

COMP90041
Programming and Software Development
2020 - Semester 2
Lab 1

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Introduction

- ❖ **Timetable**

- ❖ Tue(18) 16:15-17:15 (Melbourne Time)
 - ❖ <https://unimelb.zoom.us/j/94854648719?pwd=WUY0NmR6MkI5UVZBUWhGNWFIU216Zz09>
- ❖ Wed(19) 17:15-18:15 (Melbourne Time)
 - ❖ <https://unimelb.zoom.us/j/93723434766?pwd=MGh4QkJuZnhJR21LZ0VqeXhJQU52UT09>

- ❖ **GitHub Page** (Tutorial Materials, Solutions, Additional Resources)

- ❖ <https://github.com/Beaconsyh08/COMP90041-2020SEM2>

- ❖ **Structure**

- ❖ **Review + Exercise**

Outline

- ❖ Brief Introduction for Zoom
- ❖ Introduction about Me
- ❖ Introduction of you
- ❖ Get ready for this semester
- ❖ Several Exercises and Demos

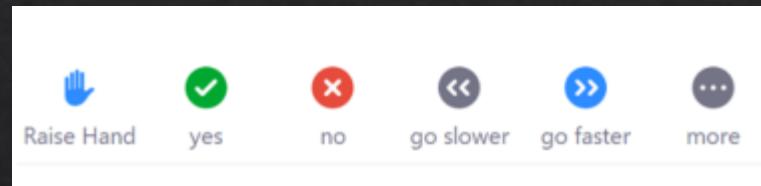
Zoom

- ❖ **Download**

- ❖ <https://www.unimelb.edu.au/zoom/home>

- ❖ **Basic Function**

- ❖ Yes & No
 - ❖ Raise Hand
 - ❖ Poll



- ❖ **Preparation**

- ❖ Food
 - ❖ Drink

Zoom Tutorial

- ❖ Camera
 - ❖ Encouraged, but not mandatory
- ❖ **Poll Everywhere** prepared
- ❖ Questions?
 - ❖ The Chat Area or Raise Hand
 - ❖ Discussion Board
 - ❖ Email me



Who's Yuhao

❖ Education:

- ❖ BSc. *Hospitality and Gaming Management*, Faculty of Business Administration, University of Macau
- ❖ MEng. *Information Technology*, Melbourne School of Engineering, The University of Melbourne

❖ Work Experience:

- ❖ IT Consultant, Oracle, Deloitte Consulting
- ❖ Algorithm Engineer, AI lab, Xiaomi Corporation
- ❖ **Tutor**, MSE-CIS, The University of Melbourne



Poll Everywhere

- ❖ Interactive Poll Web App
- ❖ <https://pollev.com/yuhsong>

✉ Respond at **PollEv.com/yuhsong**
☞ Text **YUHSONG** to **37607** once to join, then **A, B, C, D, or E**

What programme are you enrolled?

Master of Information Technology	A
Master of Engineering (Mechatronics)	B
Master of Data Science	C
Graduate Diploma in Computer Science	D
Others	E

Introduction to your peers

- ❖ Who are you, Where are you from, what subjects are you taking
- ❖ What is your undergraduate study field
- ❖ Why are you taking COMP90041
- ❖ What do you feel for this SEM so far
- ❖ ...

Learn to Google It

- ❖ Official Document/Website
- ❖ Stack Overflow
- ❖ Quora
- ❖ YouTube
- ❖ Medium
- ❖ ...
- ❖ **Best-websites-a-programmer-should-visit**
 - ❖ <https://github.com/sdmg15/Best-websites-a-programmer-should-visit#when-you-get-stuck>

Setting up your environment

- ❖ Set Up a Local Development Environment for **Windows OS**
 - ❖ <https://www.oracle.com/webfolder/technetwork/tutorials/oraclecode/windows-hol-setup.pdf>
- ❖ **Mac OS** user could done it with **terminal**
- ❖ Recommendation for Windows OS user – **WSL (Windows Subsystem for Linux)**
 - ❖ <https://docs.microsoft.com/en-us/windows/wsl/install-win10>



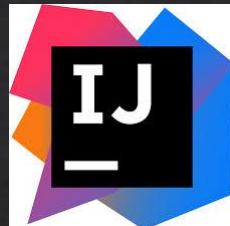
javac & java

- ❖ The **javac** command is used to **compile** Java programs
 - ❖ **.java → bytecode**
 - ❖ *>javac sample.java*

- ❖ The **java** command is used to **execute** the bytecode of java
 - ❖ **byte code → output**
 - ❖ *>java sample*

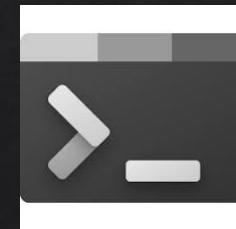
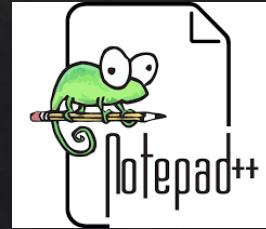
IDE

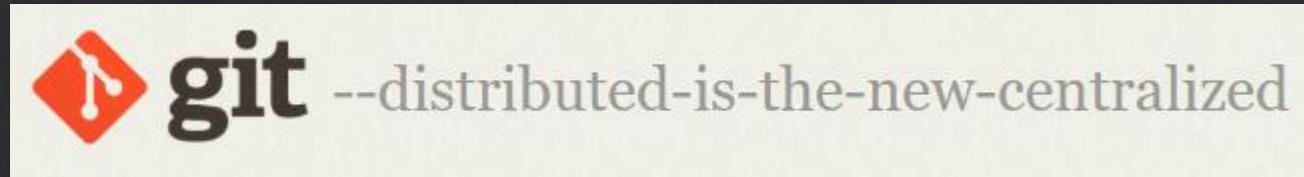
- ❖ IntelliJ (Ultimate - Unimelb Acc)
 - ❖ EDU ACC
<https://www.jetbrains.com/comm unity/education/#students>
- ❖ NetBeans
- ❖ Eclipse



Or Even...

- ❖ Sublime
- ❖ Notepad++
- ❖ Terminal





- ❖ **Git** is a free and open source **distributed version control system** designed to handle everything from small to very large projects with **speed** and **efficiency**.
 - ❖ **Download:** <https://git-scm.com/>
- ❖ **GitHub** – Mostly used / Tutorial Material
- ❖ **GitLab** – Probably the **submission platform** for the **Projects**

Exercises

These are just for practice, and will not be assessed.

1. Write a Java program that displays your name, address and telephone number each on a separate line.

2. Write a Java program that declares and initialises a String variable "Hello, World!" Print out the variable on a line by itself. Then, using the String methods discussed in Chapter 1, print out the same string in ALL UPPERCASE on a line by itself.

Hello, World!

HELLO, WORLD!

3. Modify the above program by just changing the initial value of the String variable "So Long!" and run it again. Now it should print out:

So Long!

SO LONG!

Tasks

- ❖ Set up the **environment** if you have not
- ❖ Install your favourite **IDEA**
- ❖ Install **Git** and try to get familiar with **Git**
- ❖ Stay **Safe!**

Additional Resources

- ❖ **JVM:**
 - ❖ <https://www.youtube.com/watch?v=G1ubVOl9IBw>
- ❖ **JDK vs JRE vs JVM: Key Differences**
 - ❖ <https://www.guru99.com/difference-between-jdk-jre-jvm.html#:~:text=JDK%20is%20a%20software%20development%20kit%20whereas%20JRE%20is%20a,JVM%20is%20Java%20Virtual%20Machine.>
- ❖ **Git & GitHub Crash Course For Beginners**
 - ❖ https://www.youtube.com/watch?v=SWYqp7iY_Tc