GIT BASICS - AN INTRODUCTION

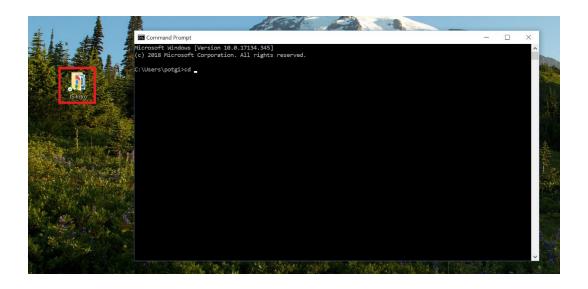
- 1. Download git (https://git-scm.com/downloads) and sign-up to GitHub (https://github.com/).
- 2. Open the command prompt (windows) or the terminal application (mac).



3. Type 'cd' followed by a space.

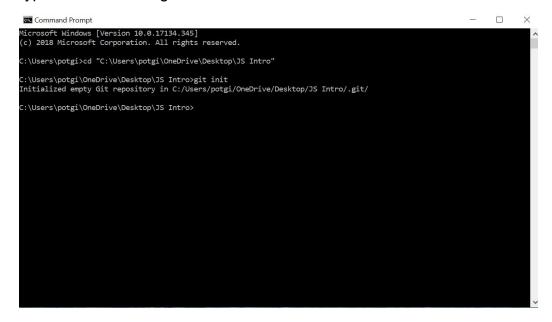


4. Introduce the project folder path (hint: Drag and drop your project folder into the command prompt/terminal) and press 'Enter'.

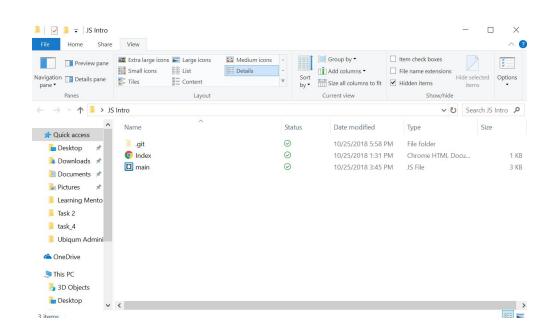




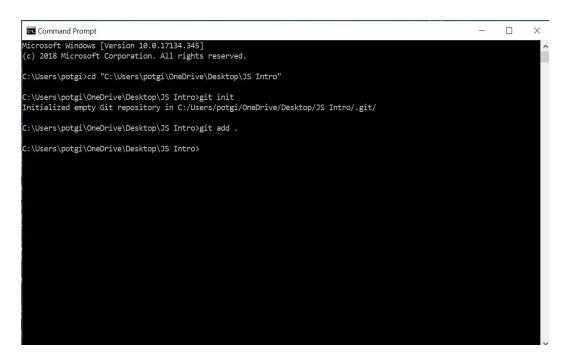
5. Type the command 'git init'. The word 'init' means initialize. Press 'Enter'.



6. A new git repository has now been initialized. You can see a hidden '.git' folder appear inside your project folder.



7. We can now add a file or all the files to the staging area or temporary storage. Type 'git add *filename*' or 'git add .' . ('git add .' adds ALL THE FILES to the staging area.) Press 'Enter'.



8. You can check the status of any changes made with 'git status'. It inspects the contents of the staging area/temporary storage.

```
Command Prompt

Microsoft Windows [Version 10.0.17134.345]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\potgi>cd "C:\Users\potgi\OneDrive\Desktop\JS Intro"

C:\Users\potgi\OneDrive\Desktop\JS Intro>git init
Initialized empty Git repository in C:\Users\potgi\OneDrive\Desktop\JS Intro\git\/
C:\Users\potgi\OneDrive\Desktop\JS Intro>git add .

C:\Users\potgi\OneDrive\Desktop\JS Intro>git status
On branch master

No commits yet

Changes to be committed:
   (use "git rm --cached <file>..." to unstage)
        new file: Index.html
        new file: Index.html
        new file: main.js

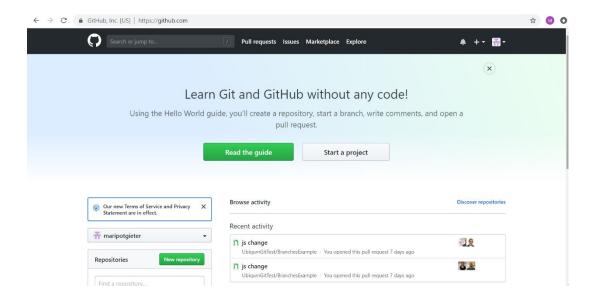
C:\Users\potgi\OneDrive\Desktop\JS Intro>
```

9. 'git commit' permanently stores changes from the staging area/temporary storage inside the git repository. Type 'git commit -m" descriptive name" and press 'Enter'.

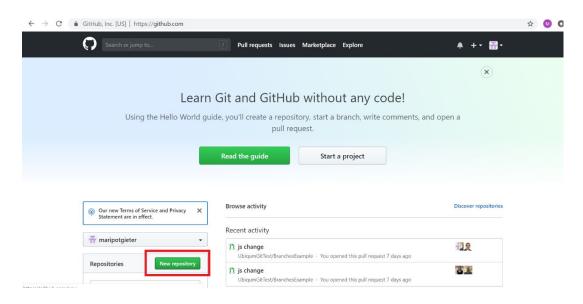
10. Your file/files have now been committed to the permanent git repository.

```
Command Prompt
                                                                                                                                   \square \times
 Microsoft Windows [Version 10.0.17134.345]
(c) 2018 Microsoft Corporation. All rights reserved.
 C:\Users\potgi>cd "C:\Users\potgi\OneDrive\Desktop\JS Intro"
C:\Users\potgi\OneDrive\Desktop\JS Intro>git init
Initialized empty Git repository in C:/Users/potgi/OneDrive/Desktop/JS Intro/.git/
 C:\Users\potgi\OneDrive\Desktop\JS Intro>git add .
C:\Users\potgi\OneDrive\Desktop\JS Intro>git status
On branch master
 No commits yet
Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
C:\Users\potgi\OneDrive\Desktop\JS Intro>git commit -m"file updated"
 [master (root-commit) 098b626] file updated
2 files changed, 159 insertions(+)
create mode 100644 Index.html
 create mode 100644 main.js
 C:\Users\potgi\OneDrive\Desktop\JS Intro>_
```

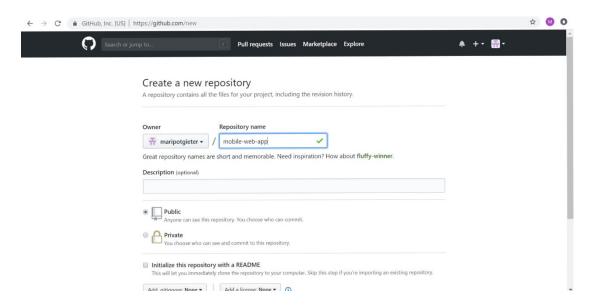
11. The next step would be to store all the files in the 'cloud'. Log into your GitHub account.



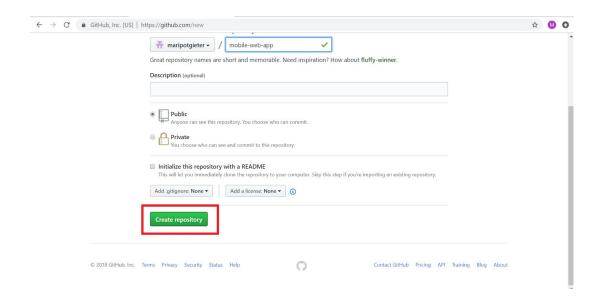
12. Click on 'New Repository'.



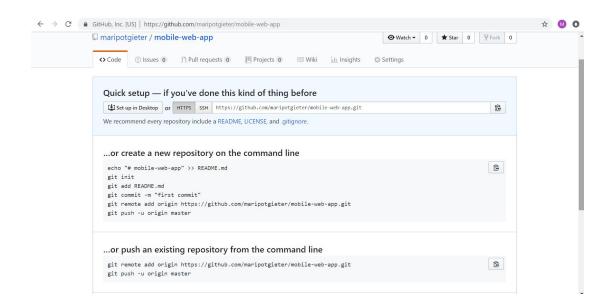
13. Give your repository a name – something descriptive. Feel free to add a description.



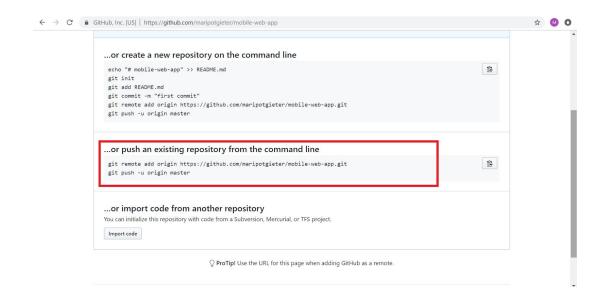
14. Click on 'Create repository'. (Important: Make sure that '*Initialize this repository with a README* is unchecked)



15. It will take you to the following page:



16. We already have an existing git repository and therefore will only need to copy the following two lines:



17. Paste the copied lines into your command prompt or terminal. Press 'Enter'.

```
Changes to be committed:
    (use "git rm --cached <file>..." to unstage)

    new file: Index.html
    new file: main.js

C:\Users\potgi\OneDrive\Desktop\JS Intro>git commit -m"file updated"
[master (root-commit) 098b526] file updated
2 files changed, 159 insertions(+)
    create mode 100644 Index.html
    create mode 100644 Index.html
    create mode 100644 main.js

:\Users\potgi\OneDrive\Desktop\JS Intro>git remote add origin https://github.com/maripotgieter/mobile-web-app.git

:\Users\potgi\OneDrive\Desktop\JS Intro>git push -u origin master

counting objects: 4, done.
Delta compression using up to 4 threads.
Compression objects: 100% (4/4), done.
Writing objects: 100% (4/4), 1.48 Ki8 | 1.48 Mi8/s, done.
Total 4 (delta 0), reused 0 (delta 0)
remote:
    remote: Create a pull request for 'master' on GitHub by visiting:
    remote: https://github.com/maripotgieter/mobile-web-app/pull/new/master
    remote:
To https://github.com/maripotgieter/mobile-web-app/pull/new/master

Branch 'master' set up to track remote branch 'master' from 'origin'.

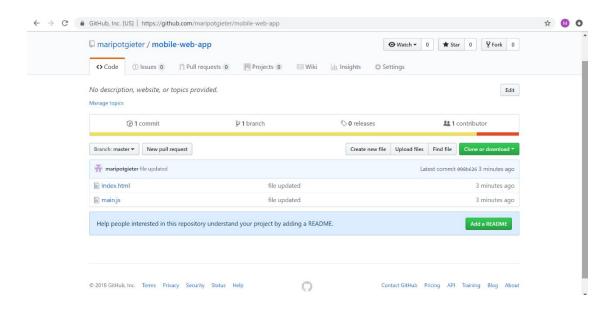
C:\Users\potgi\OneDrive\Desktop\JS Intro>__
```

18. The first time that you connect your local repository with a remote repository, Git will ask you to register. In order to do that just copy the two lines, one by one, that Git provides and type your username and your email.

```
C:\Users\polbe\Desktop\Ubiqum\Java\salvo>git config --global user.email "Your email"

C:\Users\polbe\Desktop\Ubiqum\Java\salvo>git config --global user.name "Your Name"
```

19. When you return to your GitHub page and refresh/reload the page, you should see that the commits have been successfully uploaded to GitHub.



IMPORTANT GIT COMMANDS TO REMEMBER:

- 'git init' it initializes an empty git repository in your project folder. You only do this ONCE for a project, otherwise you will override the previous repository and lose all your stored commits.
- 'git status' you can check the changes made to the staging area.
- 'git add filename' or 'git add .' adds a file or all files to staging area.
- 'git commit -m''descriptive name'' permanently stores changes from the staging area inside the git repository.
- 'git log' you can view all the commits made by using this command.
- 'git push' this will push your branch up to the remote/GitHub repository.