Source Code management (SCM) is a term for the ability to manage multiple versions of document or collection of documents. Just imagine we are building a website that includes all kind of files such as HTML, CSS, JavaScript, Images, etc. SCM keeps track for every change that we make to our project. For example, let’s imagine we adjust the CSS file on website, maybe we delete a few styles and add a few new styles. We think that everything is great but a month later we discover that, or code changes broke the layout on a few pages. So, instead of keep guessing that what code we adjusted a month ago, we can have Git tell us exactly on which day we changed which files and it will even show us which lines of code we added and which lines of code we removed. With the help of Gits, nothing is ever lost or final.

Collaboration: If we ever try to create something on the computer with group of people or a team, the common concern is trying to avoid accidentally deleting or overwriting each other’s progress. For example, let’s imagine we are writing a book and we finished the first one and half chapters and we send an email to our friend with a word processing file attached and ask him to make few edits to finish the chapter, and then sending the attachment back. Until you get the updated file back, you are stuck, and you won’t be able to guess where exactly the changes have been done. You might have to ask your friend the list of changes he made. The whole scenario will be really frustrating for both persons. The process of tracking the changes, comparing, and merging is exactly what Git does for us. Git makes collaboration very easy and allows you to be more productive when working in a team. Git will take care of merging any conflicts and will save the day.

Feature branches: Let’s imagine we have an existing website that we are responsible for editing, updating, and making improvements to. And let’s say we were assigned two tasks:

1. we need redesign the header of the website, maybe add a new logo, change the slogan, change the colors.
2. We need to adjust the styling and ordering of the links in the footer.

The Git way of implementing multiple tasks or features;

Think of our project as a tree, and we have to create two new branches, one for each task. So, we can go back and forth to each branch or two versions of our project while making changes, and Git tracks the branches separately from one another. So, it is not a big deal which feature is finished first.