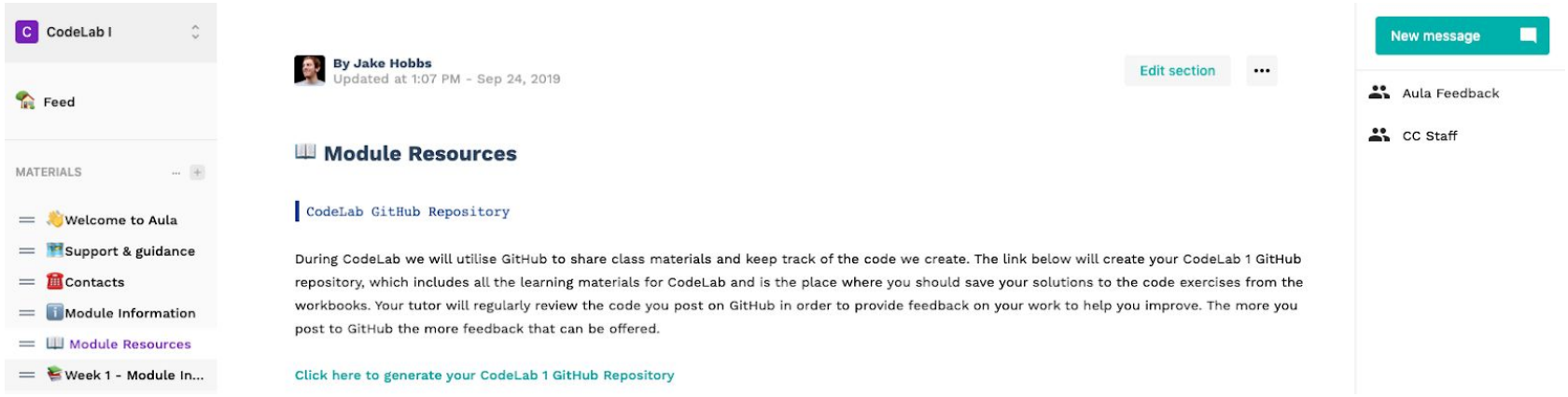
CodeLab I (CCO4000-20)

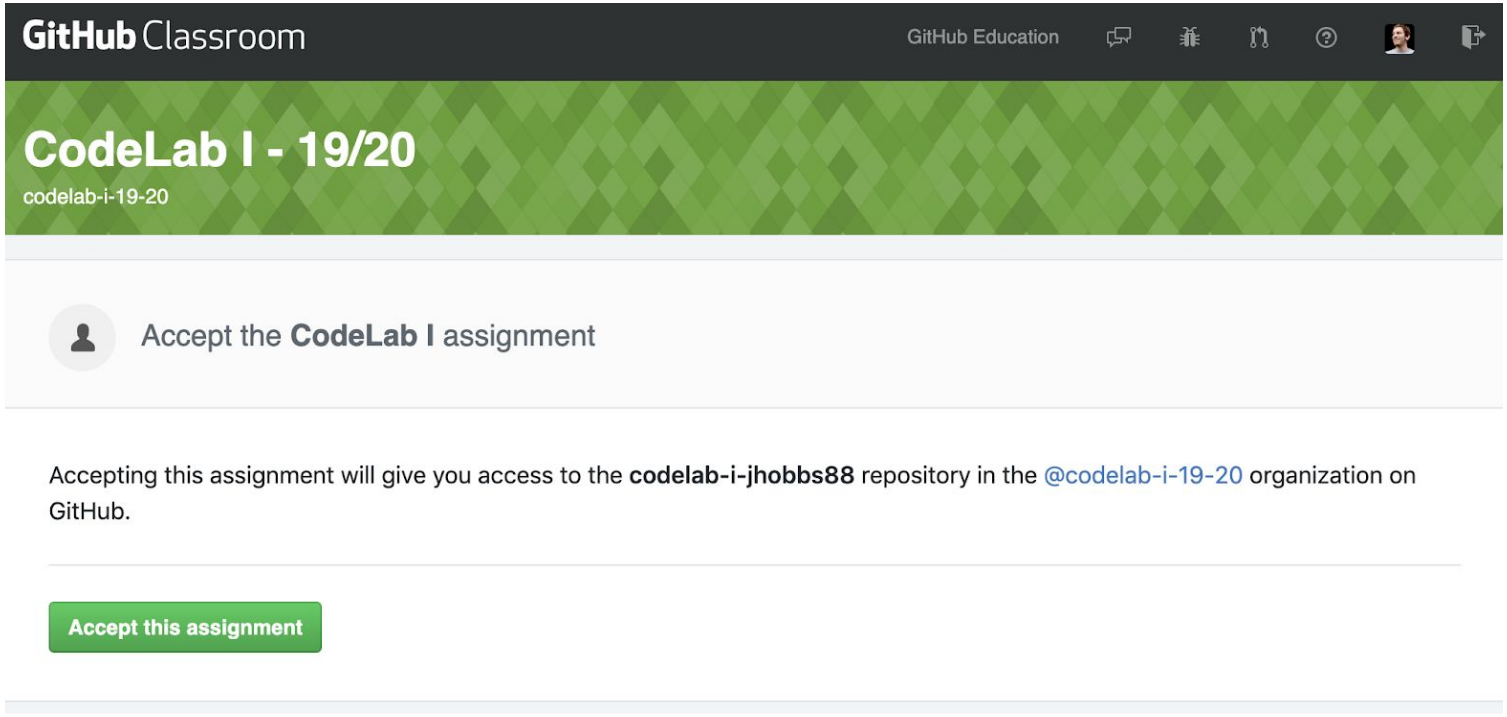
Cloning the CodeLab Repository - Visual Studio

Creative Computing
The School of Creative Industries
Bath Spa University

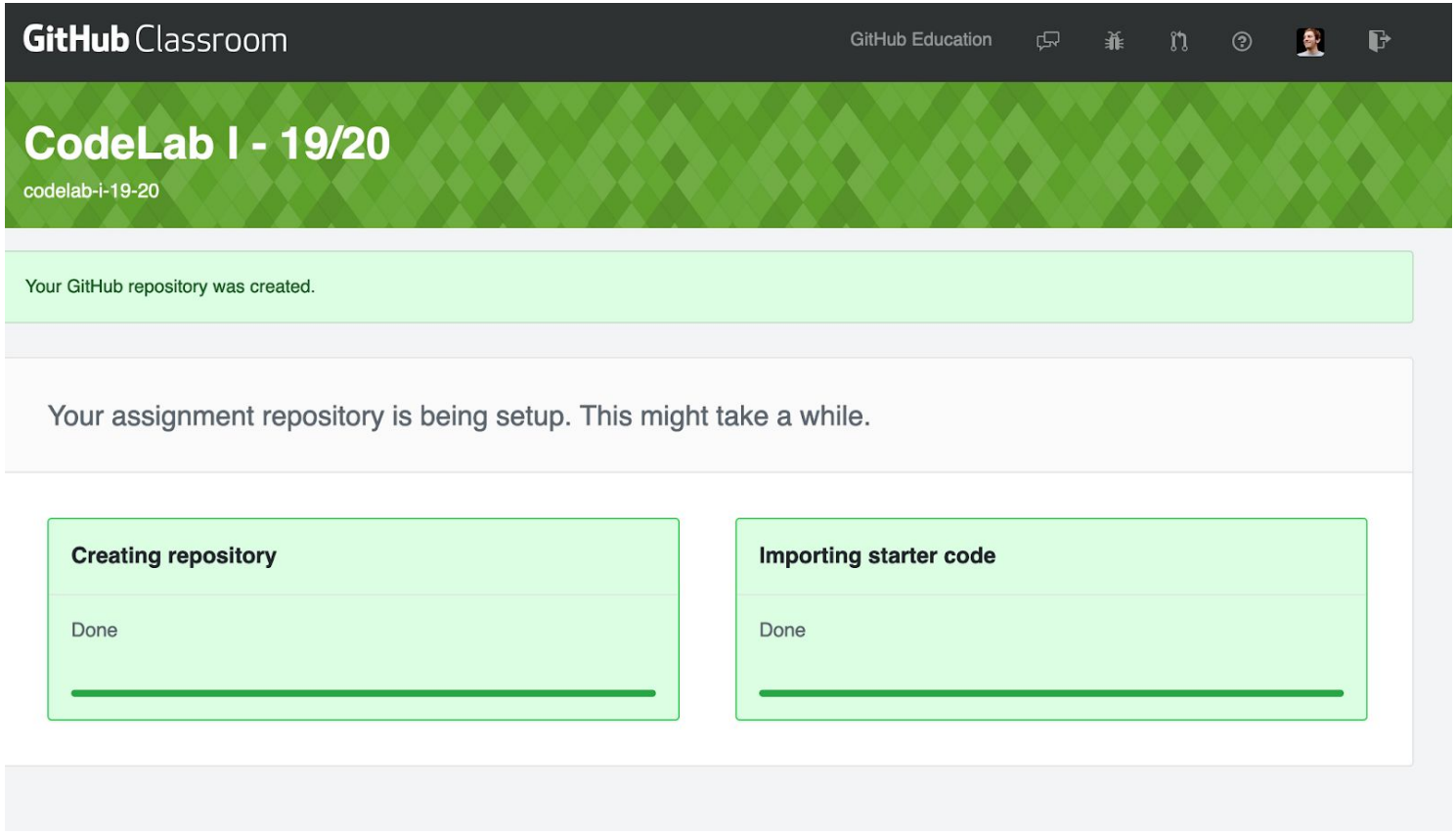
1. First you need to generate your CodeLab I repository. To do so locate and click the GitHub classroom provided within the module resources section on Aura.



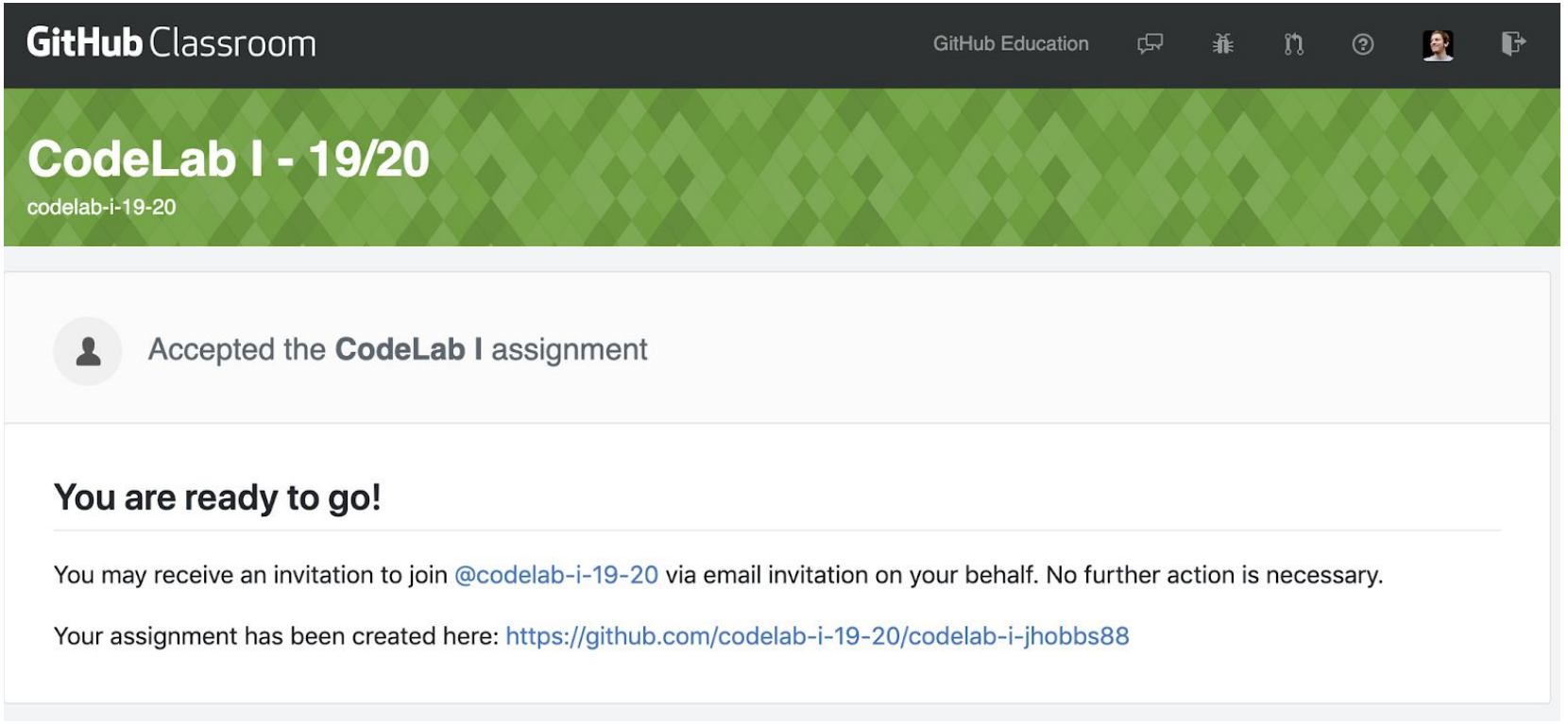
2. Once you have clicked this link you will be taken to a page asking you to accept the assignment (you may be asked to login). This page will look similar to the below. Click *Accept this assignment.*



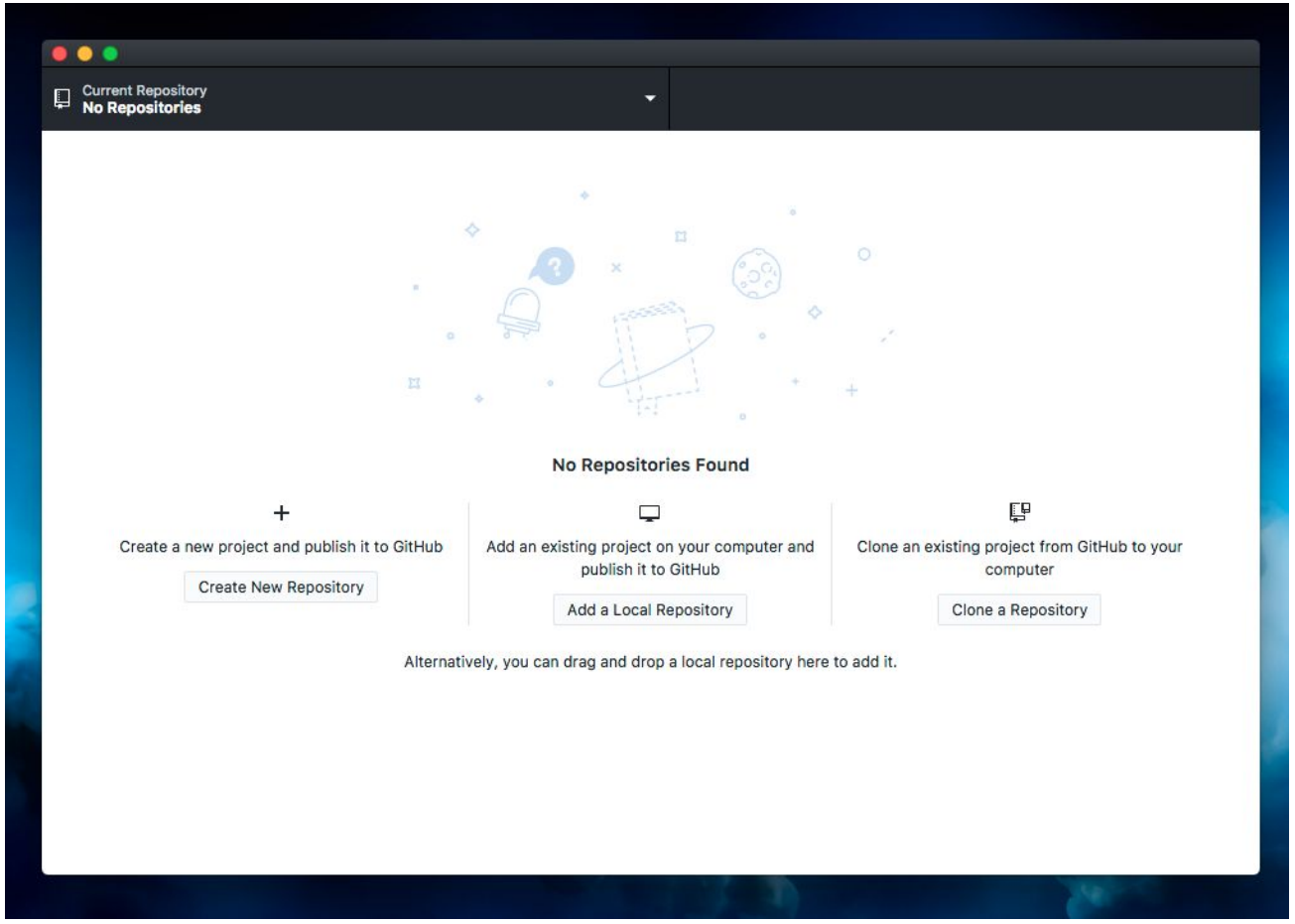
3. GitHub classroom will now generate your own unique repository. Please wait while it completes the import process



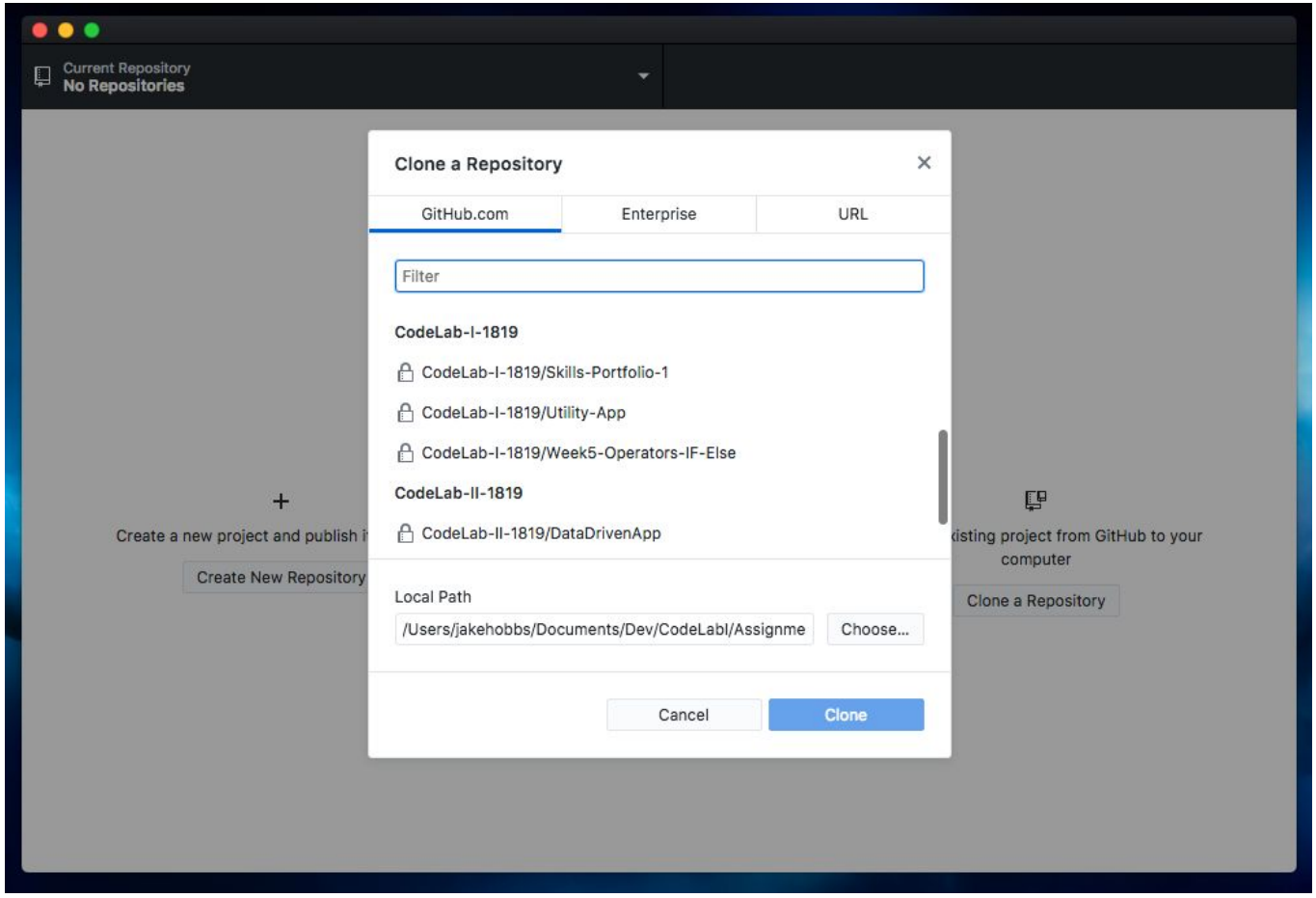
4. Once imported you will be presented with a success message like the one below. Included here is a URL for where your repository is hosted on GitHub (*t*he url that follows *“Your assignment has been created here:”)*.



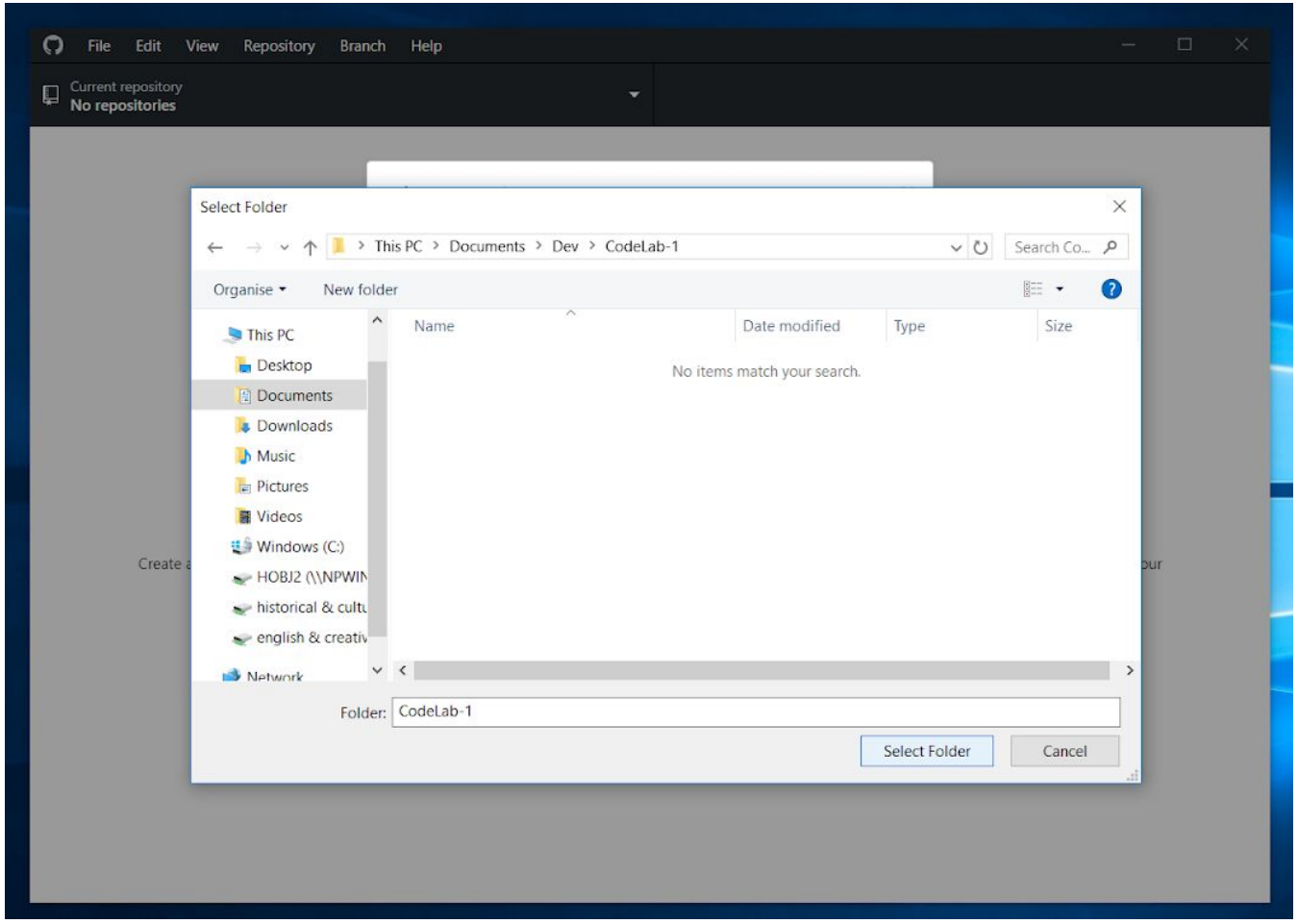
5. Use Github desktop clone your repository to your computer. If you have no existing repositories you can do this by clicking the *"Clone a Repository"* button on the opening screen. Else simply go "*File → Clone Repository*"



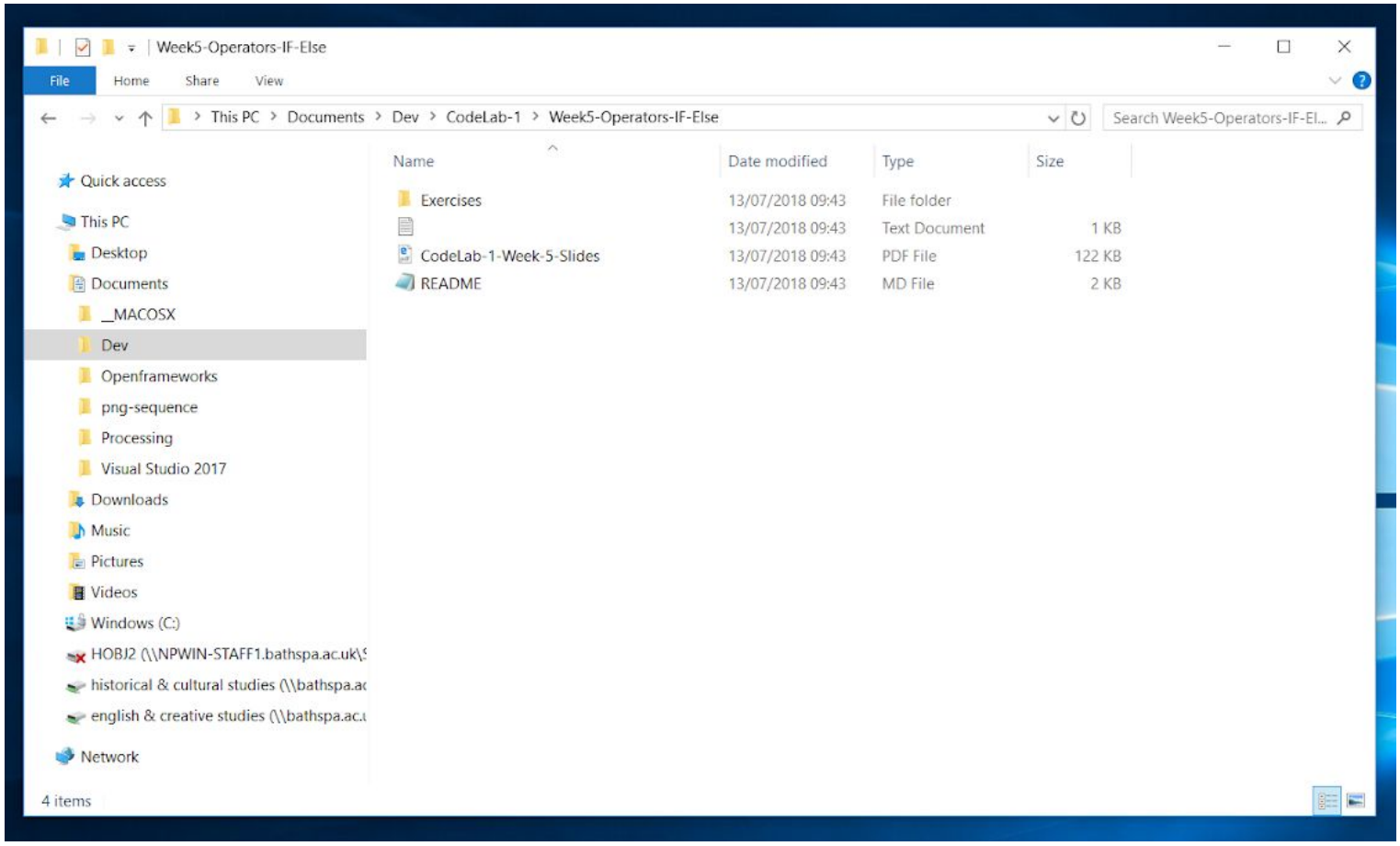
6. You will be presented with a screen similar to the one below. You should look for the repository from those listed. This will be named something like: *CodeLab-I-1920/codelab-i-yourgithubusername*



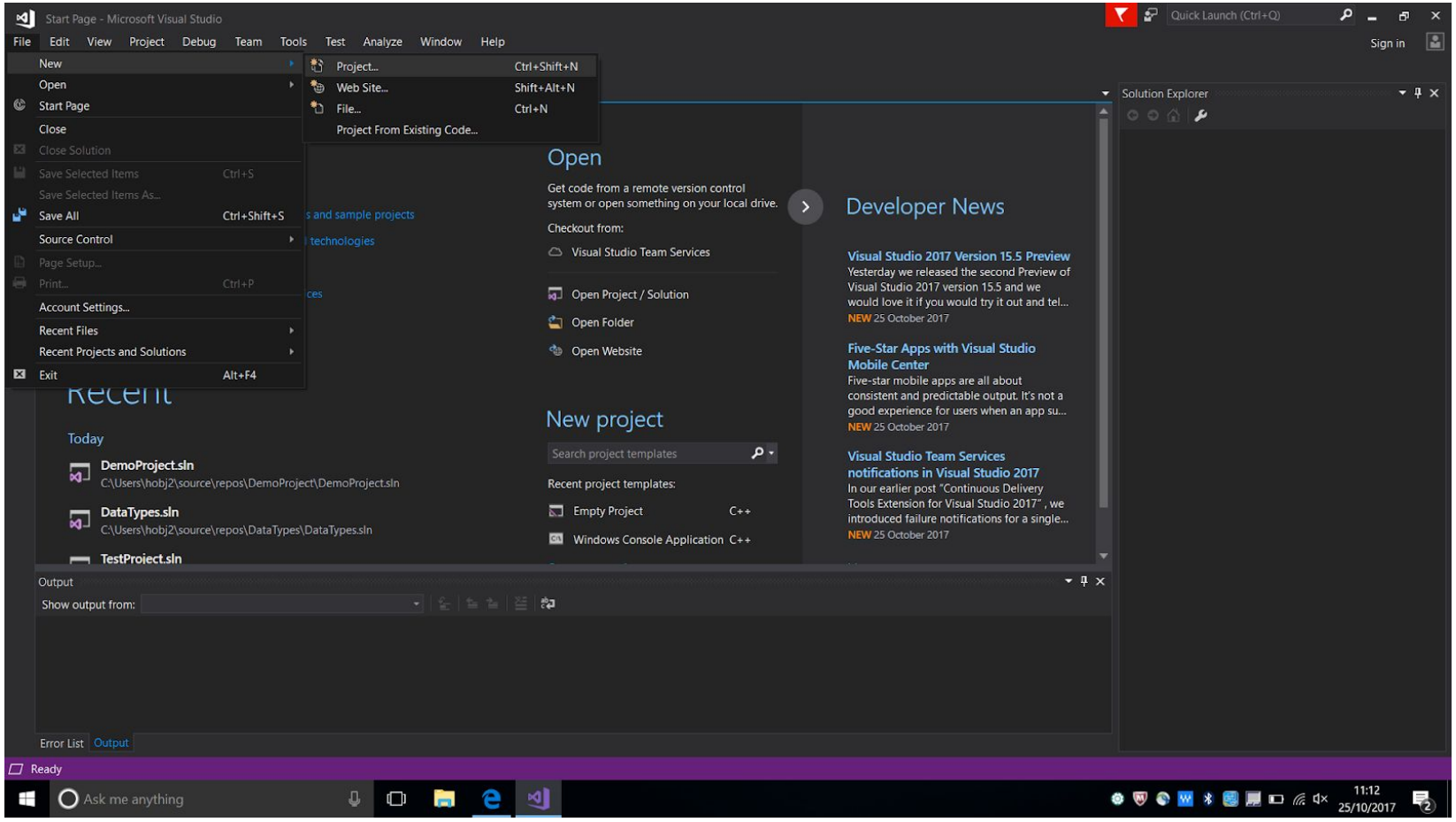
7. Click “*Choose...”* next to local path and browse to sensible location on your machine to save the repository, eg: *Documents → Dev → CodeLab-I*. Once you have selected a folder on your machine click *“Open”* to clone the repository.



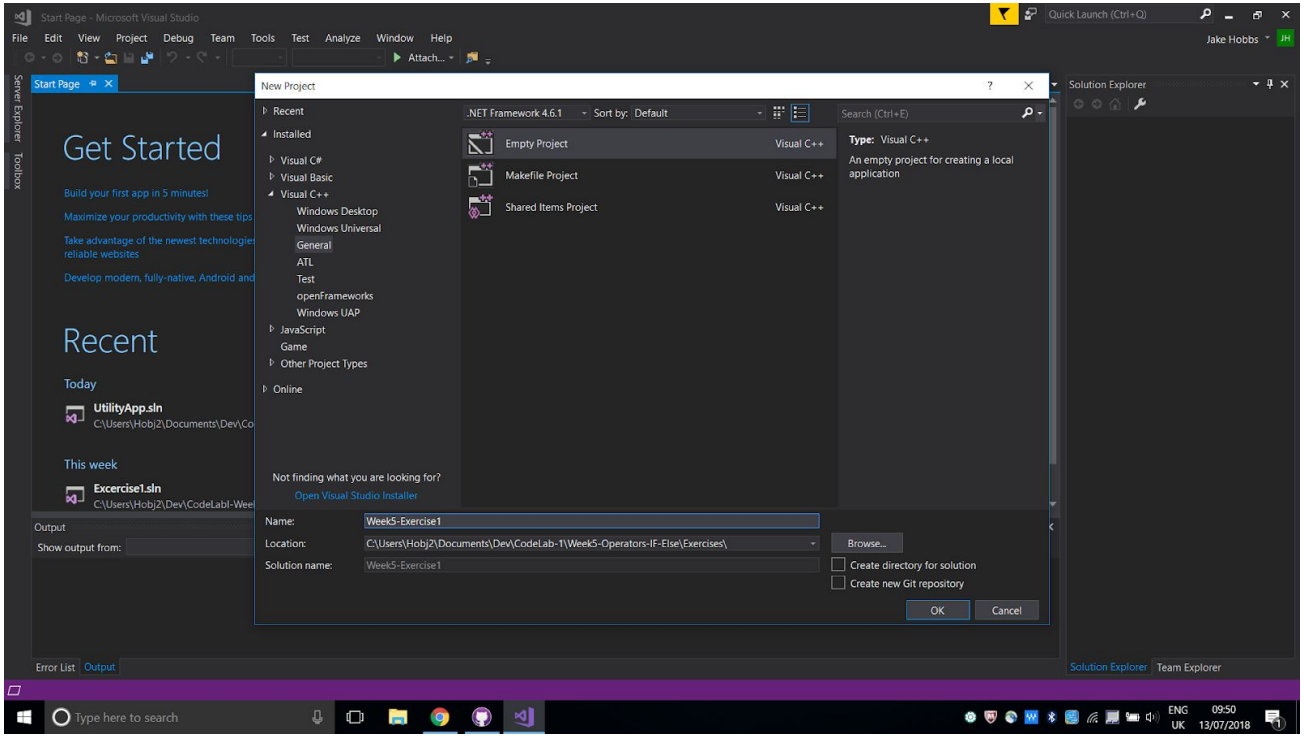
8. You should now have a copy of the repository from Github on your local machine ready to undertake the coding challenges. The image below shows an example repository after downloading to my PC. For each exercise you should create a **separate** project within the exercises folder. The remaining steps guide you on how to create a new project in Visual Studio.



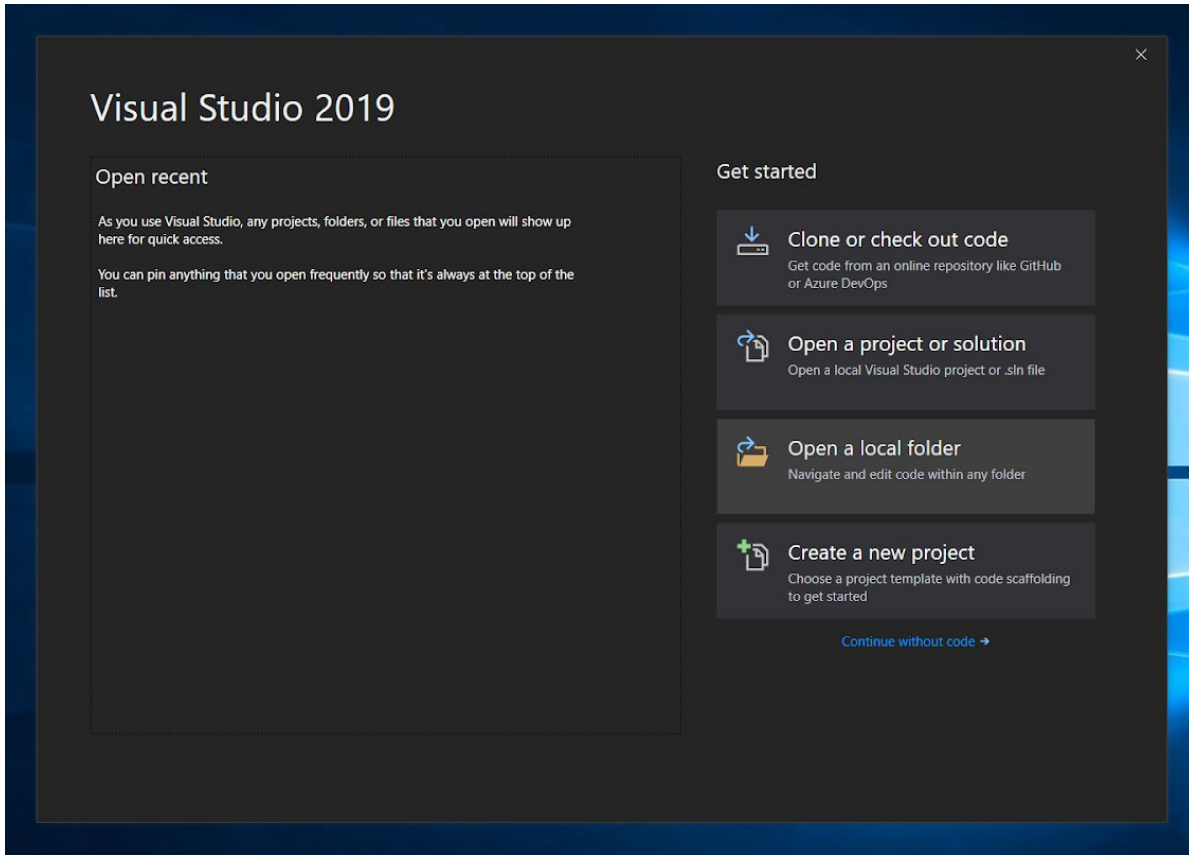
9. *VS2017:* If using Visual Studio 2017 go to File → New Project. If using Visual Studio 2019 skip to step 11



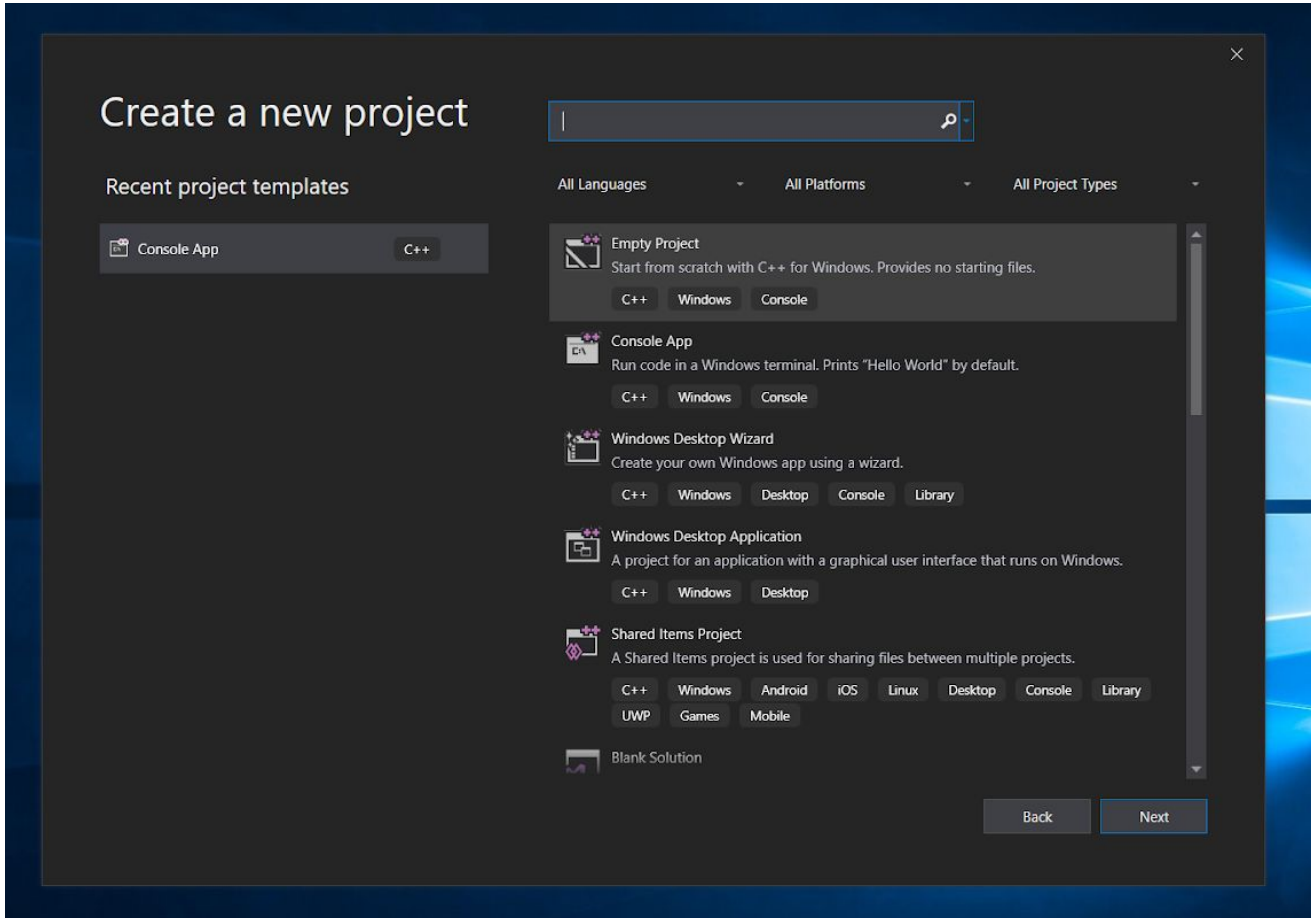
10. *VS2017:* Create your project project:
    a. Select *General* from under *Visual C++* on the left of the new project window
    b. Select *Empty Project* in the main window
    c. In the *"Name"* box provide a name for the project (e.g: HelloWorld)
    d. In the *"Location"* box click *"Browse..."* and select the "*exercises"* folder in location you cloned the repository to in step 3
    e. Make sure *"Create directory for Solution"* and *"Create new Git repository"* are **unchecked**.
    f. Click OK
    g. Now continue from step 14



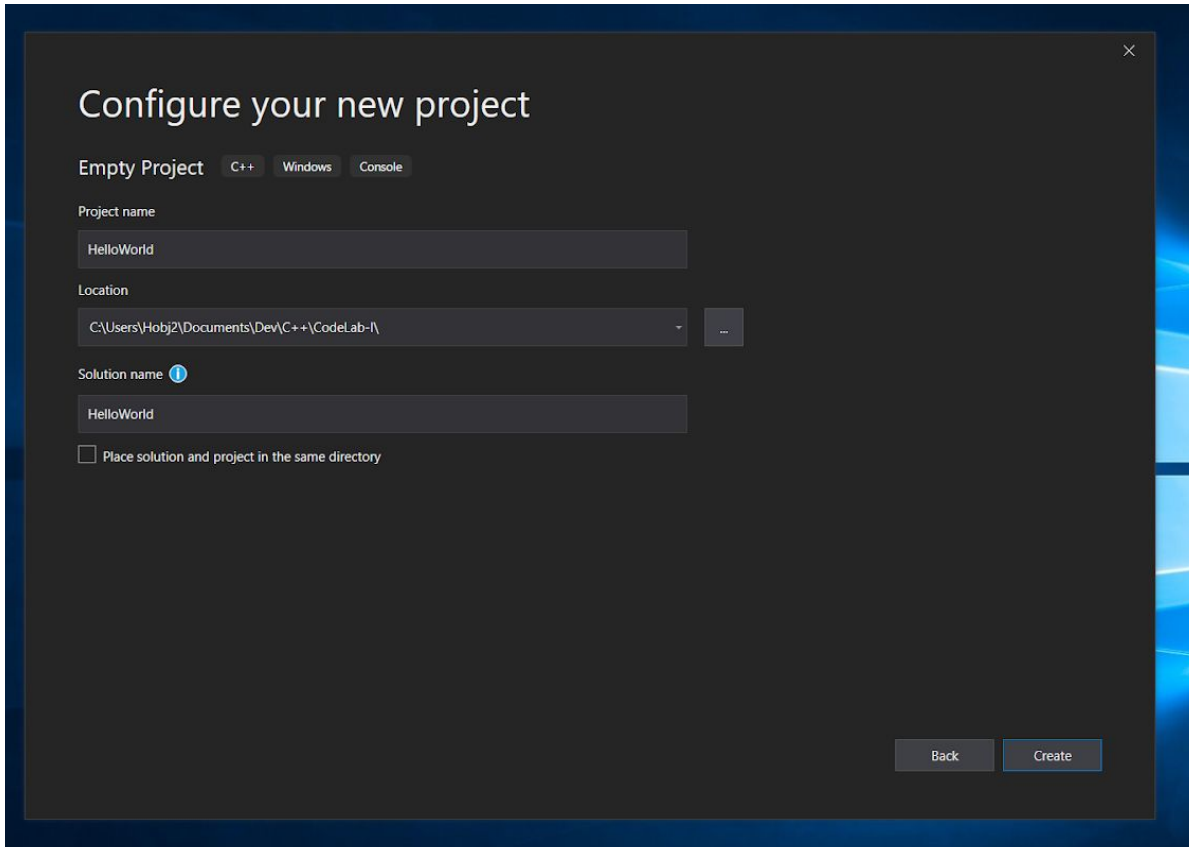
11. *VS2019:* If you are using Visual Studio 2019 select *Create a new project* from the startup screen (or File → New Project if already in Visual Studio)



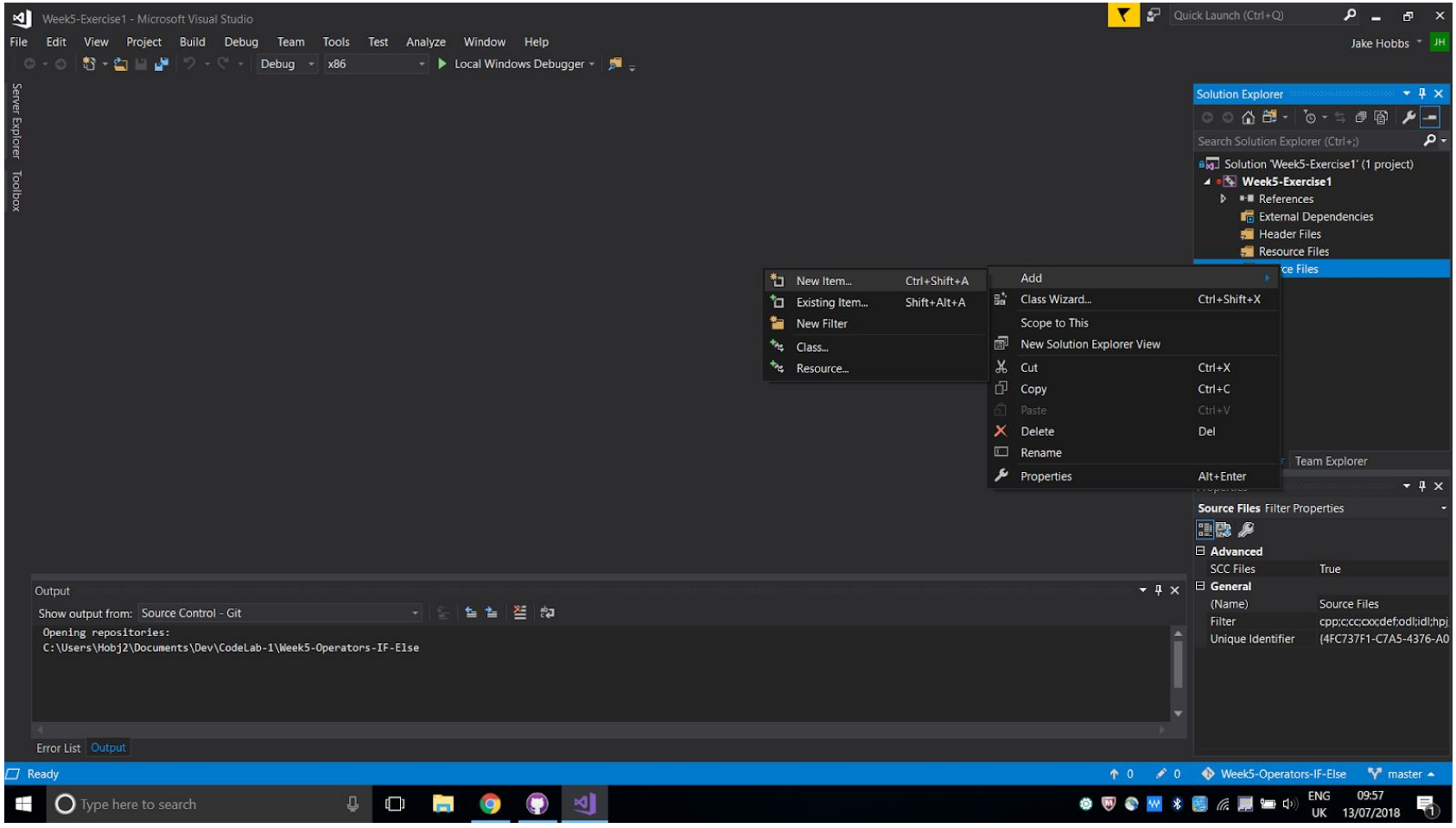
12. *VS2019:* Select Empty Project from the templates and click next



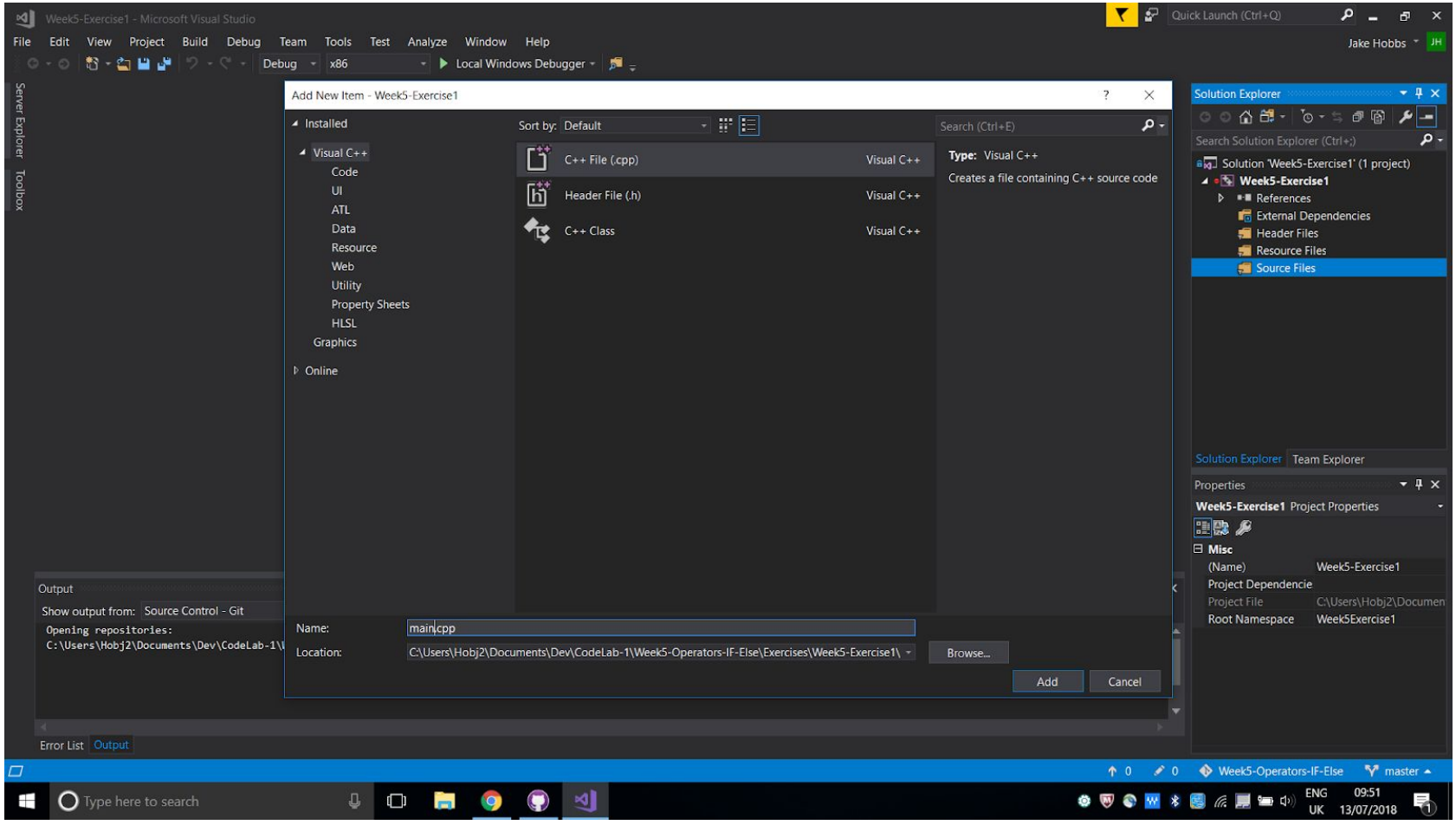
13. *VS2019:* Configure your project settings:
    a. In the *"Project Name"* box provide a name for the project (e.g: HelloWorld)
    b. In the *"Location"* box browse and select the "*exercises"* folder in location you cloned the repository to in **step 3**



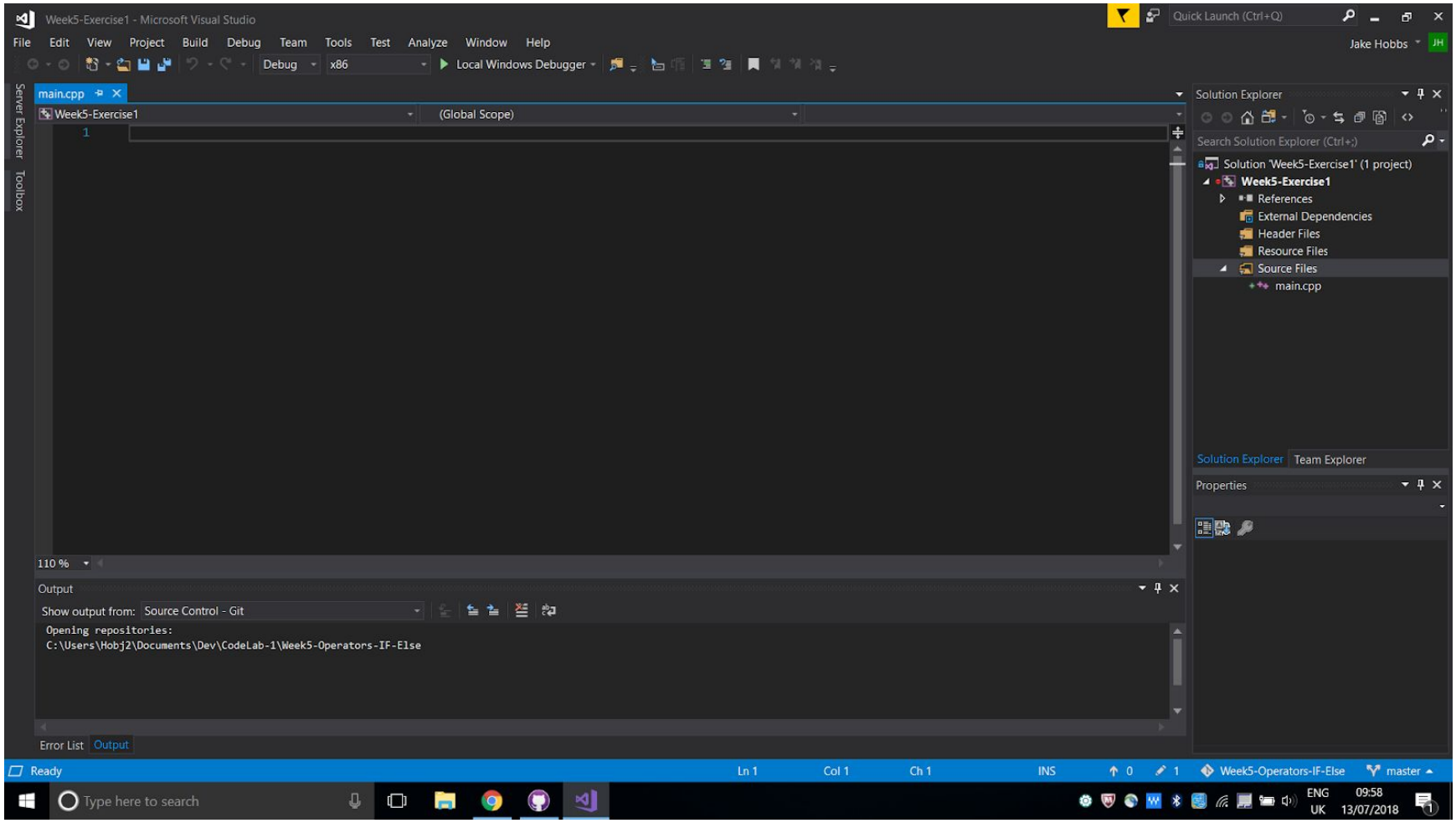
14. Your Visual Studio project is almost ready. You will be presented with the following screen. (Solution Explorer may appear on the left or the right).
    a. In the *Solution Explorer* window locate and right click the *Source Files* folder
    b. Click *Add → New Item* from the popup that appears



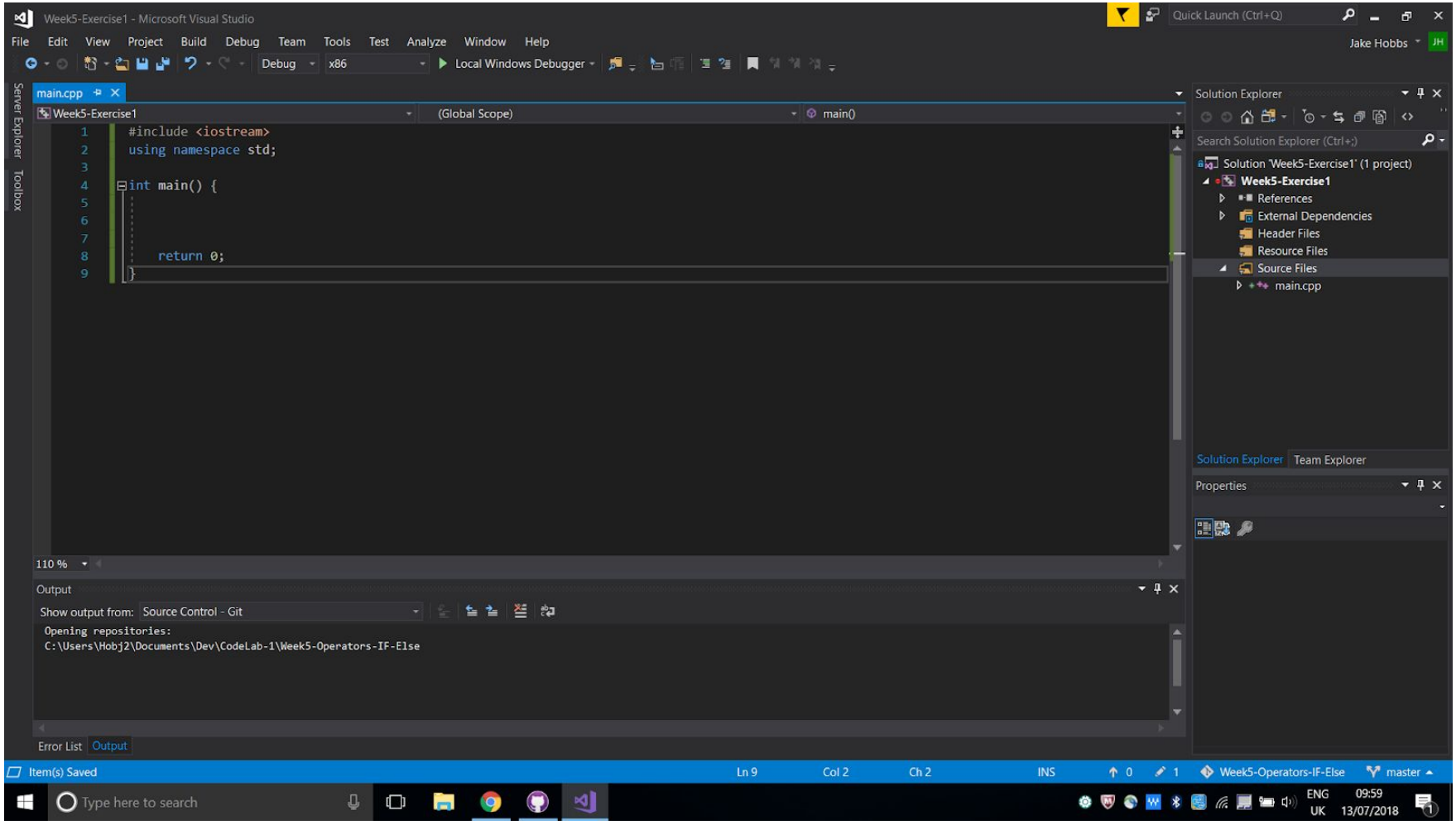
15. Add a new C++ (.cpp) file and name it main.cpp. Click add.



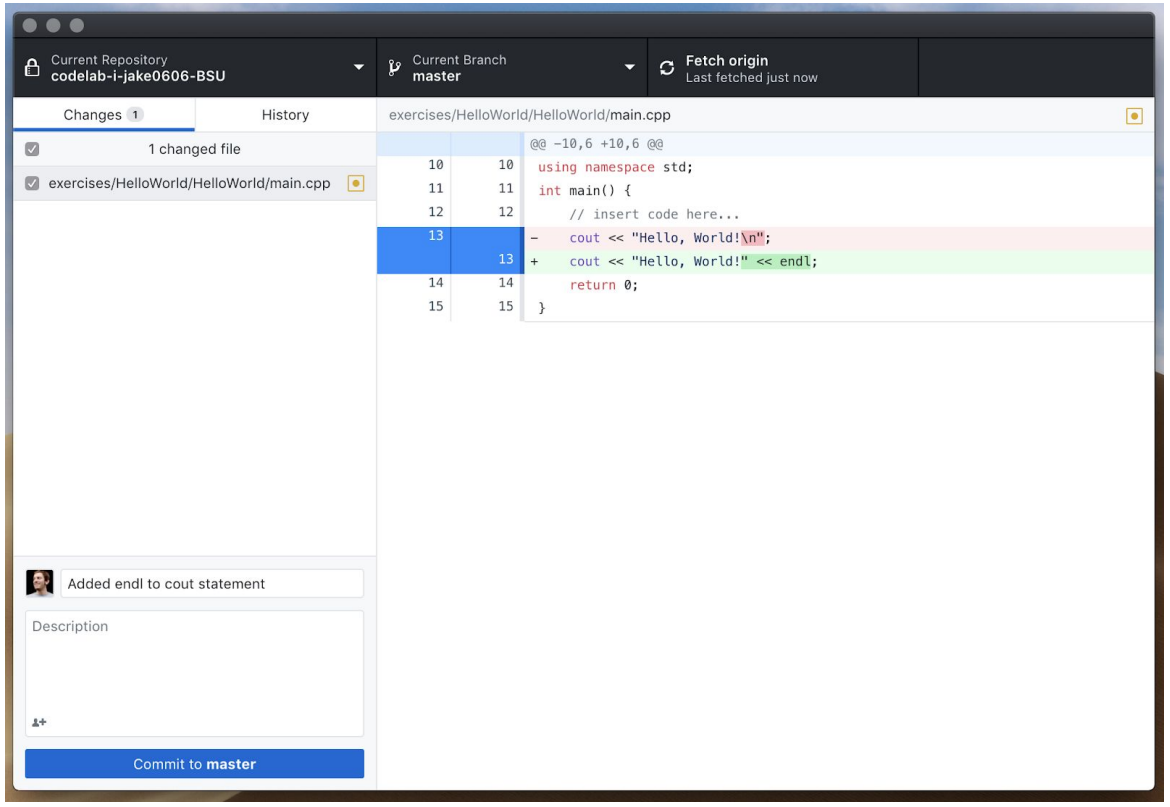
16. Your main.cpp file will initially be blank



17. Add the following basic code to the file. You are now ready to code.



18. Github Desktop will keep track of your changes in your main.cpp file and any other files you add to your project. You should regularly make commits to ensure you can fall back to previous versions if things go wrong. You should also push your commits back up to your Github repository often, this will make sure you have a backup of your work.



19. When you are happy with your exercise solution make sure you make a commit and push to your Github repository.