Hey Everyone,

These past few weeks you have all learnt a lot of new technologies and programming languages such as Java, HTML, CSS, Git, Sublime, IntelliJ, Github and the command line.

Today we begin learning Javascript. Before we dive into yet another programming language, I want to take a second to clarify some of the concepts we have seen thus far.

***Java***

Java is a strongly typed programming language, that needs to be compiled before it can run. What does this mean? We can’t run our Java code, without a compiler checking it first, and creating an executable file.

***IntelliJ***

IntelliJ is a IDE – Integrated Development Environment. What does this mean? Besides giving us a comfortable place to *write* our code, IntelliJ offers a lot of great features for developing Java. One of the features you have used the most so far, is the compile and run button. (The green arrow in your IntelliJ). This is a quick and fast way to compile and run your code. This feature is great, and is also available in other Java IDE’s such as Eclipse, Netbeans and JDeveloper. It is important to note that you could also opt (if you wanted to) to compile your Java code from the command line and then run it.

The important thing to note is as follows: IntelliJ offers many nice features for Java development such as code highlighting, bracket matching, easy code compilation etc. These utilities are in no way unique to IntelliJ – they exist in all of the aforementioned Java IDE’s as well.

***HTML***

Hyper Text Markup language. This is the bare bone skeleton, or “blueprint”, of our web pages.

***CSS***

Cascading Style Sheets. We write CSS rules, in order to style our HTML documents.

***Sublime***

Sublime is simply a text editor. It is similar to other text editors you may know like atom, notepad++, VIM (for those who dare), Brackets etc. Out of the box, it offers neat features like code highlighting, bracket matching etc. Because Sublime is a text editor, and not an IDE, you cannot compile a Java file on it. There is no Sublime compiler! Sublime is very [popular](https://www.quora.com/Why-is-Sublime-Text-2-so-popular) in the software dev community. Therefore many plugins, addons and themes have been developed for it. These do not arrive manually, and you must add the ones you want yourself.

***GIt***

A version control system, used for software development. It helps us manage our code base, record changes to it, and collaborate easily. There are other version control systems such as Mercurial. Many companies build their own version control systems for their specific needs.

Today we learnt how Git as a system works. We studied the Git Workflow - Working Directory, Staging Area, Repository (Local Repository and Remote Repository).

Because of Git’s popoularity many IDE’s (IntelliJ for example), and text editors (Sublime, aTom – which was created by Github) have plugins for it.

***Github***

A web-based Git repository (fancy name for a folder) hosting service. Github let’s us store our Git projects online. There are other fantastic Git repository hosting services, such as Bitbucket.

Today we discussed how to connect our local Git projects, to the Github online service with such commands such *git push origin master,* when origin is specified as a Github address.

***Command Line***

Allows us to interact with software, files or directories via textual commands. This is the default way to communicate with Git, although GUI’s (graphical user interfaces) and plugins do exist. When you get stuck using Git, most of the online help will be for this type of Git interaction.

It is very important to understand what each technology we use gives us, and what problem it solves. It is also important for us to understand how things work under the hood. This is because we do not want to tie our knowledge to one specific framework – ie. Intellij, Sublime etc. (What if our next work place uses Webstorm or *insert popular IDE /text editor here*?).

Everything you are doing using the IntelliJ plugin, you should also be able to replicate in your command line, Sublime plugin, or any other IDE / Text editor you select to use.

The only factor that should determine what technology you use is your personal comfort. Do not let the abstractions that some of these applications offer replace your understanding of the underlying system.

Everyone, these coming months, is exactly the time to expand our minds, and experiment with as many technologies and concepts as possible. Mix it up, push yourself to your limits, and you will look back on your boot camp, knowing it was a satisfying, worthwhile experience.

I hope this clarifies some of the concepts.

As always, feel free to ask questions!

Good luck this week,

Omer