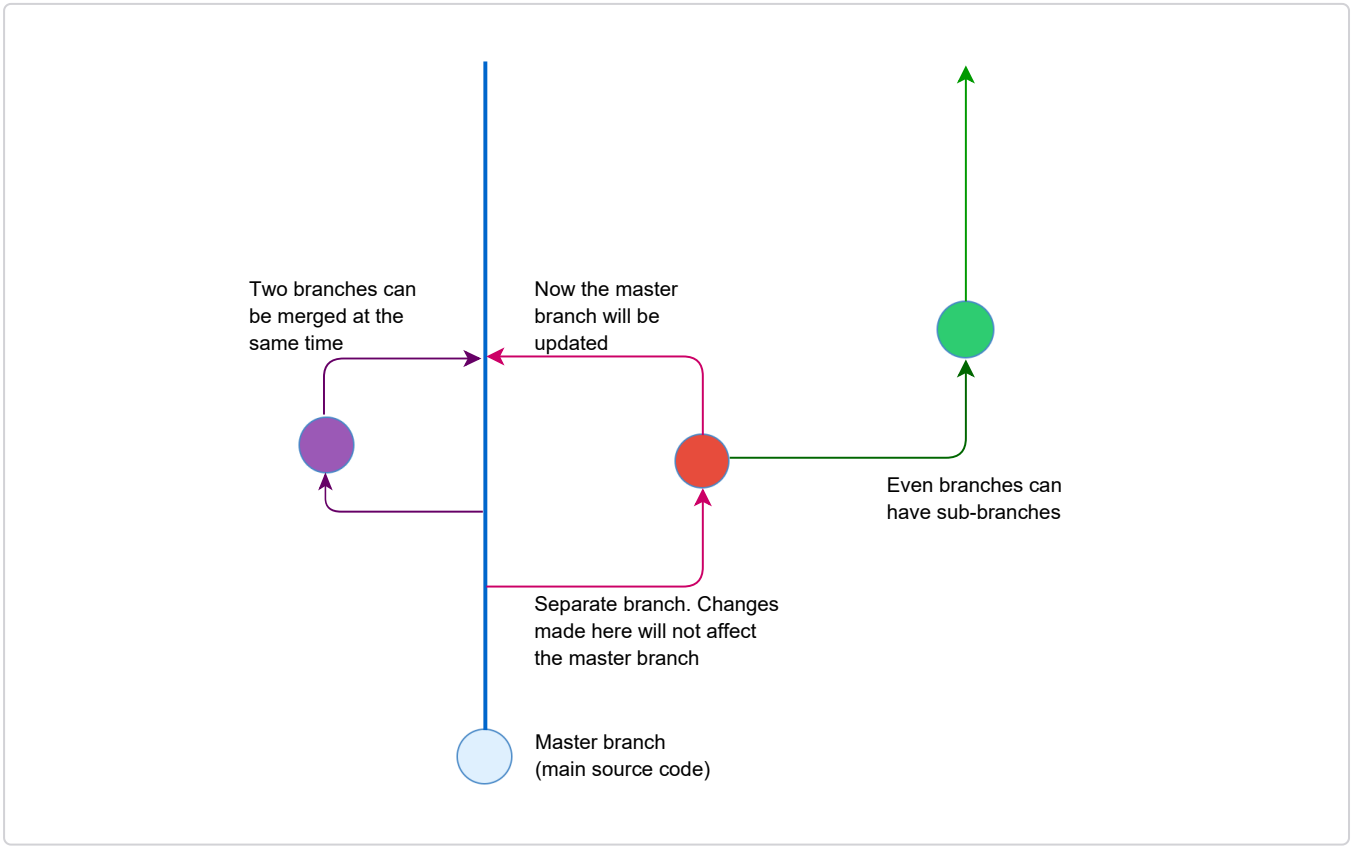
Pushing to a Version Control System Application

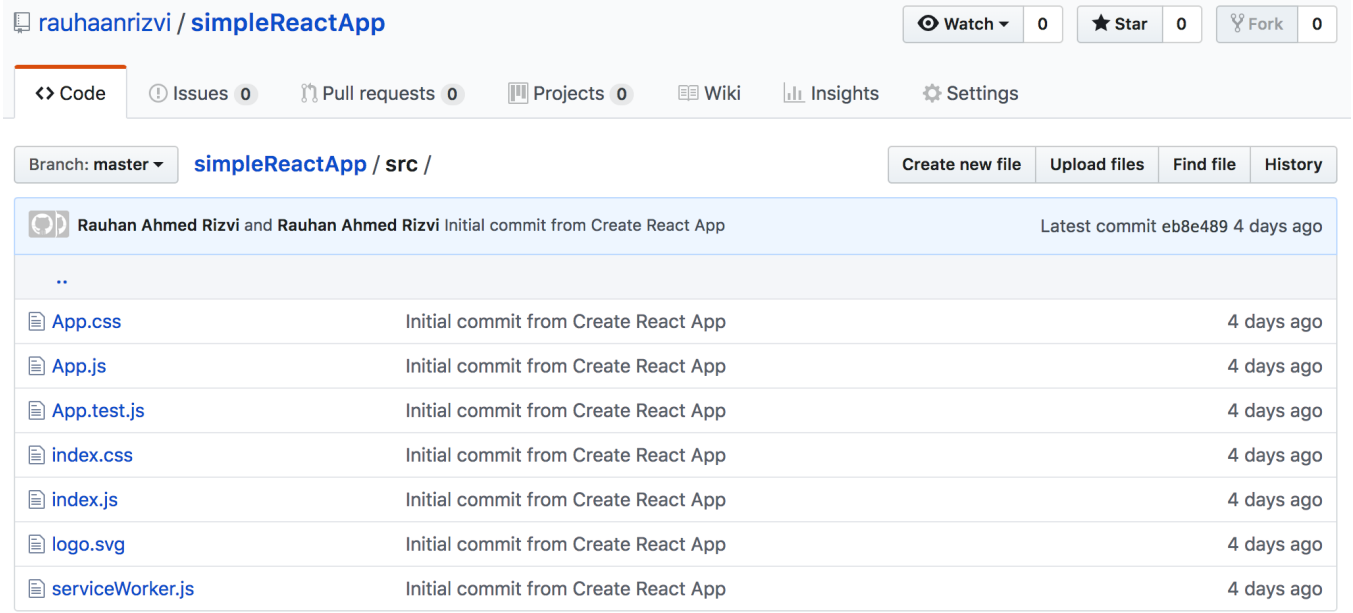
This lesson deals with uploading our website code to a VCS application like GitHub.

In the last lesson, we learned how to communicate with the server using SSH. We mentioned the `scp` command which transfers files from our local machine to the server. Although the command is available to us, it is generally not a smart way to transfer our code to the server. Instead, we bring a third player into the mix: a **version control application**.

> Version control refers to the principle of keeping track of the code of an application. All the code is stored online and changes can be made by those who are given permission (development team).



A VCS is an application which provides the version control functionality. GitHub is the most popular platform for storing code in repositories. Here is what a typical repository looks like:



So, rather than transferring files from our local machines, we copy the code from the repository to the server using:

```
git clone <URL>
```

Replace `<URL>` with the actual address of the repository.

Every time a change or update is made in our application's implementation, the new changes are pushed to the server. Different hosting services have different commands for pushing code to the server through SSH. Google Cloud uses its own CLI commands, whereas Heroku allows pushing to the master branch through `git push heroku master`.

Do keep in mind that both the server and our local machine should have Git installed.

If GitHub does not suit someone, he or she has a plethora of other VCS applications such as Bitbucket and GitLab.

The next step is to finally deploy our website to a hosting service. For the purpose of this course, we will be using the **Google Cloud Platform**. Let's get started in the next lesson!