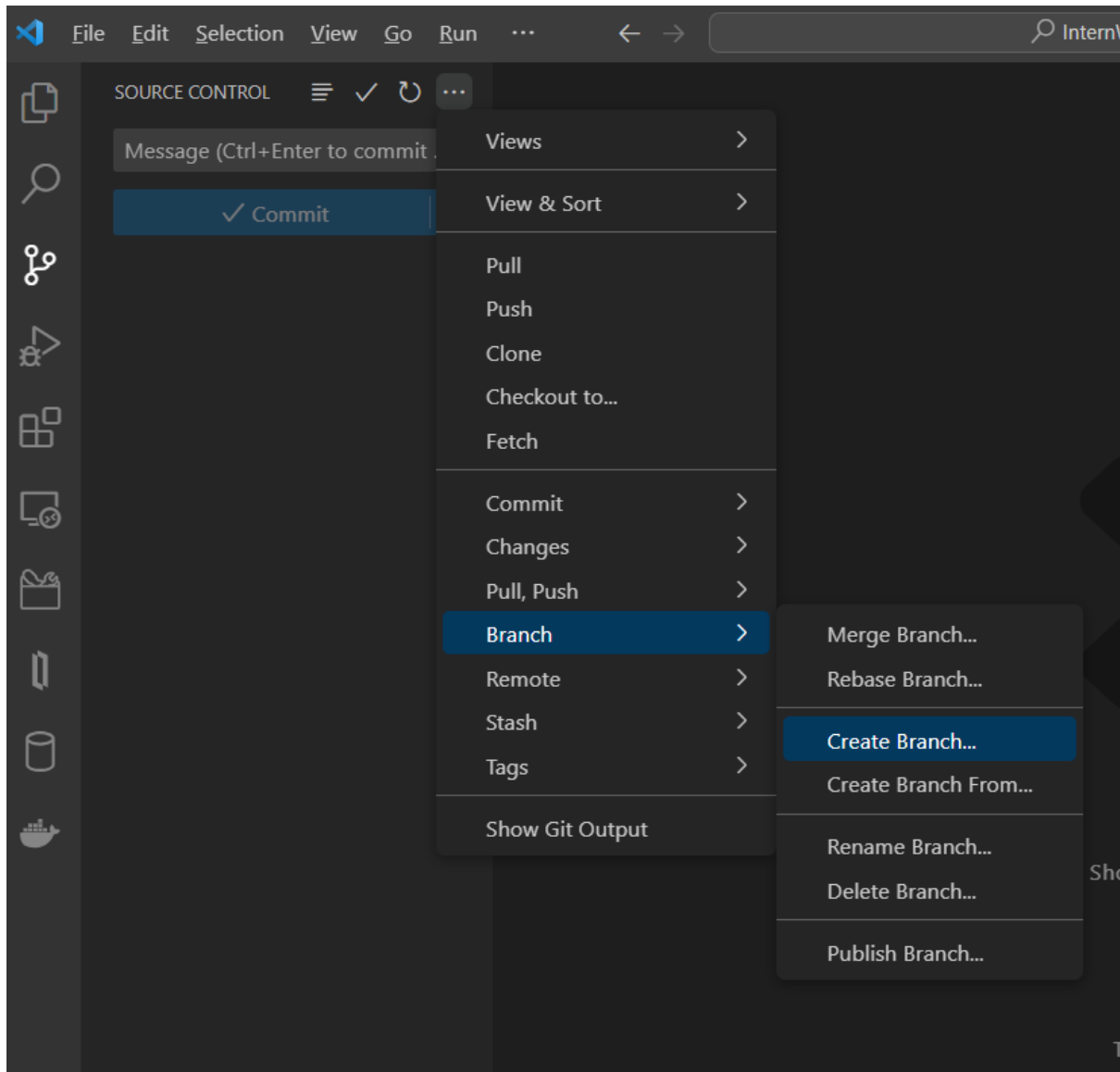
Note: If you want to import **all the files in this project**, you only need to select the "src" folder. **Right click "src" folder > "Import and Compile"**.



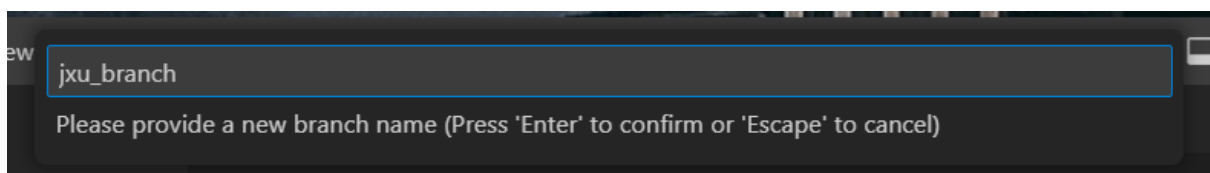
3. Branching (Version Control)

3.1 Create your working branch

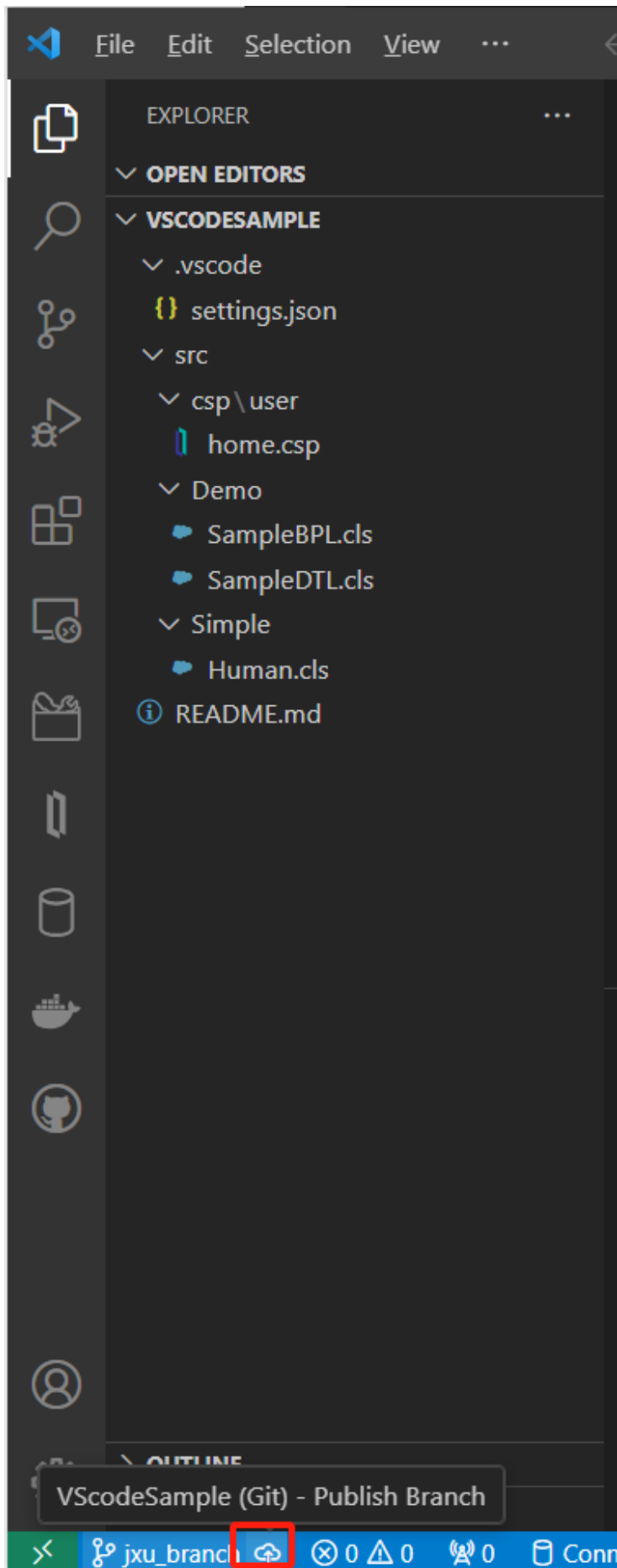
“Source control” > “Views and More Actions (3 dots)” > “Branch” > “Create Branch...”



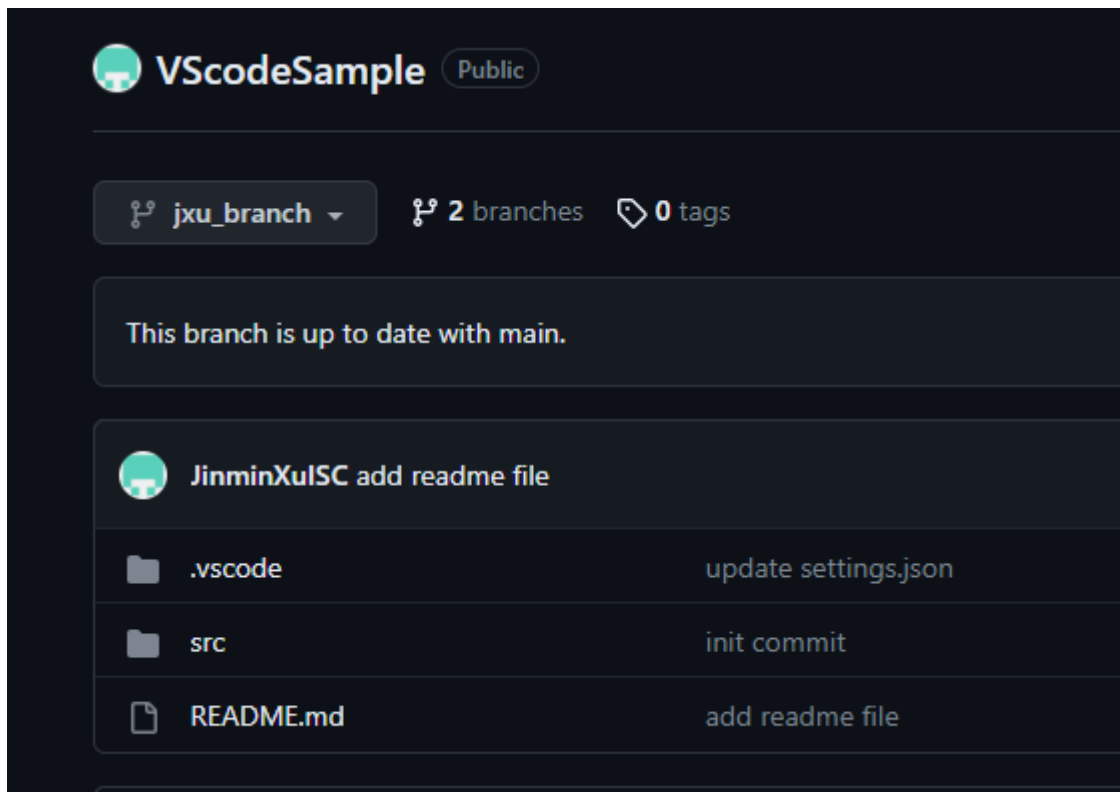
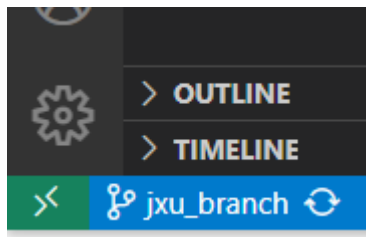
Enter branch name.



Click the “cloud liked” icon at the bottom to publish the branch you created.

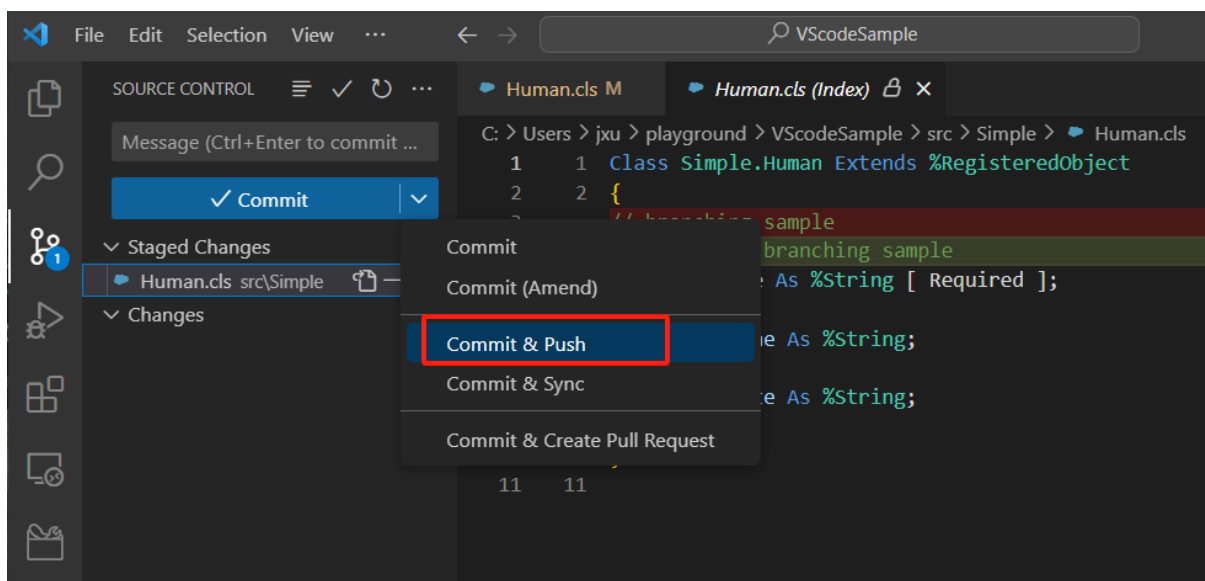


Wait until the **icon turns into the circular arrow** shown below and your working branch is created and published.

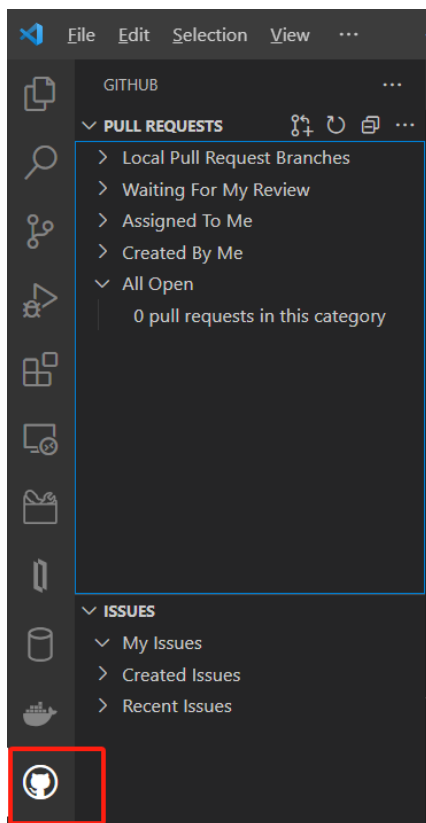


3.2 Create Pull requests (Merge Branch)

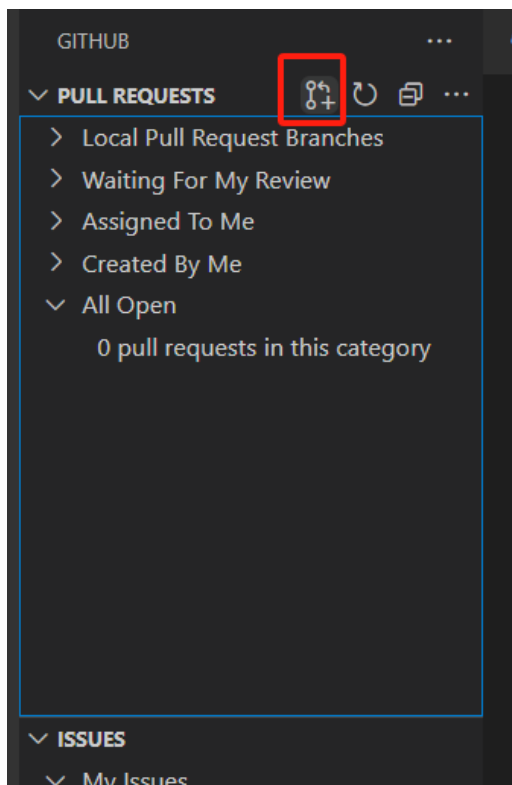
After you've written the code, push & commit it to the branch you're currently working on.



Go to **GitHub extension**.

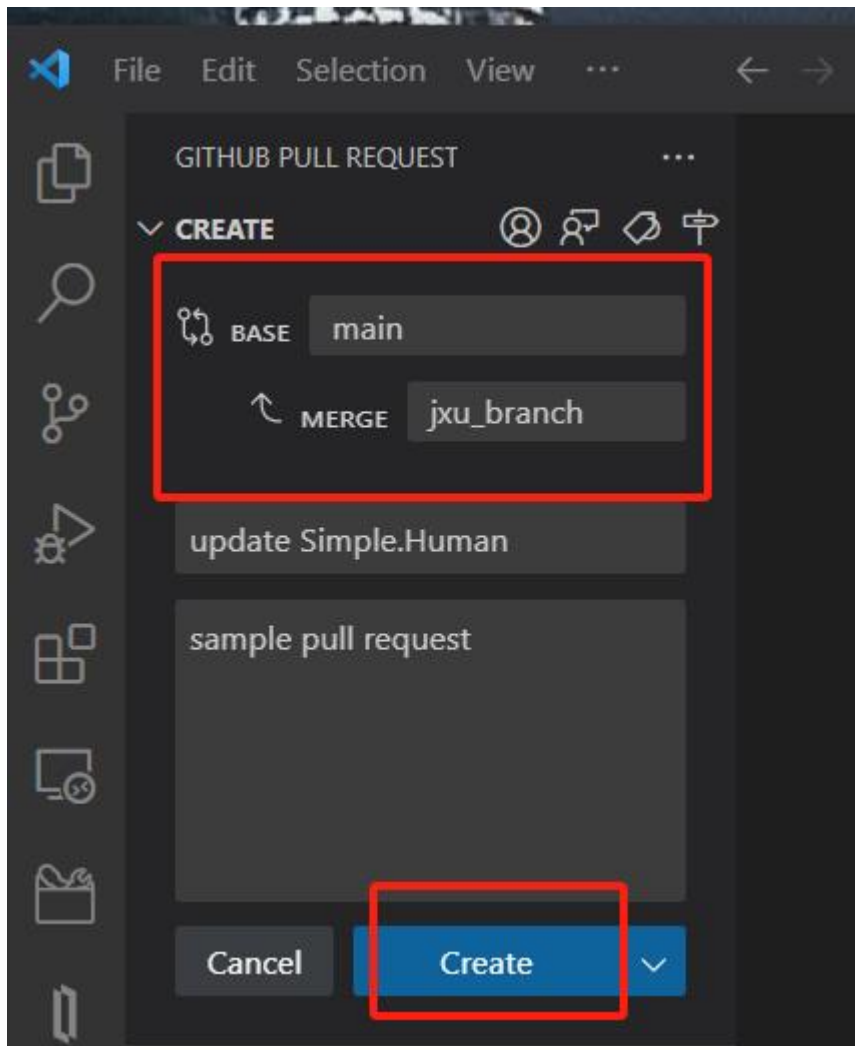


Click the button next to the **“Pull Requests”**.

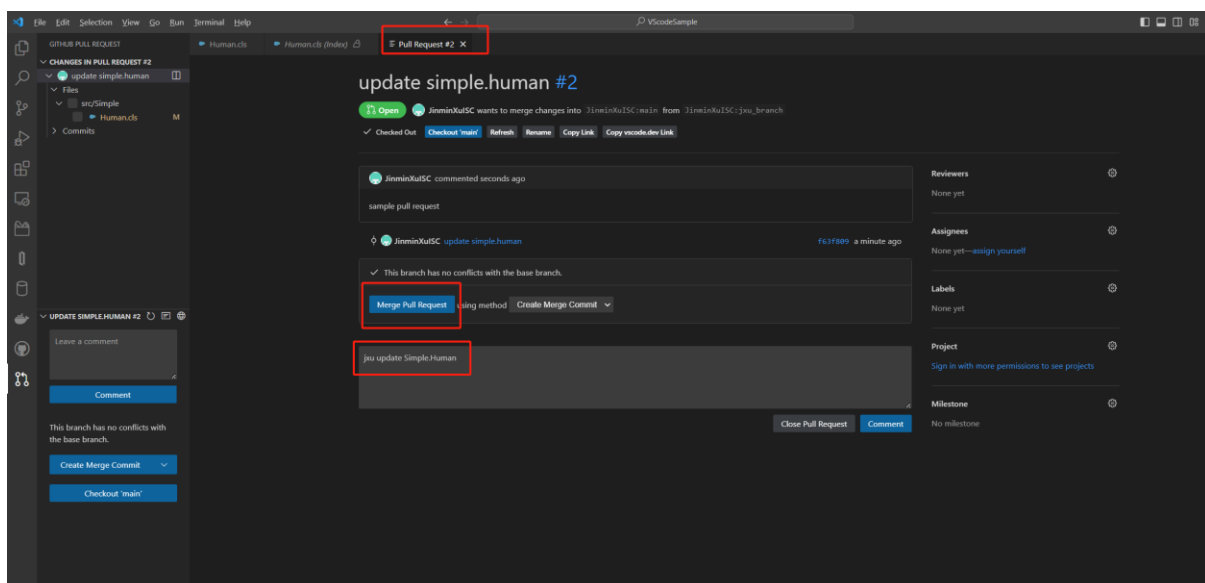


You are now in the **create pull request screen**. Choose **source** and **merge** branch, leave comments, and click **“Create”**.

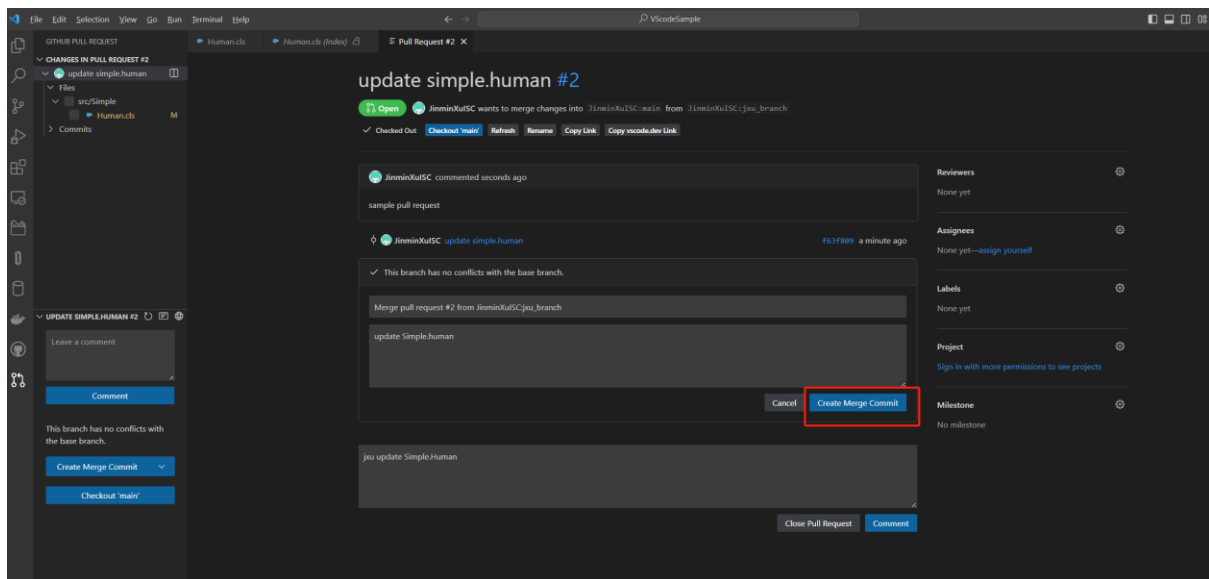
Note: In this example, the branch where code changes are made is jxu_branch and needs to be synchronized to the main branch. Therefore, MERGE branch should be “jxu_branch”, BASE branch should be “main”.



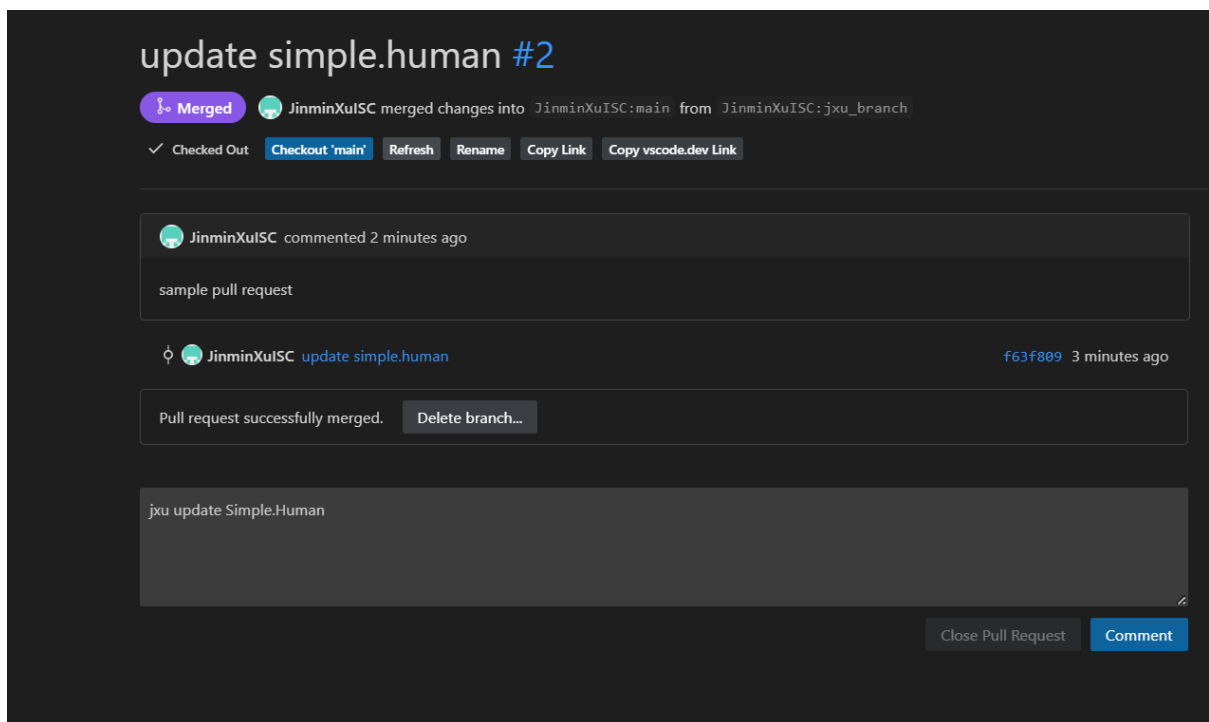
After completing the previous step, there will be a check out popup in VS Code, leave your comment and **click “merge pull request”**.



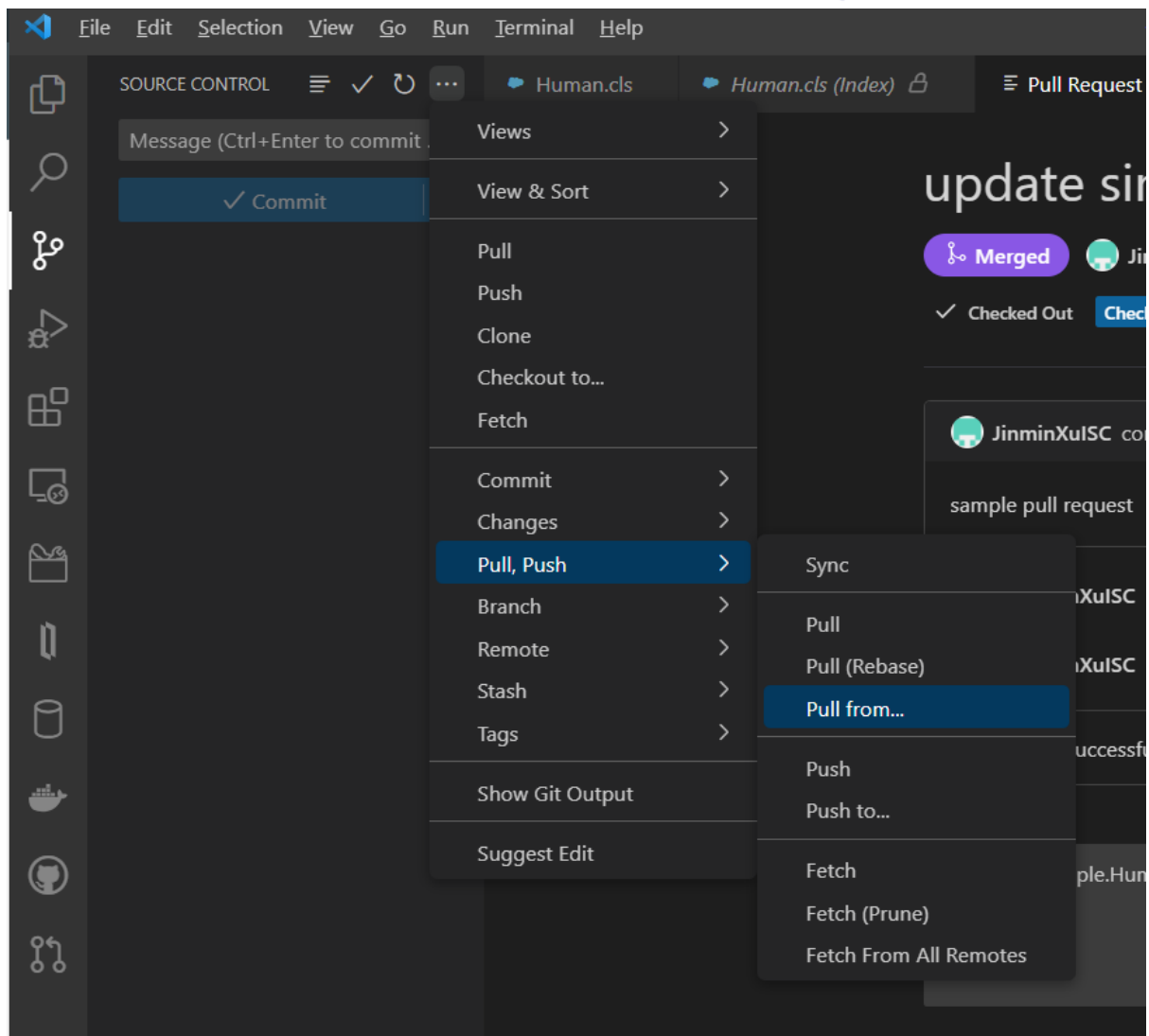
Click “Create Merge Commit”



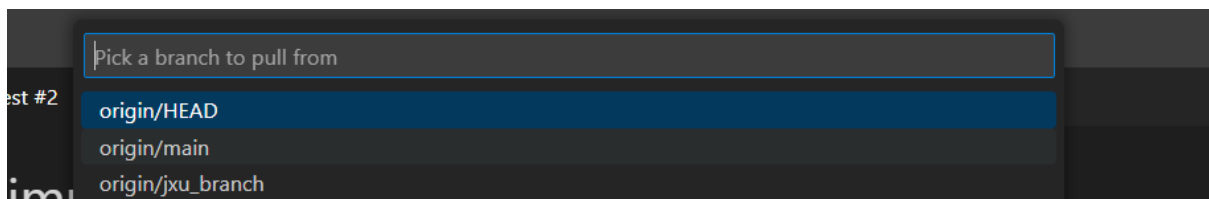
Because there are no conflicts in the current environment and the current account's repository permissions is owner, and this pull request automatically performs merge operation.



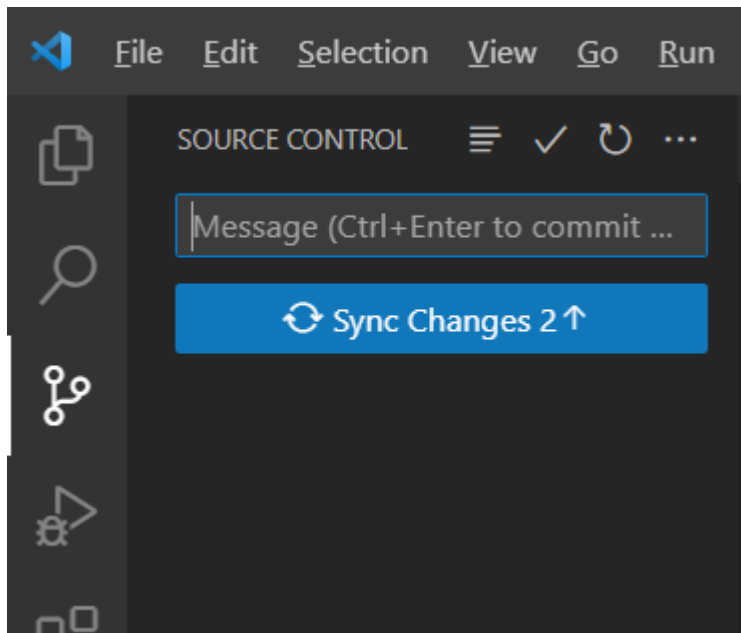
3.3 Pull the latest update from main branch to an outdated version of branch. (Check in)
Under the **outdated branch**, go to “Source Control” > “Pull, Push” > “Pull from...”.



Choose “main”.



Click “Sync Changes”.



When the pop-up window appears click “OK” and the version synchronization is complete once it has finished loading. The status of “Source Control” extension should be as the same as the second screenshot.

