

CSH1F2 Introduction to Computer Science

Week 3: Algorithm

Author: Lecturer Team

Bachelor of Engineering, School of Computing





Minecraft

- ▶ **Minecraft** is a *game* of putting some blocks and adventures.
- ▶ In Minecraft hour code, there is a usage of 'if statement' and repeating block.

Class Project - Session 3

1. You have 15 minutes to run commands below:

1. Upload .sb2 file to <https://scratch.mit.edu>:
 - a) Do the following from your working directory from last session (Session 2) : `git pull origin master`
 - b) Find a file called `CSH1F2_2018_Session3_Class-Project.sb2` and upload it to Scratch editor with this menu :
File > Upload from Your Computer
 - c) Select Ball Sprite in Scratch (on the bottom left on Scratch editor screen) and solve the scrambled pieces of code (on the right side of Scratch editor screen)
2. Check the status of your repository with this : `git status`
3. Check the commit history in your repository with this : `git log --oneline`
4. Create your branch in local repository dan enter to the branch : `git checkout <your_student_id>`
5. Submit Class Project file (.sb file for Scratch) with these series of commands :
 - a) Download Scratch Stuff with this menu : File > Download to Your Computer
 - b) Save file as `CSH1F2_2018_Session3_Class-Project_<your_student_id>.sb2`
 - c) Add the file to local repository : `git add CSH1F2_2018_Session3_Class-Project_<your_student_id>.sb2`
 - d) Commit the file to local repository : `git commit CSH1F2_2018_Session3_Class-Project_<your_student_id>.sb2 -m "<your_full_name> <your_student_id>"`
 - e) Update your work to remote repository : `git push origin <your_student_id>`

Bonus

If you are on subject "Algorithm and Programming ", you can also check this project in scratch.mit.edu :

visualization of sorting algorithms:

<https://scratch.mit.edu/projects/149793697/#>

primality testing algorithm:

<https://scratch.mit.edu/projects/94519097/>

string search algorithm:

<https://scratch.mit.edu/projects/107691199/>

Other Scratch-similar application is " Minecraft Hour of Code " (<https://code.org/mc> or install offline). You can play until minimum level 7 or up to level 15 to understand algorithm.



Fakultas Informatika
School of Computing
Telkom University



THANK YOU