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Module 0 — Tool and Infrastructure Setup

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Lab 0: Tools and Infrastructure

Part I. (20 points) Watch **this video** (https://www.youtube.com/watch?v=MaqVvXv6zrU) about GitHub Desktop. We won't be using branching or merging in CS5004, so you can watch just the first 17 minutes (and go back to finish watching this video in the future when you won't feel as overwhelmed).

1. Install GitHub Desktop **https://desktop.github.com/download/** (https://desktop.github.com/download/)
2. Use GitHub Desktop, as shown in the video, to create a ***local*** "repo" (a folder/directory on your laptop) called CS5004. This should be in your user/home directory (but *not* within the Documents folder if you are using a Mac). On *my* computer, it might be called: **Macintosh HD/mlmiller/CS5004**. DO NOT CREATE THIS FOLDER ON YOUR DESKTOP!
3. Use GitHub Desktop to associate your CS5004 Folder with a corresponding GitHub Repo directory on GitHub.com.
4. Within the CS5004 folder on your local computer:
   - Create a subfolder for **Labs** within CS5004
   - Create a subfolder within Labs for **Lab0**

- **(10 points)** Create **survey.txt** using a text editor (not a word processor) in your Lab0 folder, commit, and push it to your ***remote repo***.

Part II.

A. **(10 points)** Install **Java** https://docs.oracle.com/en/java/javase/11/install/overview-jdk-installation.html (https://docs.oracle.com/en/java/javase/11/install/overview-jdk-installation.html)
B. **(10 points)** Install **IntelliJ** https://www.jetbrains.com/idea/download/?section=mac (https://www.jetbrains.com/idea/download/?section=mac) *Scroll down for* ***Community Edition****!*
C. **(10 points)** Invite "mlmiller@learningtech.org (mailto:mlmiller@learningtech.org) " plus *each TA*'s preferred GitHub address to collaborate on your repo.
D. **(5 points)** Create a Python program, **power.py**, within your Lab01 folder to **compute 2 raised to the 31 power and print** the result.
E. **(5 points)** Create a Java class, **Power.java,** to do the same thing as the Python version.
F. **(3 points)** Within */* ... */* in the Power.java file, describe three differences versus the Python version.
G. **(7 points)** Create a Java class, **AddFromKbd**, to read two integers from the keyboard and print their sum.

Hint:

```
import java.util.Scanner;

//...

Scanner in = new Scanner(System.in);
int num = in.nextInt();
```

H. **(15 points)** **Commit** and **push** everything when finished. You can use GitHub Desktop for this step. Next week we will get IntelliJ to do that.
I. **(5 points)** Copy the URL for this lab's **folder** *on your GitHub repo* and submit that on Canvas. Both are required! The date and time submitted on Canvas must match the file dates on GitHub and be before the posted deadline.

Points	100
Submitting	a website url

Due	For	Available from	Until
Sep 11, 2025 at 6:30pm	Everyone	-	-

+ Rubric

Please remember to invite us to your github repo :)

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