

# EECS2030 (B & E) Fall 2021

## Optional Pre-Study Materials

### Managing Software using Github and Java Programming in Eclipse

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Texts in blue are hyperlinks to the corresponding documents/recordings.

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## Submission?

No submission is to be done. All tasks suggested below are only for those who are interested in completing some preparation work before the course starts officially.

# 1 Task 1: Creating a Github Account to Manage Software Projects

- It is highly recommended that you adapt to to the practice of managing your software projects using Github.
- If you already have a Github account, make sure that you are able to create **private** repositories. Otherwise, you still need to create an **Educational** account for storing your work in this course.

**Requirement:** Create an **Educational** Github account, e.g., with a user name structured as follows (separated by single hyphens):

lastName-firstName

For example: **smith-john** would be the Github account name for a student whose last name is Smith and first name is John.

- Follow this tutorial series to learn about applying and using an Educational Github account (and creating **private** repositories):

[https://www.youtube.com/playlist?list=PL5dxAmCmjv\\_58KxTSd1CRbpinmSF8EPJx](https://www.youtube.com/playlist?list=PL5dxAmCmjv_58KxTSd1CRbpinmSF8EPJx)

## Notes:

- **Skip Video 05**, which is not applicable for this course.
- **Video 06** is for you to synchronize between your Github repositories and **your own computer**. It is assumed that you already installed the *Github desktop* program on your own computer.

# 2 Task 2: Installing and Launching Eclipse on Your Own Computer

There is one item to install on your laptops in order to construct Java programs:

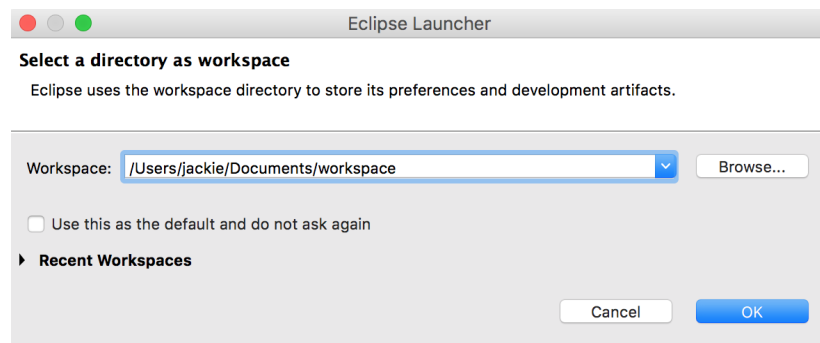
[Eclipse IDE 2021-06](#) (use the Eclipse Installer 202106 R)

[click on the blue link]

To launch Eclipse, simply click on its icon:



You should be able to see an initial prompt like:



- If you are able to see the above Eclipse initial prompt, then you are ready! See the next section for tutorial videos to get started with programming in Java.

### 3 Task 3: Tutorial Videos

- Here is a tutorial series created for EECS1022-W21 for obtaining hands-on experience on the basics of Java programming:

[https://www.eecs.yorku.ca/~jackie/teaching/tutorials/index.html#java\\_from\\_scratch\\_w21](https://www.eecs.yorku.ca/~jackie/teaching/tutorials/index.html#java_from_scratch_w21)

- Just find those topics which interest you! For examples:
  - If you are new to **Eclipse**, then Week 1 would be helpful.
  - If you wish to review **if-statements**, then study Weeks 2 & 3.
  - If you wish to review **loops and arrays**, then study Weeks 4 & 5.
  - If you wish to review **object-oriented programming**, then study Weeks 6, 7, & 8.
- You can find the iPad notes illustrated in the tutorial videos here:

<https://www.eecs.yorku.ca/~jackie/teaching/tutorials/notes/EECS1022%20Tutorial%20on%20Java.pdf>

## 4 Appendix: Basic Commands on a Terminal

- `cd`  
Change to a directory  
e.g., `cd ~`  
e.g., `cd ~/Desktop`  
e.g., `cd ~/Desktop/EECS1022-W21-workspace`
- `pwd`  
Return the path of the current directory.
- `ls`  
List the contents of the current directory.

## 5 Appendix: A Simple Github Workflow

- Create a **private** repository (e.g., `EECS1022-W21-workspace`) dedicated for all labs of this course.
- Clone a copy of some repository:

```
git clone ...
```

where ... is the URL of the repository that can be copied from a web browser.

- Make some changes to the clone copy (e.g., a new Java project, a new Java class, a change to an existing Java class).
- Add all changes to the local change list:

```
git add *
```

- Commit the change list **locally**:

```
git commit -m "..."
```

where ... is some meaningful and informative log message.

- Push the local committed change to the online repository:

```
git push
```

Then enter your git account username and password.