Offline Tutorial: Very beginning git

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August 2017

Why are we even reading this.

Throughout the course COMP3111 we are working on a chatbot (chatting-robot) on the instant messager software LINE. One of the easiest way to do is using the example provided by LINE developer site and it is written in Java Enterprise Edition (J2EE). In order to complete the project you will need to pick up a set of skills, which is already *minimized* when we design the project, as listed below:

1. git, *a version controlling repository tools.*

2. Java, *an object oriented programming language.*

3. JUnit, *a testing suite for Java.*

4. Database, *a program that manage your data.*

5. Spring, *a framework that provide web service in Java Enterprise Edition.*

6. Gradle, *a package management tools, like makefile, Ant, Maven.*

As you can see we said "minimized" but there are still a lot to cover. It is impossible to cover all these contents in the lecture or tutorial. Besides, you should also develop the skill to pick up new contents therefore we are here. This document is one of the seven topics tutorial and you are supposed to read this at home and you will be given chance to practise them at lab. In any case you have encounted difficulty in reading this document, you can post your question on the forum or contact the TA for help.

Contents

1   Background

Git is a software that allows you to do version controlling at localhost, as well as at a central server where collaboration is taken place. There is a lecture note covering git. At the time this document is released you may not read that lecture note yet. Here we gather some useful resources that you can learn and try git on your own. You can pick one row from each topic below. We would skip two important questions in your head: 1) Why should we use git, and 2) What is the advantages of using git. These two questions are actually the same question. We hope you can figure out the answer while you taste it.

Topics	Resources
Concept	Web: What is git – Atlassian
	Video: Git Basics Episode 2 – What is Git?
	Video: Git Basics Episode 3 – Get Going with Git
Basic	Web: Git Basics
	Interactive Tutorial – by Code School
	Interactive Tutorial – by Atlassian
	Web: git for beginners
Branching	Video: Branching – by Codemy School
	Video: Merge – by Codemy School
	Interactive Tutorial – by learngitbranching.js.org
	Web: Using Branches – by Atlassian
	Interactive Tutorial: Branching – by Atlassian
Cheatsheet	Atlassian's Cheatsheet
	GitHub's Cheatsheet

✎ **Learn More:**

- Git Reference Manual
- Pro Git – Scott Chacon and Ben Straub

2   Self Test

Try to perform the following scenario using git commands.

Scene 1: Checkout the content from a remote repository https://github.com/khwang0/gitTest/.
Add a folder with your student ID and commit it with the message "Hi".

Scene 2: Create a local repository. Add and stage two files "a.txt" and "b.txt" into
it. Create another branch called "test" and try to modify the file "b.txt" and add
a file called "c.txt". Stage it. Going back to your master branch and merge the
change.