Introduction

In this lesson we discuss why you should learn **Git**, what is **version control** and what are the benefits of learning and using Git.

What is version control?

Often when coding, many changes are made to the files. For example, you might decide to add a certain feature or delete another one, and so on. And when you save your file with these new changes, you overwrite the previous version of the file. There's no way of going back to the previous version unless you save the file with new changes under new names. This is not very convenient, especially for complex apps. For example, you might deploy a web app and then decide to come back to a previous release of the web app, with or without a certain feature. This could mean changes to one or more components of your code files.

In cases like this version control is extremely useful and important. Learning a version control tool like Git will save you lots of time and effort.

So, what is version control? It is a method of recording changes to a file or a set of files. Recording changes allows you to come back to a specific version as you continue coding.

There are two methods of version control: **centralized** and **distributed**.

- With the centralized version control method, the code file or files are stored on a central server. Then you and your team mates will make changes to the code files on the central server.
- In a distributed version control method (for example, Git) the code files which are stored on a central server, but can be cloned (copied) by you and your teammates. Then during the course of your coding project, each of you can make changes to your own copy of the code file. Towards the end of the project, you can send your code file with new changes to the central server. During the course of the project you and your teammates can also collaborate with each other.

That's how Git works: it's a distributed version control tool.