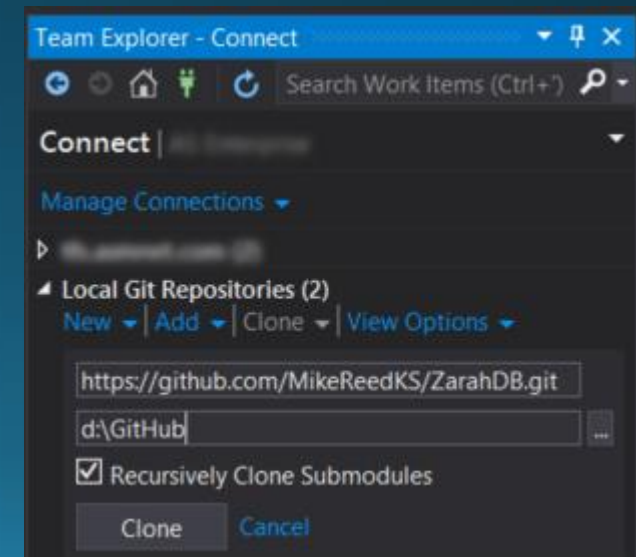


Get, modify and check-in ZarahDB code

# GitHub Introduction

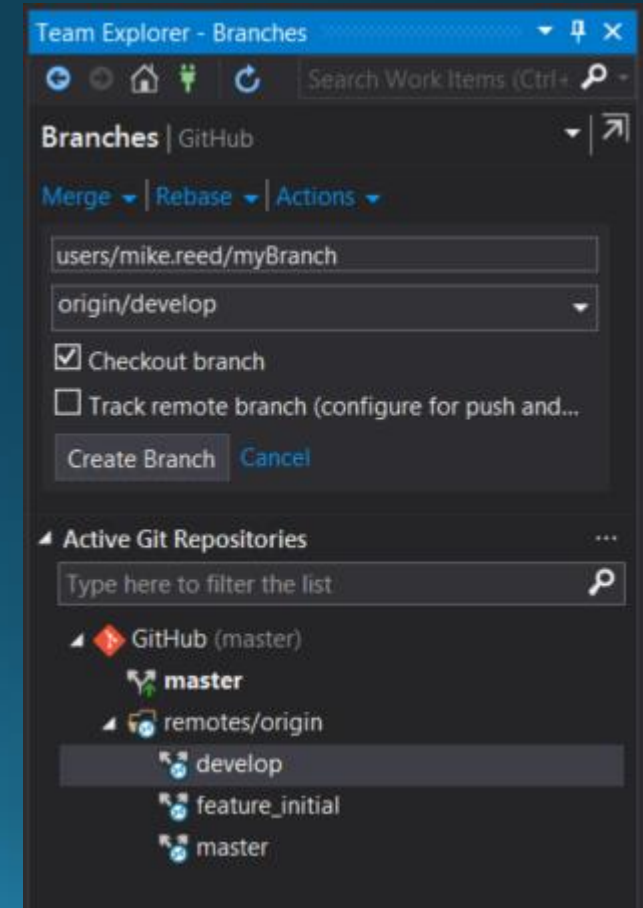
# Connect to GitHub in Visual Studio

- In Team Explorer, click the plug just right of the house icon to navigate to the “Connect” panel.
- Click “Clone” just to the right of “Add”.
- Fill in <http://GitHub.com/MikeReedKS/ZarahDB.git>
- Fill in D:\GitHub  
(Or wherever you want the code to live)
- Keep it recursive.
- Click the “Clone” button.
- You now have access to the source code!



# Create your own working branch

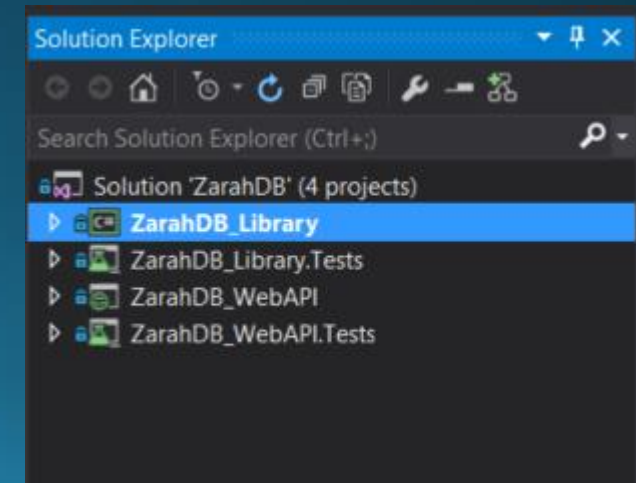
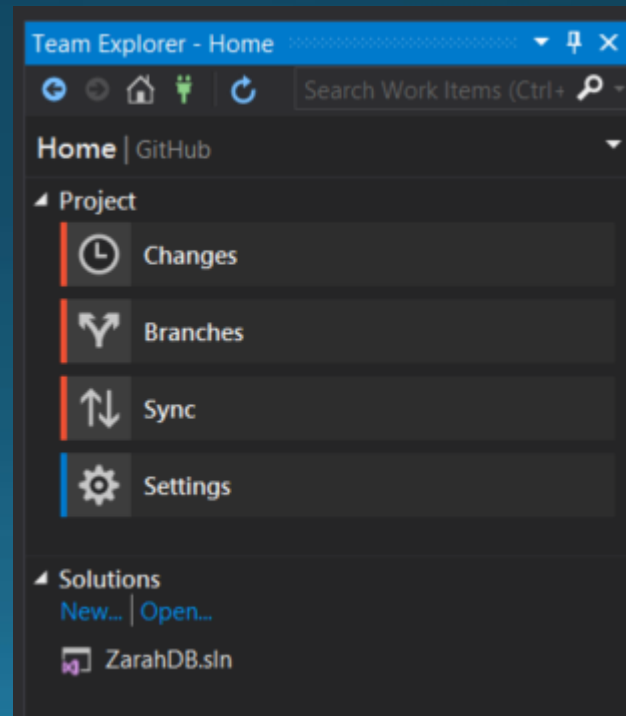
- Navigate to the “Branches” panel using the down arrow to the right of the heading “Connect”. This is the easiest way to change panels.
- Open the “remotes/origin” node so that you can see the “develop” branch.
- Right click the “develop” branch and choose “New Local Branch From”
- Enter “users/your.name/NameOfYourBranch” (Make sure the “Track” checkbox is unchecked)
- Click the “Create Branch” button.
- You now have a copy of the develop branch locally.



# Open the Project

- Navigate to the “Home” panel.
- Double-Click “ZarahDB.sln” to open the solution.
- The solution should contain four projects.

1. The Library (50K DLL)
2. Library Tests
3. The WebAPI
4. WebAPI tests.



# Make Changes – Please!

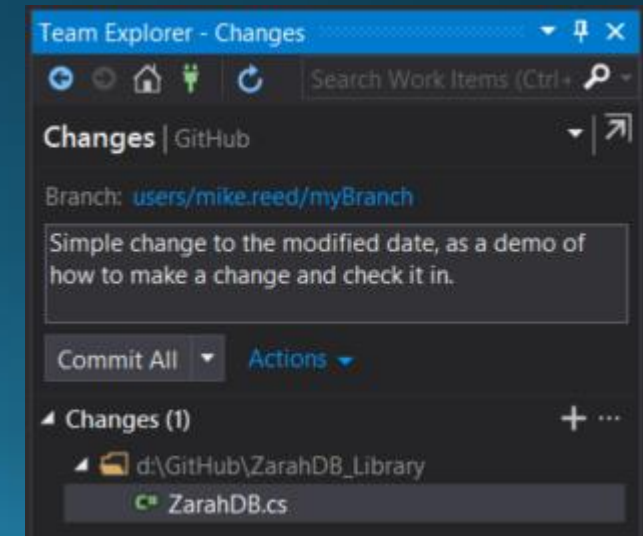
- If you are a C# developer, we invite you to improve the project.
- Edit, add, delete files. Change anything that makes the project better. If your changes will be substantial, you might want to chat with Mike Reed or other contributors to assure that the changes will have a high likelihood of making it into the final product.
- Tests that increase code coverage are always welcomed.
- Make sure to include tests covering any new code you contribute.



```
1 // *****  
2 // Assembly      : ZarahDB_Library  
3 // Author        : Mike.Reed  
4 // Created       : 07-04-2015  
5 //  
6 // Last Modified By : Mike.Reed  
7 // Last Modified On : 04-05-2017  
8 // *****  
9 // <copyright file="ZarahDB.cs" company="Benchmark Solutions LLC">  
10 //     Copyright © 2015 Benchmark Solutions LLC  
11 // </copyright>  
12 // <summary></summary>  
13 // *****  
14
```

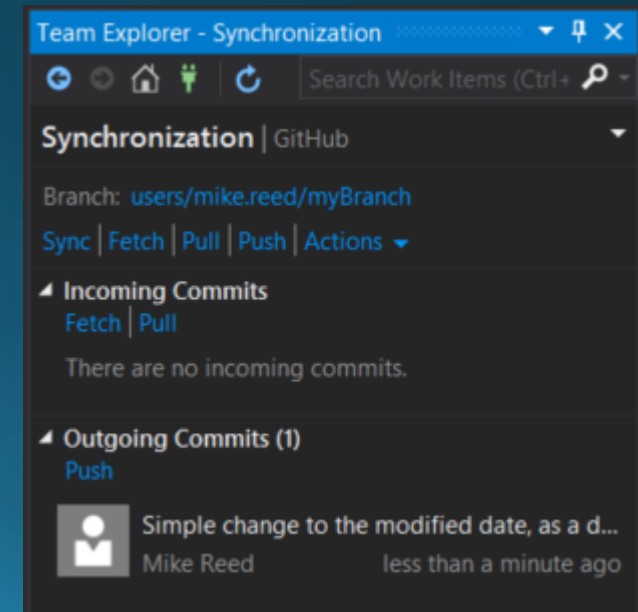
# Commit Changes Locally

- Git requires that changes made locally be committed before they can be moved out of your private source repository.
- Navigate to the “Changes” panel in Team Explorer. You will see a list of each file you changed.
- Add a comment about the changes.
- Click the “Commit All” button. This locks in your changes locally as ones you have approved.
- You can make as many commits to your local branch as needed to finish all the changes you wish to make.



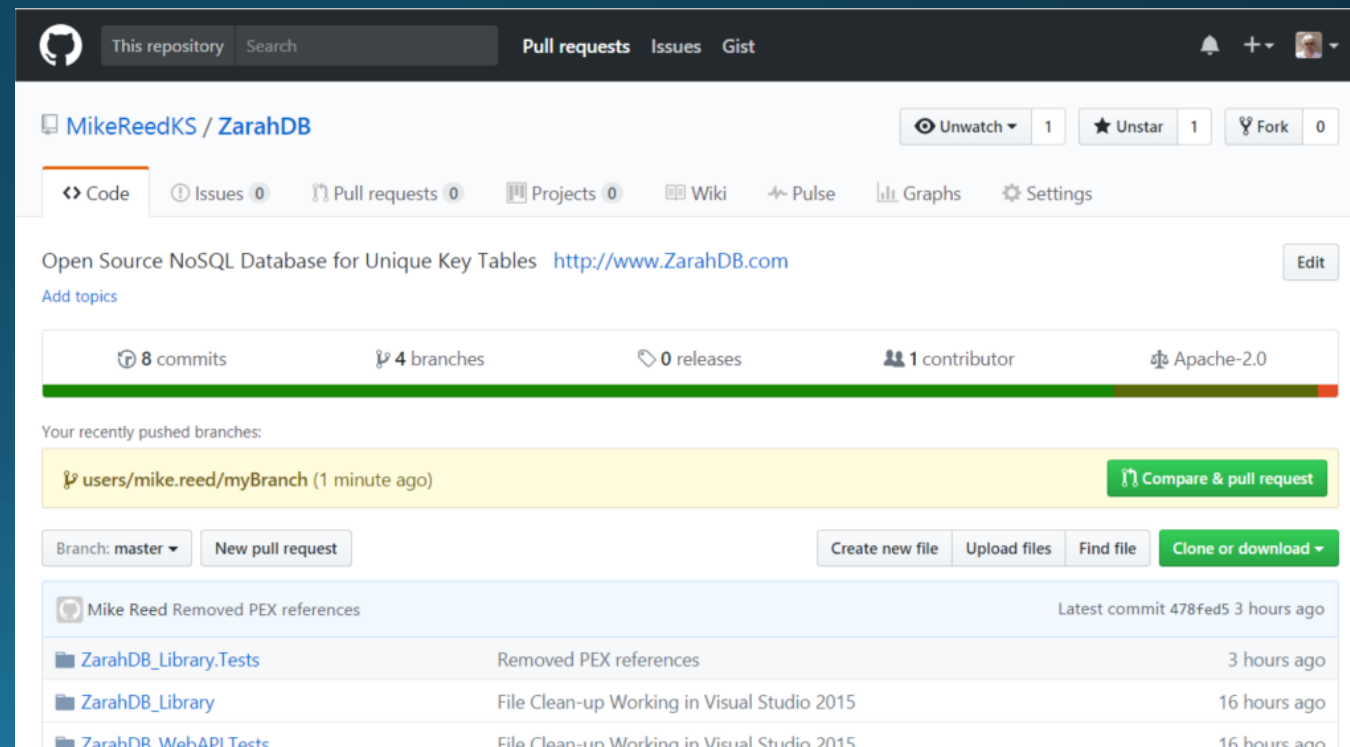
# Publish Local Changes to Remote

- Share your changes with the community by pushing them to the remote repository at GitHub.
- Navigate to the “Synchronization” panel.
- You should see one outgoing commit for each commit you created.
- Click “Publish” or “Push” just under the “Outgoing Commits” heading.  
“Publish” means you have never pushed to this branch before, while “Push” means to update the remote branch with even more changes.



# Initiate a Pull Request

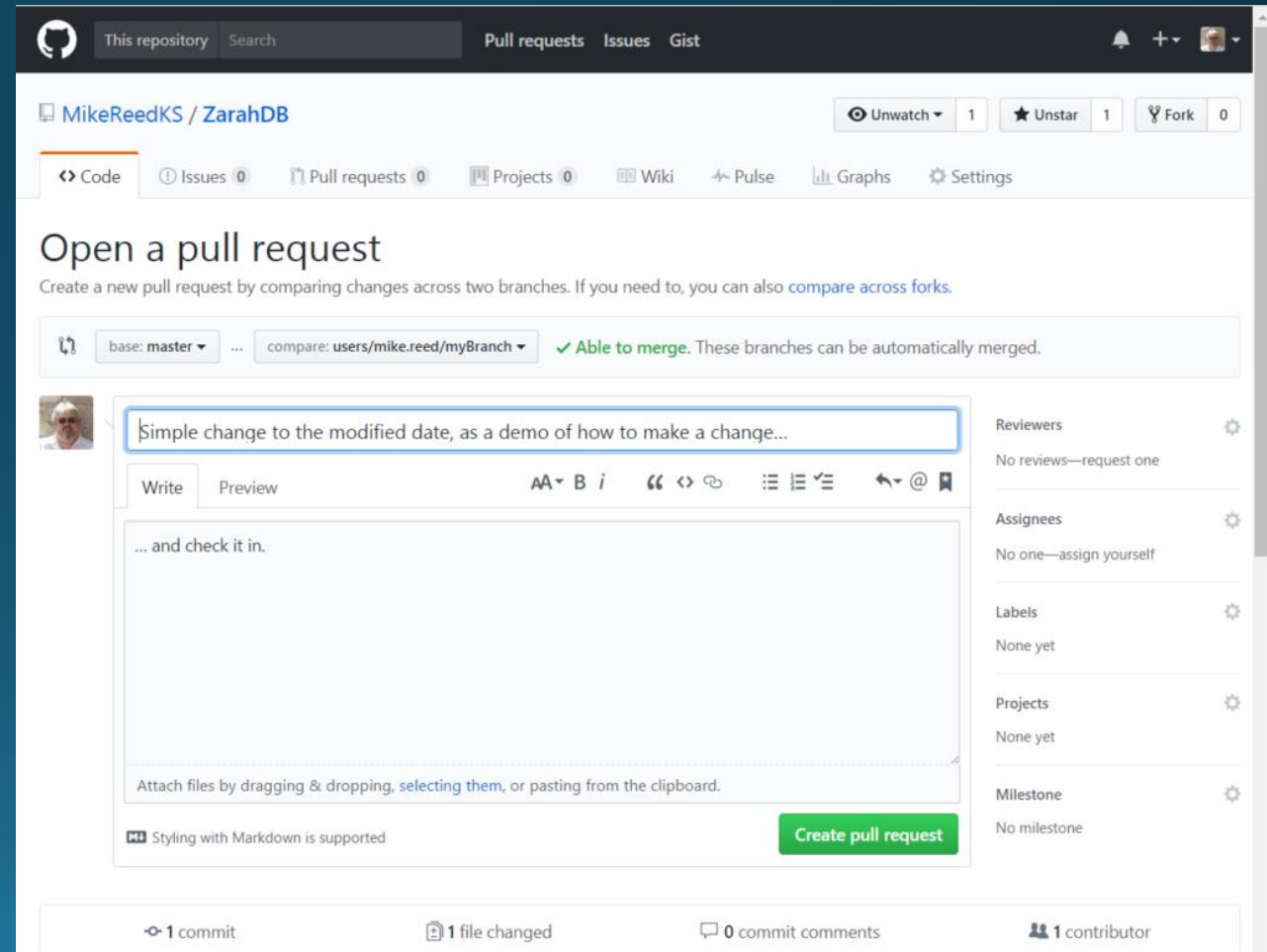
- Go to <https://github.com/MikeReedKS/ZarahDB> and you should see that you have a recently pushed branch awaiting a pull request.
- Click the “Compare & pull request” button.
- A pull request is how you ask to have your changes merged into the develop branch on the remote repository.





# Create a Pull Request

- Add any additional comments to help those reviewing your pull request to know exactly what you changed, added, or deleted.
- Make sure your base is set to “develop”.
- Click the “Create pull request” button.



The screenshot shows the GitHub interface for creating a pull request in the repository 'MikeReedKS / ZarahDB'. The 'base' is set to 'master' and the 'compare' branch is 'users/mike.reed/myBranch'. A green checkmark indicates the pull request is 'Able to merge'. The title field contains the text 'Simple change to the modified date, as a demo of how to make a change...'. The description field contains the text '... and check it in.'. A green 'Create pull request' button is visible at the bottom right. The interface also shows navigation links for Code, Issues, Pull requests, Projects, Wiki, Pulse, Graphs, and Settings. On the right side, there are sections for Reviewers, Assignees, Labels, Projects, and Milestone, all currently set to 'None yet' or 'No reviews—request one'. At the bottom, it shows '1 commit', '1 file changed', '0 commit comments', and '1 contributor'.

# Code Review and Merge

- Administrator(s) will review your pull request and if approved it will be merged in to the “develop” branch.
- When a new release is ready, the “develop” branch, with your changes among others, will be merged into the “master” branch.
- The master branch is then used to create a new NuGet package and the NuGet.org package is then updated.
- This is all done by those approved to help at this higher level, you don't have to worry about these steps, but it helps to be aware of them.

**Thank you in advance!!!**