

COMP 3111 Software Engineering

Lab Classes
Spring 2022

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Teaching Team



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Instructor



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Teaching Assistants

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Assessment Components

Item	Weight
Pre-Lecture Quizzes	10%
In-Class Exercises	10%
Lab Assignments	10%
Team Project	25%
* Activity 1: System Req Spec	(5%)
* Activity 2: System Imp & Test	(20%)
Midterm Quiz	5%
Final Exam	40%

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Lab Class & Assignment



To earn the credit points, you must make an online submission of your completed lab assignment by the respective deadline. **Submission of Lab Assignment is done via Canvas.** Late submissions will be scored with zero marks.



Each lab class will start with a **brief presentation** of the topic of the week (walking through the lab exercises and tasks), followed by **Q&A time** to address specific issues of concerns and questions from the participating students.



Attendance for COMP3111 lab classes is **optional**. Video recording of the walkthrough of the lab tasks will be released on Canvas the following day.

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Lab Sessions 9:00AM – 10:50AM (FRI)

Date	Lab	Topic	Presented By	Graded By
Feb 18	#1	Git and GitHub	Namkiu & Haoyang	Haoyang
Feb 25	#2	Java Programming Basics	Namkiu & Hungchun	Hungchun
Mar 4	#3	JavaFX	Namkiu & Yukun	n/a
Mar 11	#4	Data Modeling	Namkiu & Hungchun	n/a
Mar 18	#5	Teamwork with GitHub	Namkiu & Haoyang	Haoyang
Mar 25	#6	Debugging Tools	Namkiu & Yukun	Yukun
Apr 1	#7	Unit Testing	Namkiu & Hungchun	Hungchun
Apr 8	#8	Conflict Resolution and Documentation	Namkiu & Yukun	Yukun

* zoom link to the lab sessions has been posted on Canvas

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TA Office Hours 5:30PM – 6:30PM (MON)

Date	TA-on-Duty
Feb 21	Haoyang
Feb 28	Hungchun
Mar 7	Yukun
Mar 14	Hungchun
Mar 21	Haoyang
Mar 28	Yukun
Apr 4	Hungchun
Apr 11	Yukun

* zoom link to the TA Office Hours sessions has been posted on Canvas

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Channels of Support



Email your questions to the Instructor or TAs



Ask questions or seek clarifications from the instructor during the **lecture** sessions



Ask questions or seek clarifications from the TAs during the **lab** sessions



Ask questions or seek clarifications from the TAs during the **TA Office Hours**



Post questions or share your thoughts on **Telegram group** for peer support

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Lab #1: Git and GitHub

Walking through lab exercises and tasks

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Software Development Environment

- Java SE Development Kit 15 (JDK 15.0.2)
<https://www.oracle.com/java/technologies/javase/jdk15-archive-downloads.html>
- Eclipse IDE for Java Developers 2020-12 R
 - <https://www.eclipse.org/downloads/packages/release/2020-12/r>
- GitHub
 - <https://www.github.com>

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Virtual Barn

<https://itsc.hkust.edu.hk/services/academic-teaching-support/facilities/virtual-barn>

- If you have difficulties in setting up the software development environment on your own computer, you might choose to use Virtual Barn instead (where the proper versions of Java SE Development Kit and Eclipse IDE for Java have already been installed)
- Download VMware Horizon Client on your laptop:
 - <https://itsc.hkust.edu.hk/services/academic-teaching-support/facilities/virtual-barn/installation>
- Follow the steps to connect to Virtual Barn:
 - <https://itsc.hkust.edu.hk/services/academic-teaching-support/facilities/virtual-barn/user-guide>
 - Remember that you need to select the programming software pool.
- It will virtually connect to the barn machine with your account.

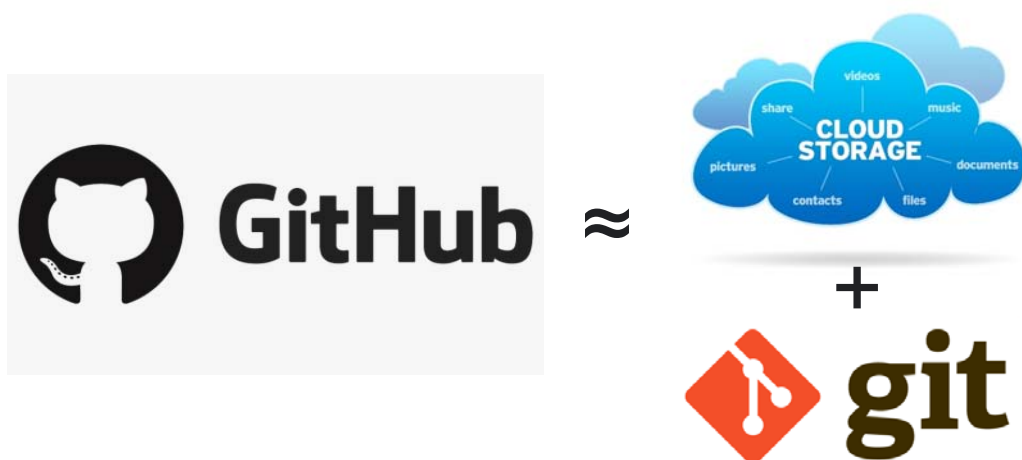
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Guided Lab Exercises (refer to the worksheet)

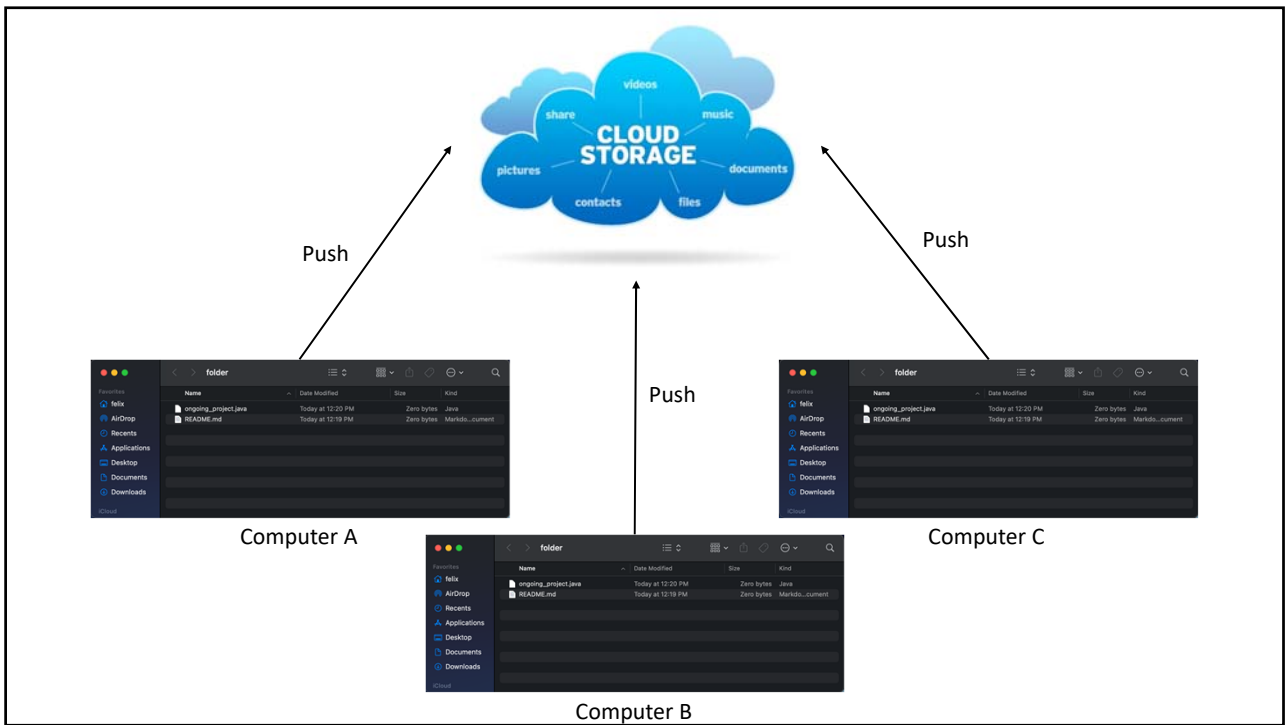
1. Create a Java project in Eclipse
2. Setup a local Git repository
3. Make and commit changes to the local repository
4. Setup a remote Git repository on GitHub and push changes to it

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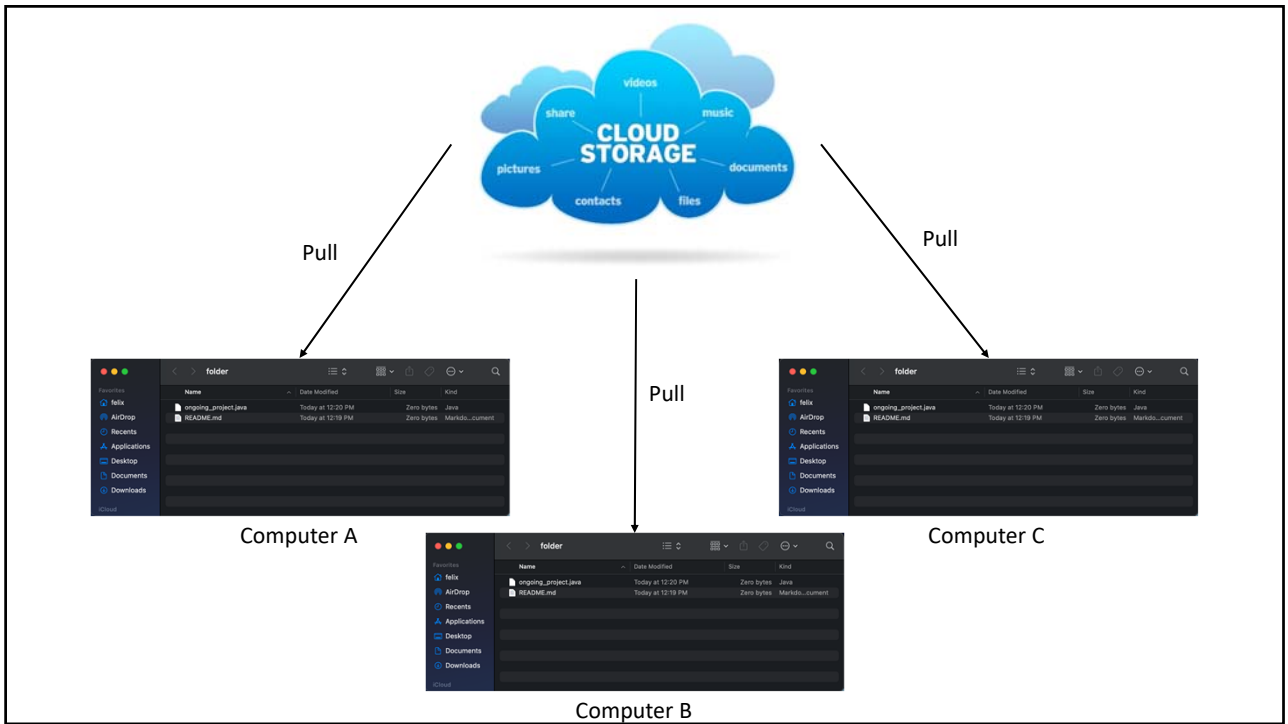
What is GitHub?



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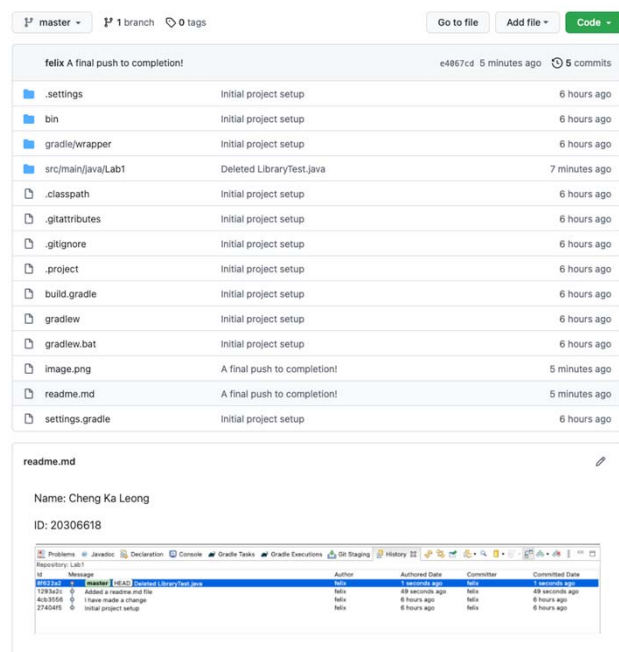
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Lab Assignment

1. Add a textfile "readme.md" to your project folder in Eclipse
2. Put a name and 8-digit ID in the file (could make up any name and 8-digit ID)
3. Commit with the message: "Added a readme.md file"
4. Push it to GitHub
5. Delete the file src/test/java/LibraryTest.java in Eclipse
6. Commit with the message: "Deleted LibraryTest.java"
7. Take a screenshot of the "Git History" panel to reflect the changes made
8. Add the screenshot file to your project folder in Eclipse
9. Find a way to link the screenshot image in readme.md (to be shown on GitHub)
10. Commit your screenshot file and readme.md, and push them to GitHub
11. Find a way to locate the deleted LibraryTest.java on GitHub

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Assessment:
The front page of your GitHub should look something like this



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Submission of Lab Assignment

Make an online submission of your lab work (two personalized URLs) through Canvas by the due date:

- URL link to your repository on GitHub
- URL link to the deleted LibraryTest.java on GitHub (in earlier versions of your repository)