

Research

What is Git?

Git is a lightweight program used for Software Change Management. One of its unique features is the ability to branch from a project and then merge that branch back into the project. The software is useful so that teams no matter the size or distance can collaborate on a project and work on one piece of the same software while someone else works on a different piece of the same software. Git also uses a distributed system that stores the project locally on any machine that is working on the project so if the remote server fails you can push the version of your repo to the remote server and losing minimal data. Another unique aspect of git is there staging function that allows you to review or format anything before you commit it. My most favorite thing about git is the fact they use an open source license ensuring it is free and available to anyone that wants to use it

Source: <https://git-scm.com/about>

What are the 8 primitive data types in Java

There are 8 different primitive data types within Java those being int, double, Boolean, byte, char, float, long, and short. Some of these primitives store number values while others store characters and true false values. The Integer data type stores a number value from -2147483648 to 2147483647. Short is like the integer data type that stores a number value but only uses 16bits instead of 32bits. It can store values -32,768 to 32,767. Byte is an even smaller bit size only being 8bits and can store values from -128 to 127. Due to bytes small size it can be used in arrays to store a list of number values. Long again is like the Integer data type but is larger using 64bits of data to store -922337203 6854775808 to 922337203 6854775807. Now I am going to move onto data types that can store decimal places as well as whole numbers. Double takes up 64bits and can have up to 754 floating points. Float only uses up 32bits of data and can store up to 754 floating points. Both of these data types are not recommended for use with currency since there are more precise options that exist within Java. Now we can move on from the data types that store number values. The char data type uses 8bits of data and stores Unicode information. In other words it can store single characters. Next the Boolean data type this data type only takes up one bit of data since it only has two possible stores of value those being true or false. You might be thinking I am missing a data type, string, but String isn't actually a primitive but is used so often that it could be mistaken as one. String is used to store a let's say string of characters that may be a word.

Source: <https://docs.oracle.com/javase/tutorial/java/nutsandbolts/datatypes.html>

What are your favorite things you learned this week?

So far my favorite thing that we learned this week was Git through the command line. This skill seems essential to working on a team within an organization. I know GUI interfaces for git commands do exist but understanding how the things that run in the background gives me a more basic understanding of the program so I can easily troubleshoot issues I may have with my Git repository. Learning this will also give me the ability to contribute to open source software and become a part of the open source community. I love the idea of not only using software but also contribute to the software you are using and adding features to software that you want to see.