

Get started with Git and GitHub in Visual Studio

<https://docs.microsoft.com/en-us/learn/modules/visual-studio-github-push/>

Authenticate to GitHub and create a repository by using the Git tooling experience in Visual Studio 2019. Add and modify files, stage and commit changes, and then finally push to your remote.

Learning objectives

By the end of this module, you'll be able to:

- Add a GitHub account to sign in to Visual Studio
- Initialize a Git repository and push it to GitHub by using Visual Studio
- Make and push commits to your remote branch

Prerequisites

- Basic understanding of Git concepts
- Familiarity with beginner Git commands
- A GitHub account
- Familiarity with Visual Studio 2019
- Visual Studio 2019 (minimum version 16.9) installed

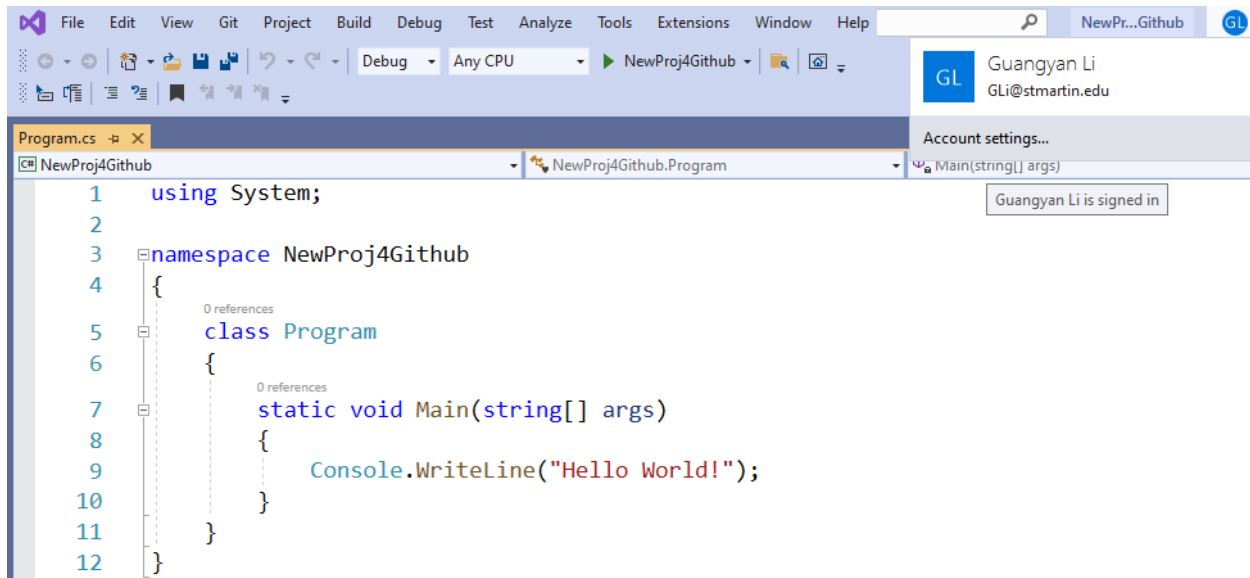
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Select screen shots in the following pages:

- [Sign in to GitHub from Visual Studio](#)

In the following, you'll use the GitHub integration in Visual Studio to sign in to GitHub, create a new repository, and push commits. And you'll do all that without leaving the IDE.



Personalization Account



Guangyan Li
GLi@stmartin.edu

[Manage Visual Studio profile](#)

[Account options](#)

[Sign out](#)

Your personalization account is used to roam settings across devices, and to provide other personalized services.

Visual Studio

Community 2019

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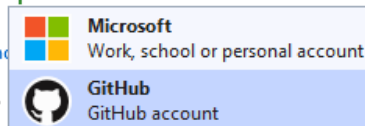
All Accounts



Saint Martin's University
GLi@stmartin.edu

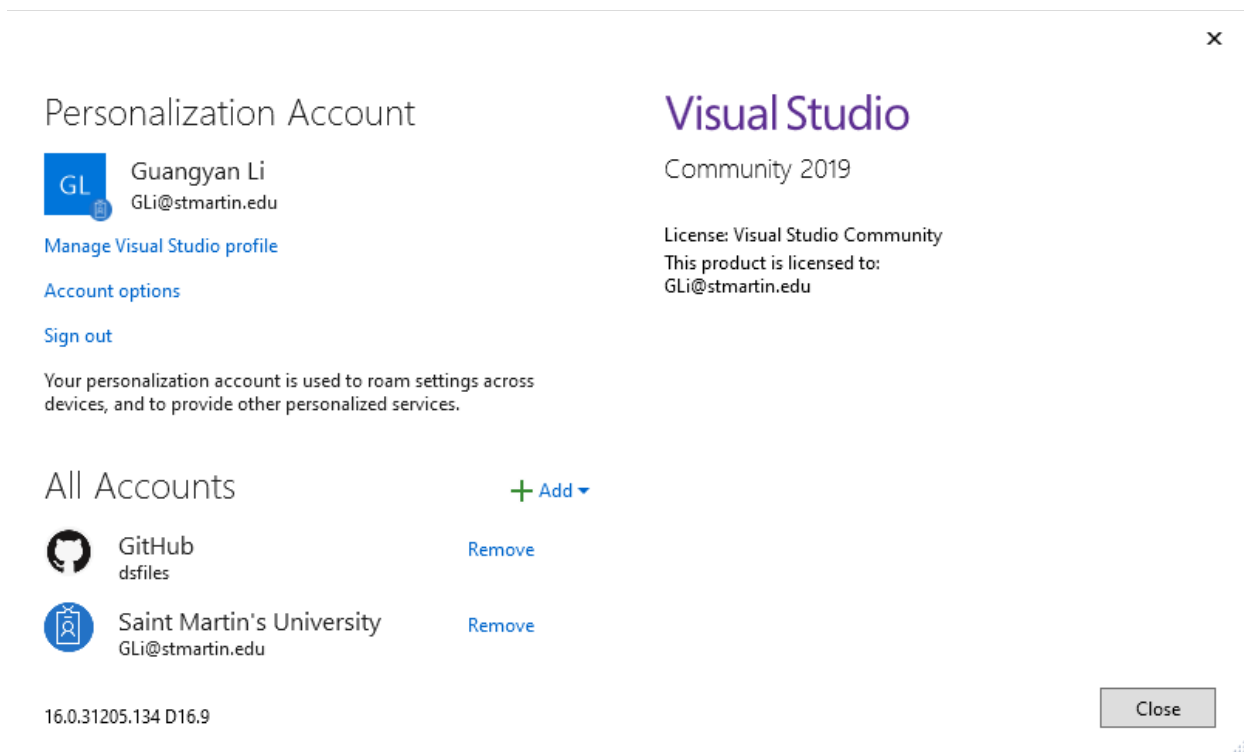
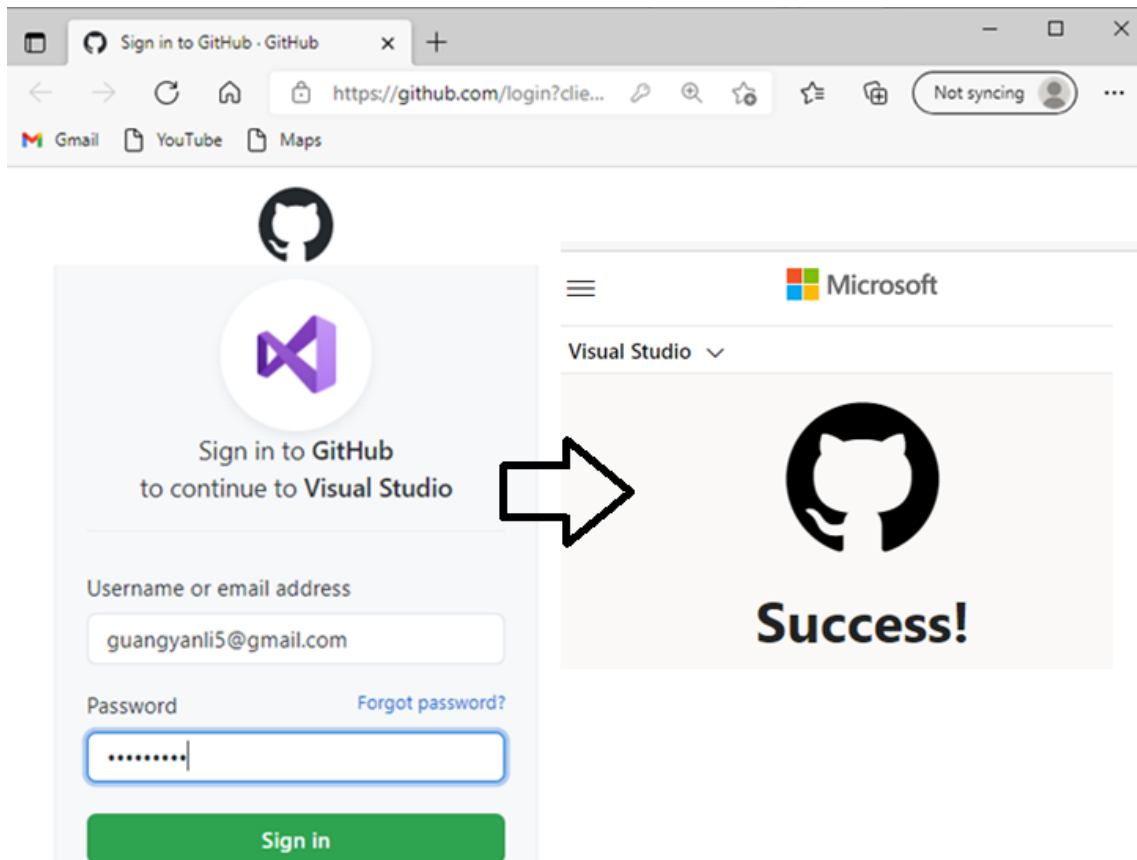


+ Add



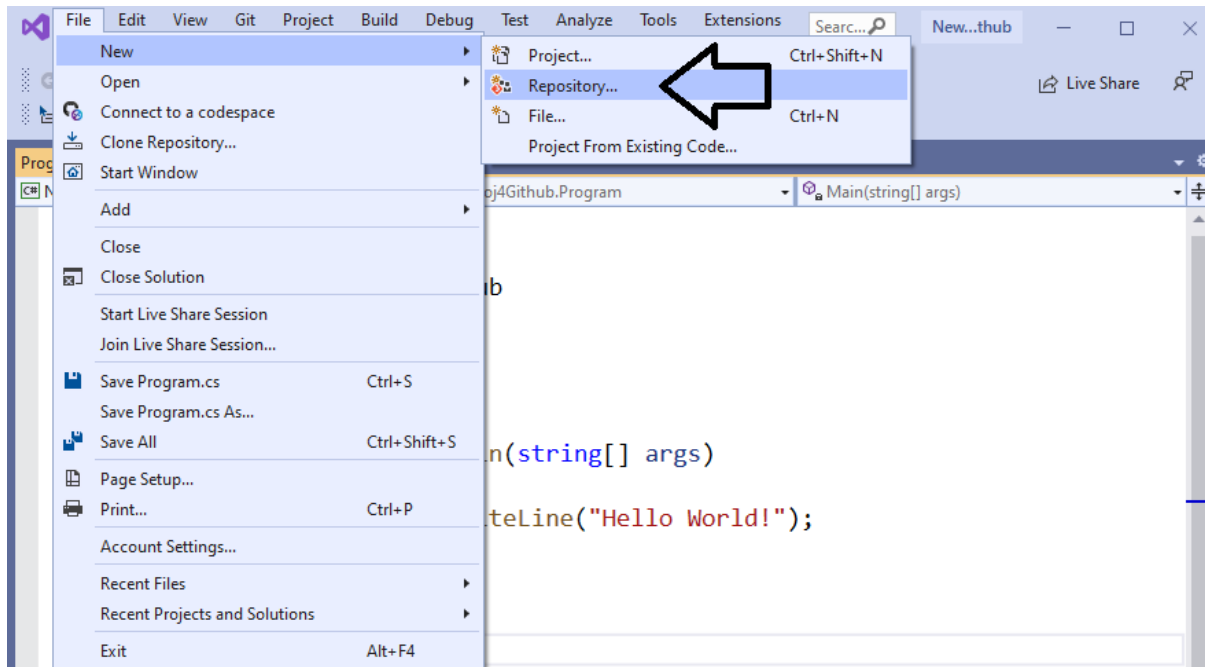
16.0.31205.134 D16.9

Close



- Create a repository on GitHub from Visual Studio

After you create/open a console application project, you'll initialize a Git repository at the project root directory, create a repository on GitHub, and push the repository's contents to GitHub. Visual Studio has a **Create a Git repository** dialog for these actions. You can access it through the **File/New/Repository** menu.



Create a Git repository

Push to a new remote



Other

Existing remote

Local only



Initialize a local Git repository

Local path C:\Users\GL\source\repos\NewProj4Github



Create a new GitHub repository

Account dsfiles (GitHub)

Owner dsfiles

Repository name NewProj4Github

Description Enter the description of the repository <Optional>

☐ Private repository



Push your code to GitHub

<https://github.com/dsfiles/NewProj4Github>



Create and Push

Cancel

A new repository named “NewProj4Github” is created as shown below:

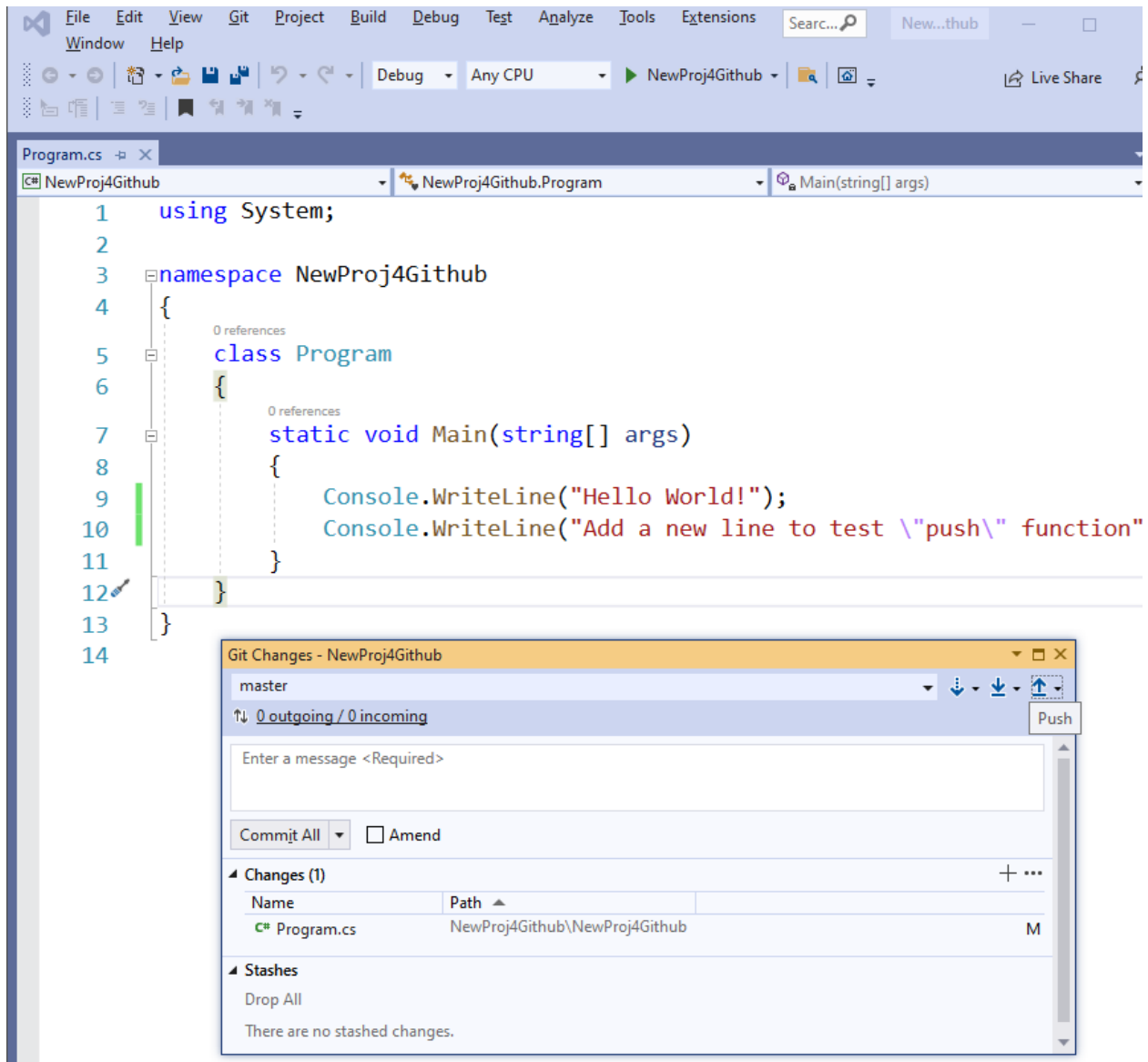
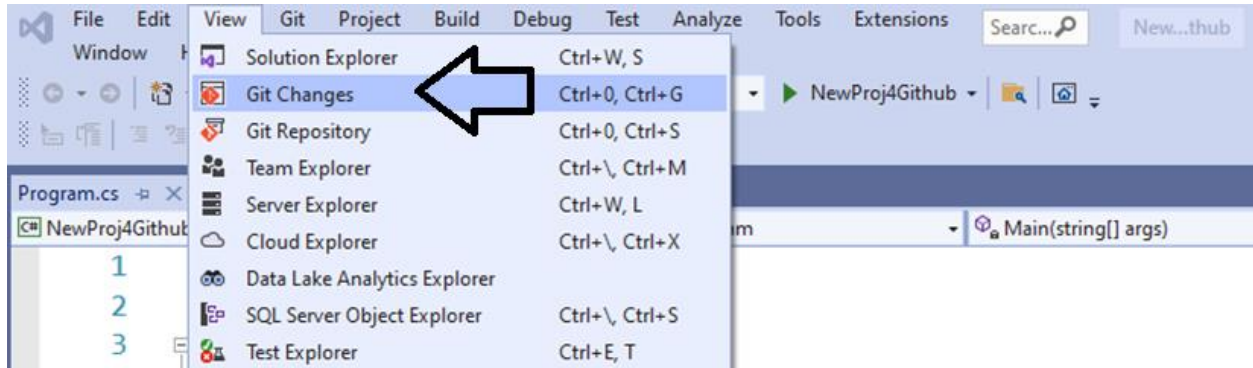
The screenshot shows the GitHub web interface for a newly created repository named "NewProj4Github" by the user "dsfiles". The repository is currently empty, with 1 watch, 0 stars, and 0 forks. The main content area displays a list of files that have been added, including a folder named "NewProj4Github" and several files like ".gitattributes", ".gitignore", and "NewProj4Github.s...". Each file entry includes a brief description of its purpose and the time it was added (9 hours ago). On the right side, there are sections for "About" (no description provided), "Releases" (no releases published), and "Packages" (no packages published). At the bottom, there is a prompt to "Add a README" to help people understand the project.

Let us revise the original “Hello World!” program:

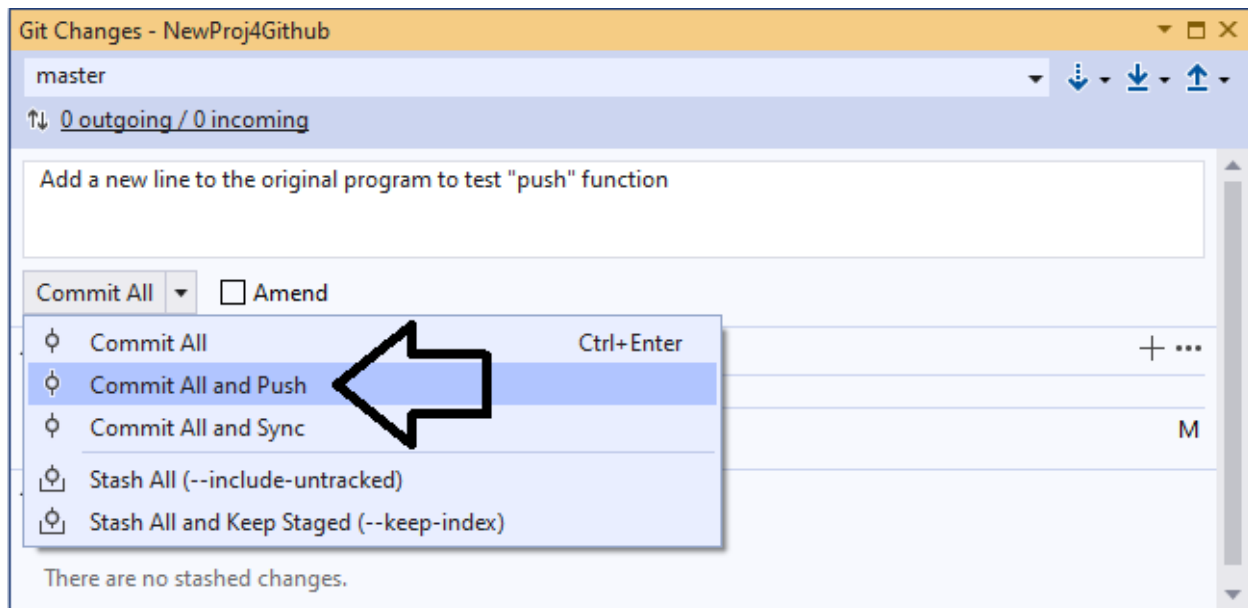
```
using System;

namespace NewProj4Github
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Hello World!");
            Console.WriteLine("Add a new line to test \"push\" function");
        }
    }
}
```

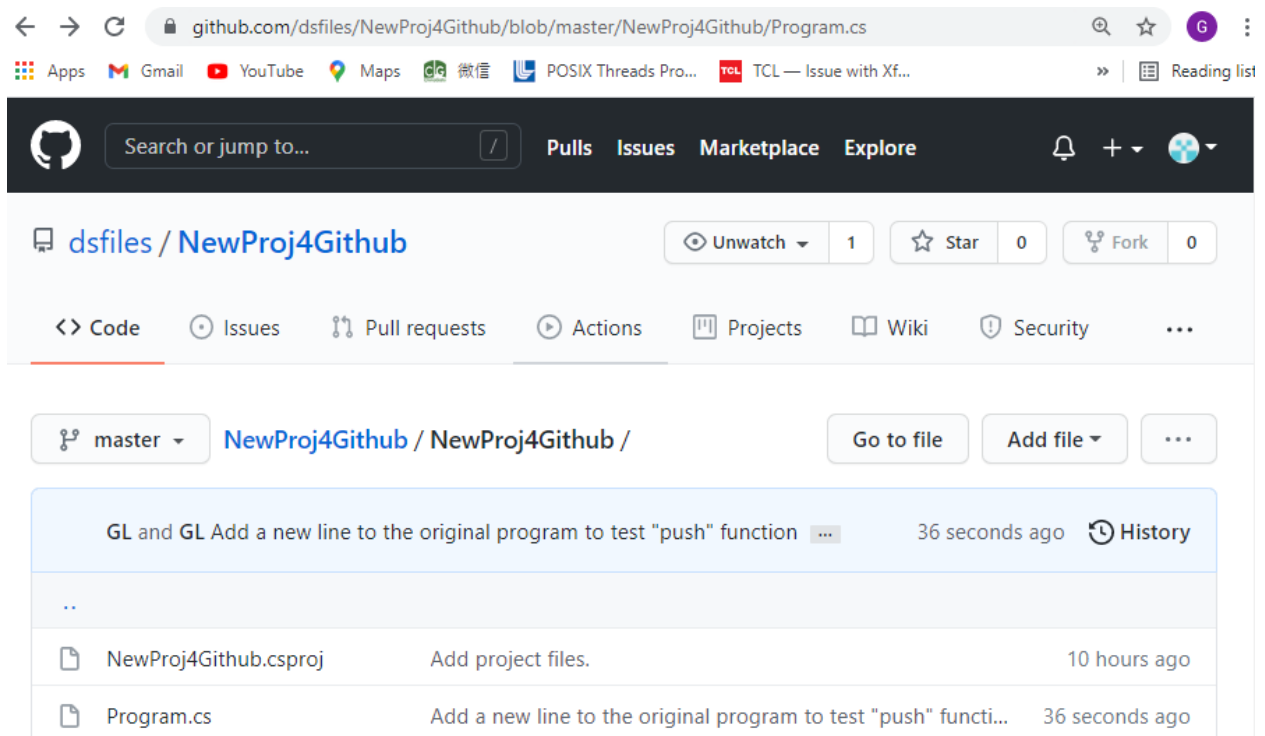
Open "Git Changes" window to see the change:



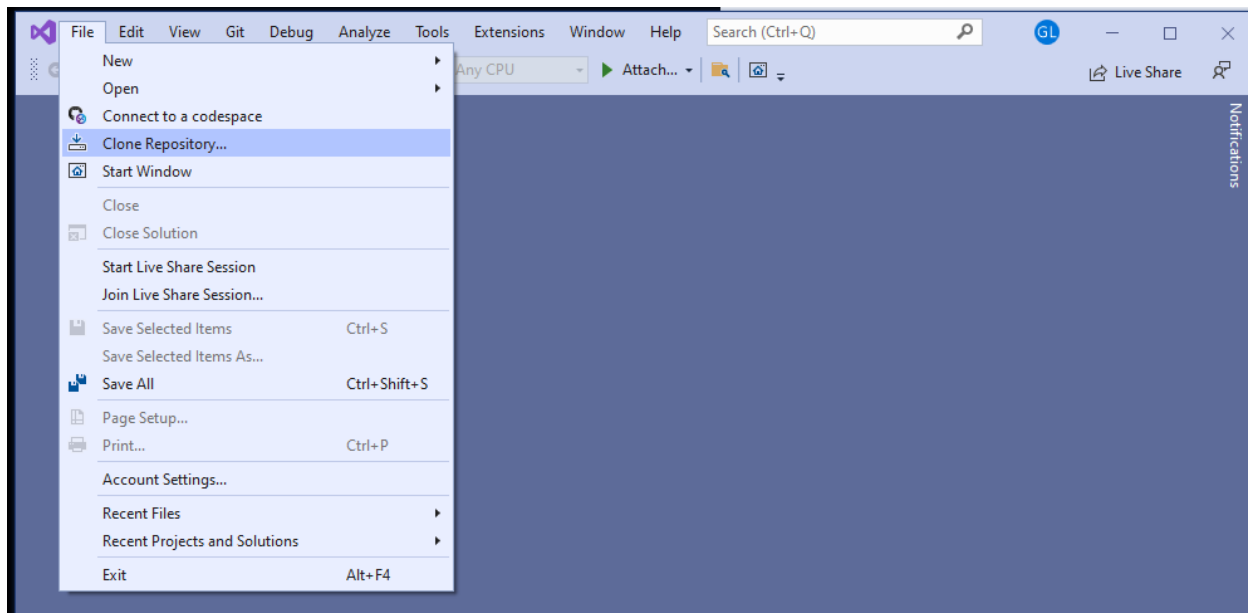
Push the change to the remote repository on github:



Check out the github page:



- [Open a repository on GitHub from Visual Studio](#)



What would you like to do?

Open recent

Today

- CarClass.sln 6/22/2021 11:50 PM
C:\Users\GL\source\repos\CarClass2
- CarClass2 6/22/2021 11:49 PM
C:\Users\GL\Source\Repos
- CarClass.sln 6/22/2021 12:00 PM
C:\Users\GL\source\repos\CarClass
- CSC205GitTest 6/22/2021 11:45 AM
C:\Users\GL

Yesterday

- CSC205Week07.sln 6/21/2021 10:59 PM
C:\Users\GL\source\repos\CSC205Week07

Get started

Connect to a codespace
Create and manage cloud-powered development environments

Clone a repository
Get code from an online repository like GitHub or Azure DevOps

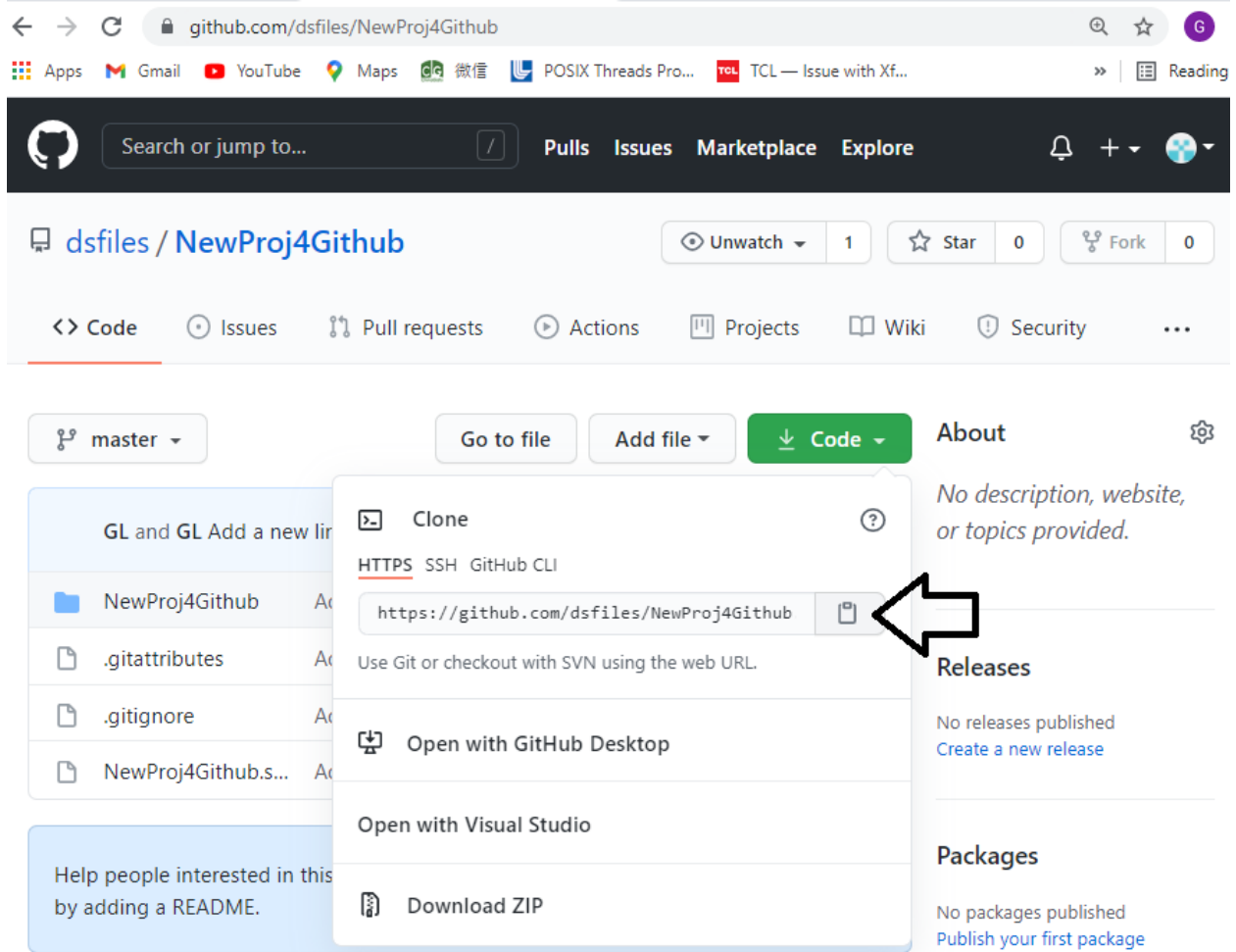
Open a project or solution
Open a local Visual Studio project or .sln file

Open a local folder
Navigate and edit code within any folder

Create a new project
Choose a project template with code scaffolding to get started



Obtain the URL of the repository on github:



The screenshot shows the GitHub interface for the repository 'dsfiles / NewProj4Github'. The browser address bar displays 'github.com/dsfiles/NewProj4Github'. The repository page includes a search bar, navigation tabs (Code, Issues, Pull requests, Actions, Projects, Wiki, Security), and repository statistics (1 pull, 0 stars, 0 forks). The 'Code' dropdown menu is open, showing options to clone the repository via HTTPS, SSH, or GitHub CLI. The HTTPS URL 'https://github.com/dsfiles/NewProj4Github' is highlighted, and a black arrow points to the copy icon next to it. Other options include 'Open with GitHub Desktop', 'Open with Visual Studio', and 'Download ZIP'. The right sidebar shows the 'About' section with a note: 'No description, website, or topics provided.' Below it are sections for 'Releases' (No releases published) and 'Packages' (No packages published).

Clone a repository

Enter a Git repository URL

Repository location

`https://github.com/dsfiles/NewProj4Github.git`

Path

`C:\Users\GL\Source\Repos\NewProj4Github`

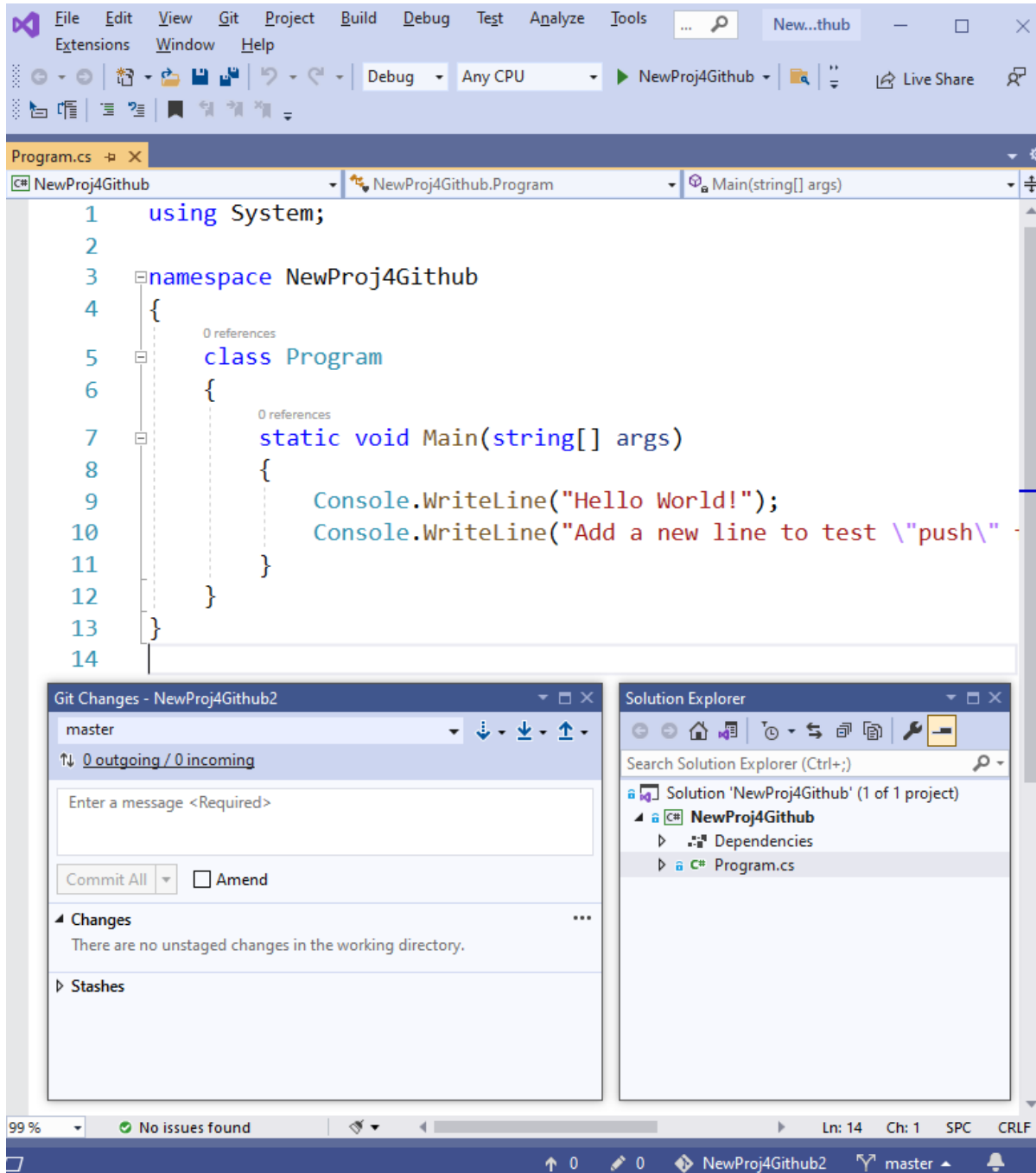
Browse a repository

Azure DevOps

GitHub

Clone

The remote project “NewProj4Github” on github is “pulled” and open in Visual Studio now:



- [Useful resources](#)

<https://docs.microsoft.com/en-us/learn/modules/visual-studio-github-push/>

<https://git-scm.com/doc>

<https://git-scm.com/book/en/v2>