# The Engineering Guide

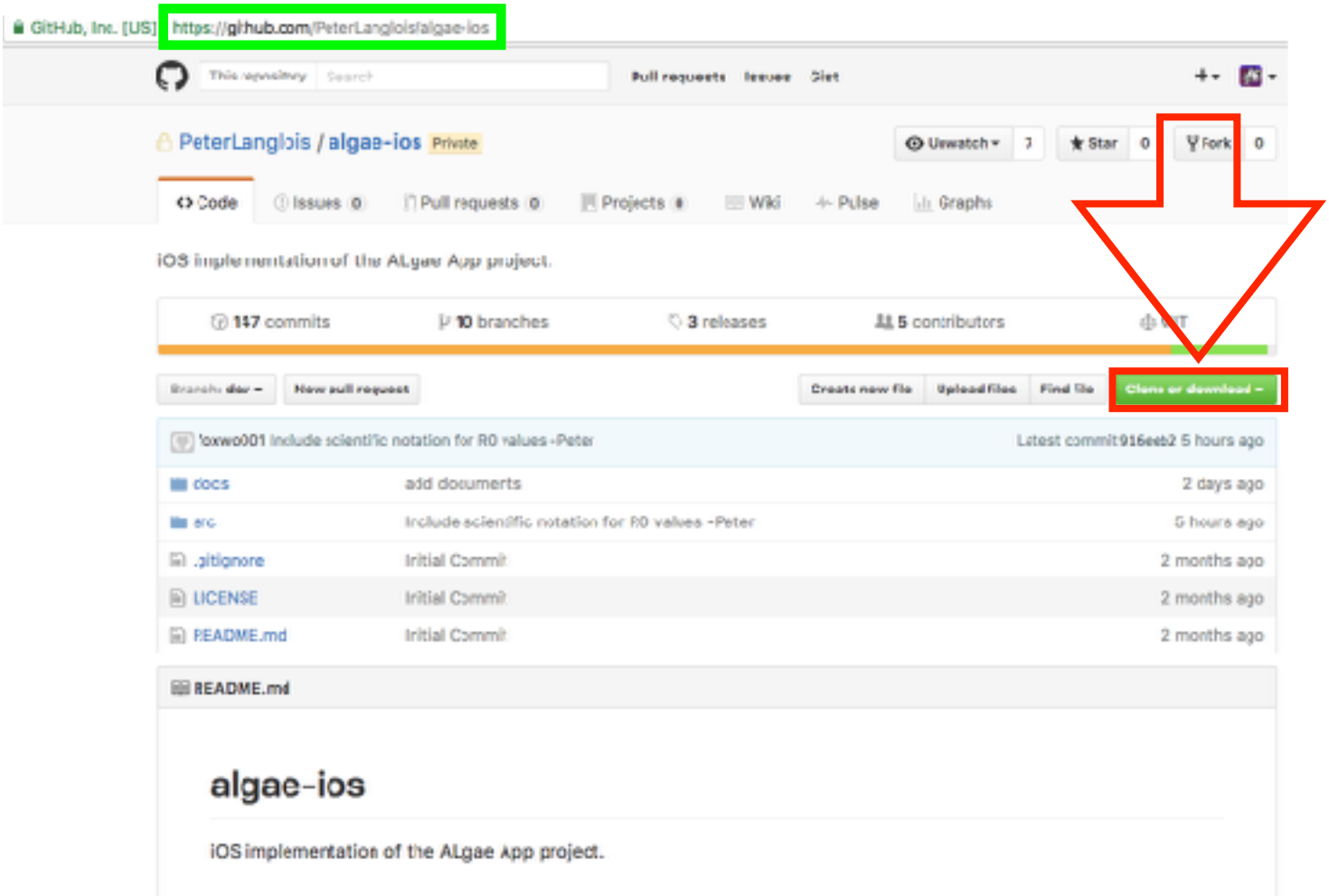
## How to Build & Deploy the Algae Estimator App

**ANDREW BARRETT, PETER LANGLOIS, MICHAEL HORNING, WALEED SAAD, DOMINIQUE TIPTON, ASIF REZA, QIAO LI**

## A. Build

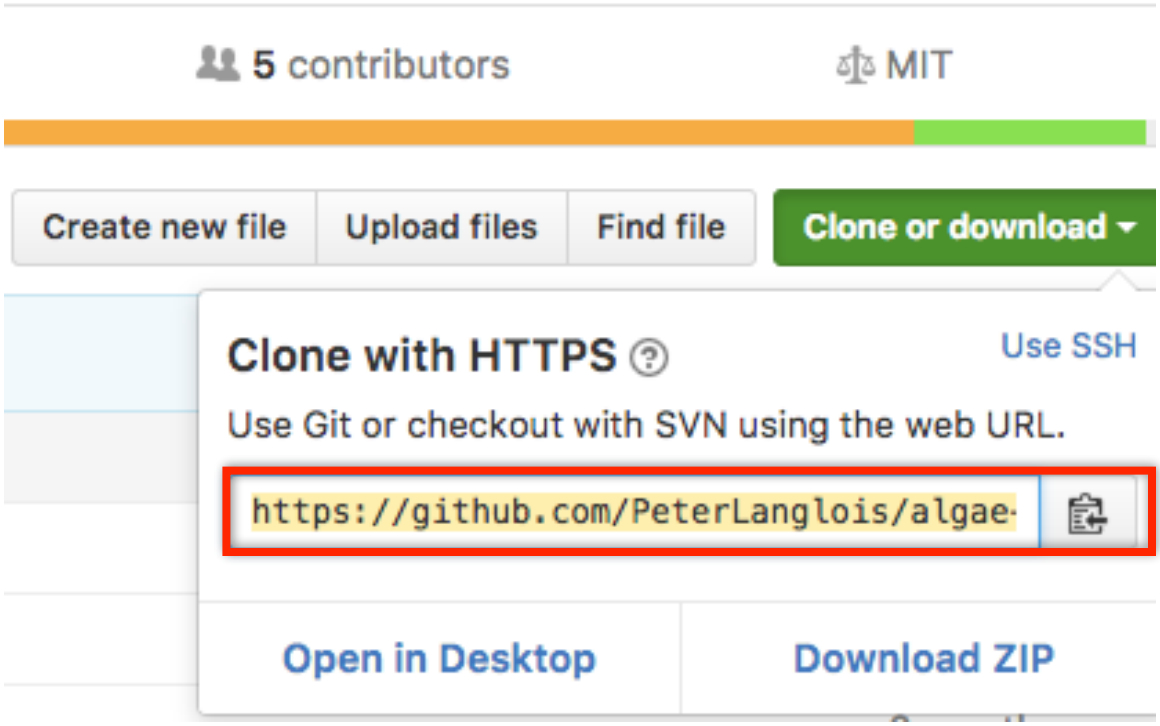
1. For the first step you want to make sure you currently have the latest version of Xcode using Swift 3 which can be found at the apple store located at: https://developer.apple.com/xcode/downloads/

2. The current location of the code can be located at https://github.com/peterlanglois/algae-ios

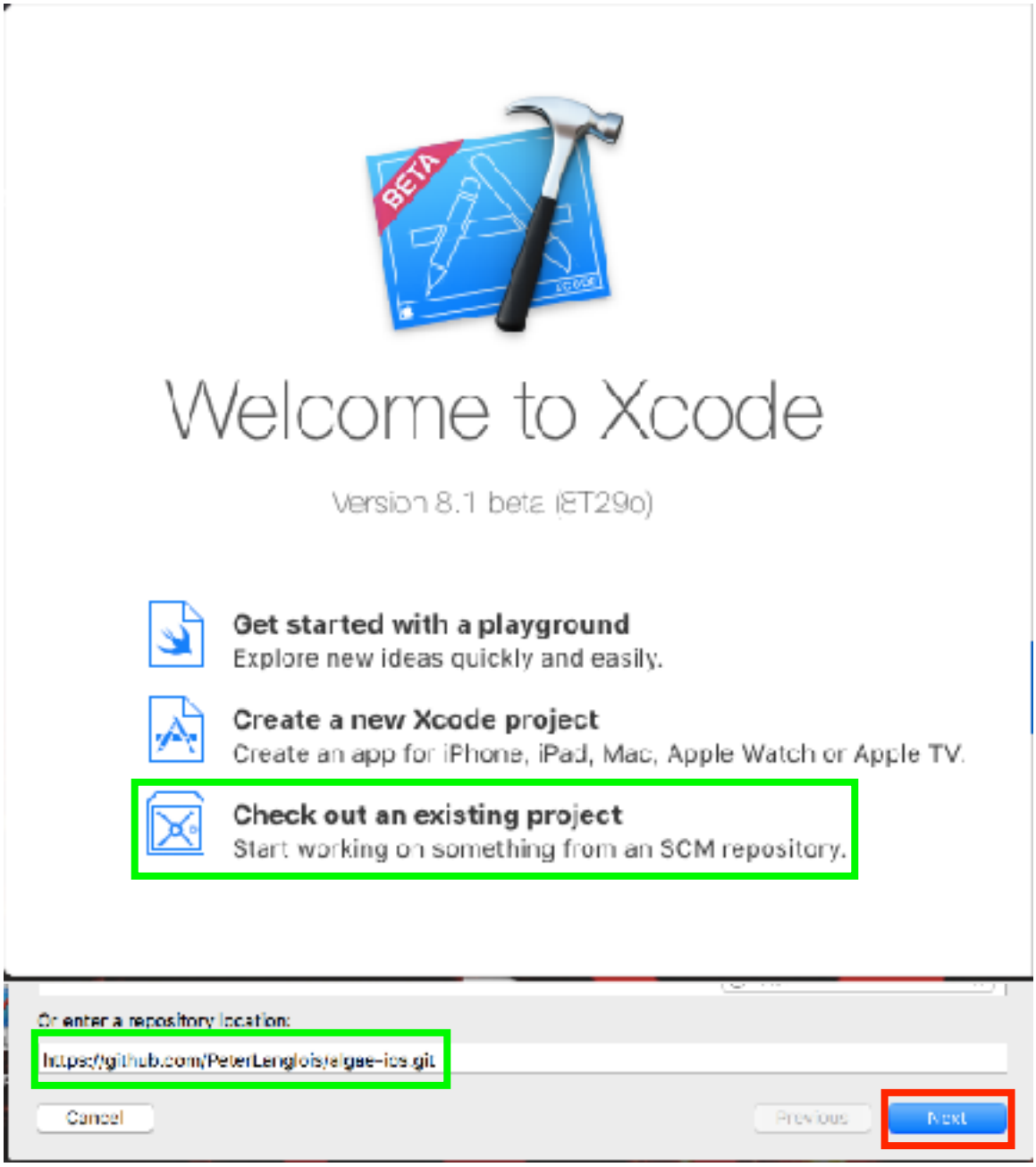


3. From GitHub you can click on the docs folders to view documents for the Algae Estimator App or you can click on the src folder which shows the Algae Estimator source code, test folders and pods.

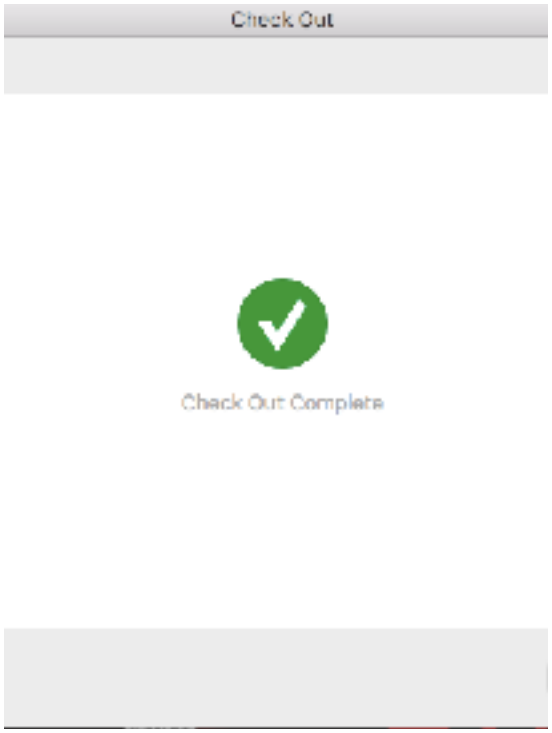
4. For setting up the build you want to click on the button that says to clone or download. After clicking this button it will display a link which you can copy to clone the repo.



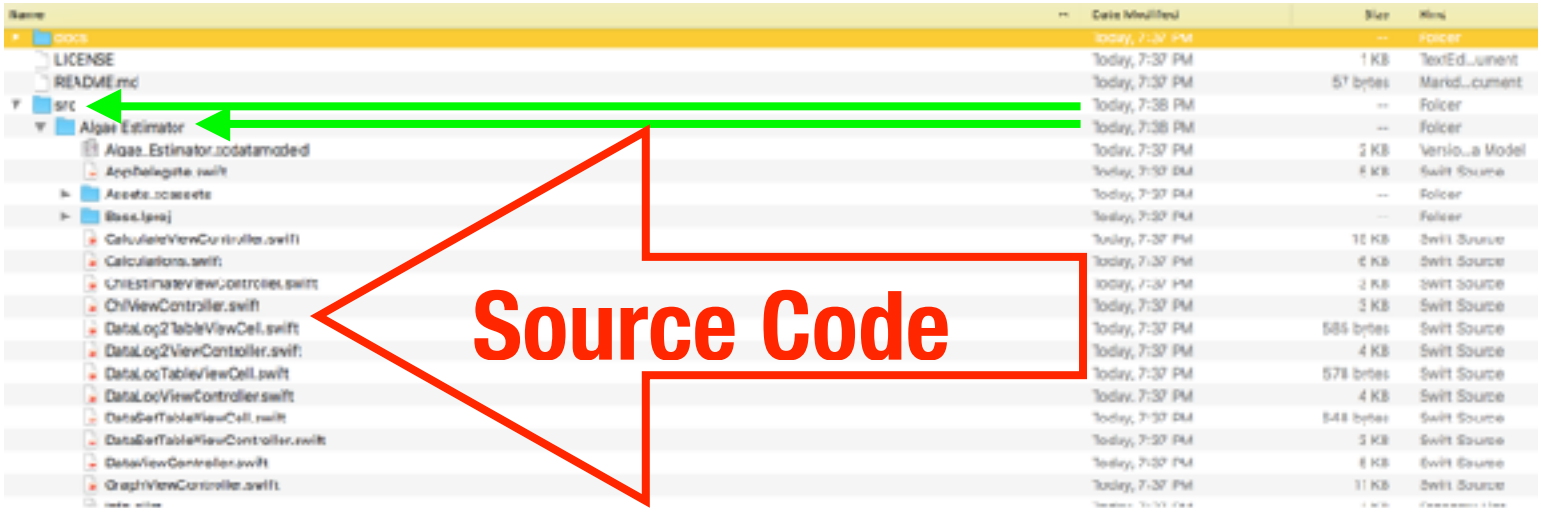
5. Now open up Xcode and near the bottom of the “Welcome to Xcode” you should see an option that says to “Check out an existing project”, you want to click on this and copy in the link from step 4.



6. You should now see a list of branches, these are some of the branches used to create segments of the project and the branch you will be looking at for the build is the master branch which will contain the full current version of the Algae Estimator App.




7. Choosing the master branch will contain all the current working code for the version release and Xcode will also ask you after selecting the master branch where you want to save this cloned repo project code. You can choose this location, and inside will contain a src folder which contains an Algae Estimator folder leading to the source code files.

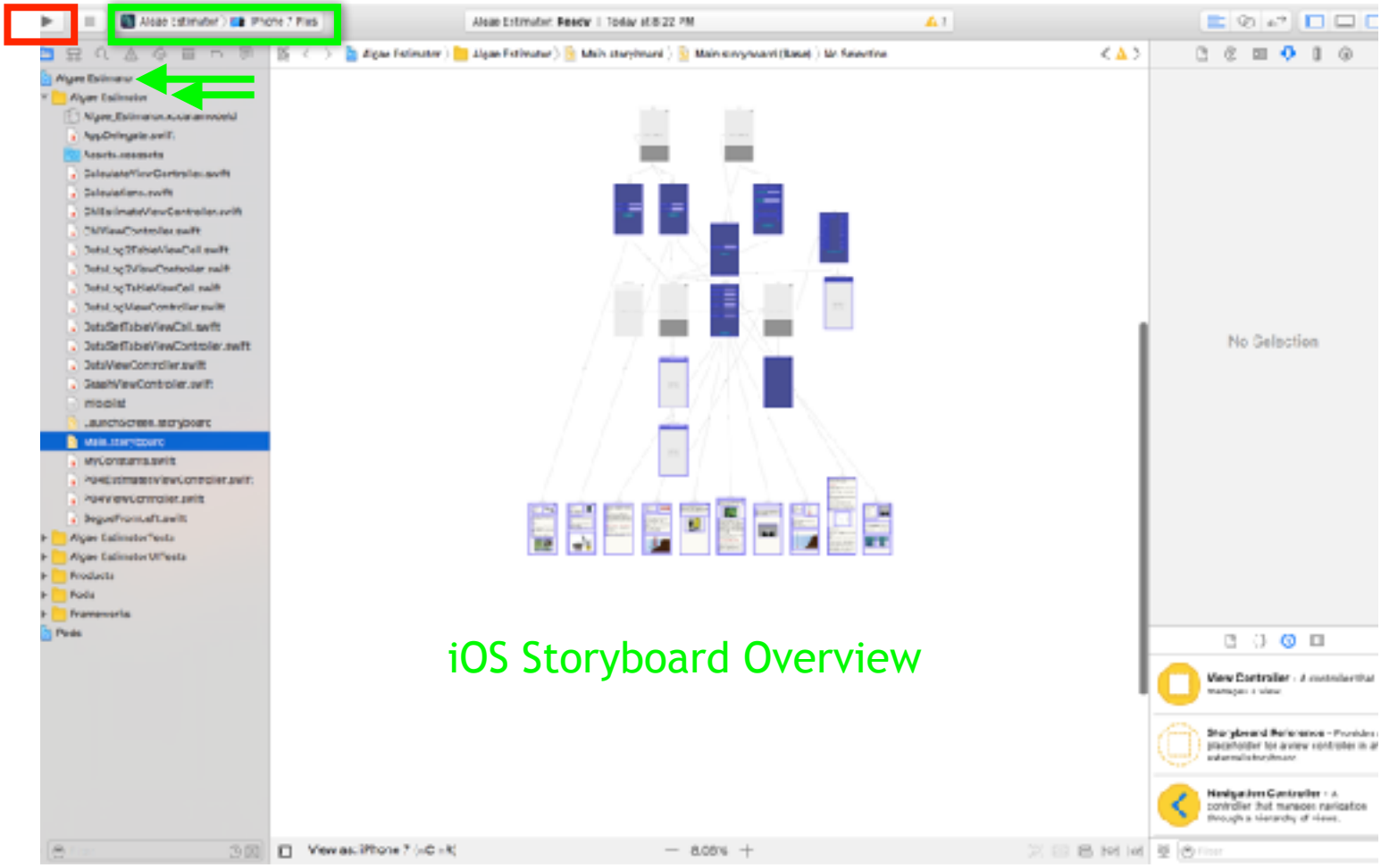


8. You can view the source code after cloning the repo to a specified location on your computer, then you will want to click on the src folder -> then Algae Estimator folder -> which will have all the source code files which can be viewed in Xcode with Swift 3.

# B. Deploy

1. Inside the Algae Estimator folder you should also be able to notice a file named “Algae Estimator.xcworkspace” which when clicked on will open up the project in Xcode.

2. Inside Xcode we can click on Algae Estimator on the far left side of the screen which will display a folder named Algae Estimator and when this is clicked you are able to view the source code files and if you click on “Main.storyboard” you are able to view the iOS storyboard overview which may look chaotic.




3. Now to ready the deployment process, on the top lefthand side of Xcode you will see a play and stop button. Next to those two buttons you want to confirm that it says [Algae Estimator -> iPhone 7 Plus] the iPhone 7 Plus is just the simulator in Xcode and can be changed to run from an iOS device of choice. After this is setup, you can finally click on the play button which will open up the Algae Estimator App which can then be used.