

	<b>SCHOOL OF POLITEKNIK BRUNEI</b> <b>WEEKLY MODULE PLAN</b>		REFERENCE NUMBER: PB/AS/LP/002 VERSION: 1.2 REVISION DATE: 06/10/2018 EFFECTIVE DATE: 1/1/2019
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MODULE CODE/NAME	NS4307, Network Programming	TOPIC	Git
SEMESTER	Semester 2, 2021 / 2022	GROUP CODE/INTAKE	DITN12 (Intake 11), DITN10R (Intake 9)
SCHOOL/DEPT	School of ICT	WEEK	Week 2 - 30/01 - 05/02

<b>PEDAGOGICAL APPROACH</b> <input type="checkbox"/> Knowledge Building <input checked="" type="checkbox"/> Presentation <input checked="" type="checkbox"/> Co-operative/ Collaborative Learning <input type="checkbox"/> Experimental Learning <input checked="" type="checkbox"/> Case Studies <input type="checkbox"/> Discussion <input checked="" type="checkbox"/> Blended Learning <input type="checkbox"/> Debate <input type="checkbox"/> Others, please specify _____				
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<b>RESOURCES</b> Learning management system
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LESSON LEARNING OBJECTIVES	METHOD OF INSTRUCTION/LEARNING ACTIVITIES	REFLECTIVE EVALUATION
At the end of this lesson, the student should be able to: 1) Apply the basic of git.	<b>Session 1:</b> Practical (Git): 1 hour - Make sure everyone have managed to installed Git successfully. - Facilitate Git configurations in students computer globally (i.e. for every project): name, email, colourise output, preferred text editor. - Facilitate students how to create a repository. - Facilitate students how to try to create a nested repository and make sure they understand that this is a bad idea. - Facilitate students how to rectify a nested repository problem. - Facilitate students how to record changes in Git. - Facilitate students how to check the status of a Git repository. - Facilitate students how to record notes about the changes made to a Git repository. - Facilitate students how to check Git repository history. - Facilitate students how to check differences between the current state of the file and the most recently saved version. - Facilitate students on how Git staging area works. - Facilitate students how to identify old versions of files in repository. - Facilitate students how to review changes in repository. - Facilitate students how to recover old versions of files in repository. - Facilitate students how to tell Git to ignore files that the students do not want the repository to track.  Quiz: 15 mins - Facilitate students to complete online quiz posted in PBLMS.  Exercise (Git): 1 hour 45 mins - Facilitate students to complete Git exercises 01, 02 and 03 posted in PBLMS. - If students finished early, asked students to complete Git exercises 04 and 05 posted in PBLMS.	The first practical session went longer than expected. Completed by 9.12am. I had to add more explanation to further emphasis the part of working directory, staging area and git directory.  All students managed to complete the quiz within allocated time.  During exercise, for windows, some have to type quote key twice for it to show. It cause issues in Bash where students accidentally press enter without closing a quote.  Some students missed a step in the exercise where they need to resolve nested git repositories where they need to remove the .git folders from the children folders.  Not enough extension to provide all students to charge their laptops.
At the end of this lesson, the student should be able to: 1) Students should personally own GitHub account. 2) Able to host and manage Git repository on GitHub. 3) Able to collaborate using GitHub.	<b>Session 2:</b> Lecture: 20 mins - Explain the strength of version control when collaborating with other people. - Explain how Git repository can be store on the web. - Explain the popular Git hosting services: GitHub, BitBucket or GitLab. - Emphasize that we will be using GitHub for this module.  Practical: 1 hour - Facilitate students to register an account with GitHub (preferably using student license). - Facilitate students to familiarise with GitHub dashboard. - Facilitate students to create new repository in GitHub. - Facilitate students to connect their local repository to the remote repository in GitHub. - Facilitate students to sync any changes in their local repository to their remote repository. - Facilitate students to sync any changes in their remote repository to their local repository. - Facilitate students how to add collaborator to their remote repository. - Facilitate students how to download a copy of their friends repository to their local machine. - Facilitate students to make changes to their friend repository in their local machine. - Facilitate students to sync the changes to their friend remote repository. - Facilitate students to sync the changes their friend made to their remote repository to their local repository. - Facilitate students on how to handle conflict on the changes to a file. - Facilitate students on how to use Git branching. - Facilitate students on how to explore features available in GitHub.  Exercise: 1 hour 40 mins - Facilitate students to complete Git exercise 06, 07 and 08 posted in PBLMS.	Found out that students already have GitHub account where they registered during their Basic Web Programming module. Was planning to spend time for account registration. But since they already registered, I had extra time. So I used that time to integrate Eclipse IDE with Git and facilitate students familiarise using Git through Eclipse IDE.  Usually Eclipse IDE has Git plugin installed automatically. But some students are using an older version of Eclipse IDE and it does not have Git plugin installed. Due to slow Internet, some have to take few attempts to successfully installed the plugin.  Found out that the Eclipse IDE Git plugin does not support HTTPS authentication, have to use SSH authentication. I overlooked this issue since when I tested Eclipse IDE Git plugin, I already set up my computer to use SSH authentication prior. Luckily Eclipse IDE has an RSA key generation built in that can be use for SSH authentication.
At the end of this lesson, the student should be able to:	<b>Session 3:</b>	

NAME & SIGNATURE	
MODULE LECTURER  Jailani Abdul Rahman	PROGRAMME LEADER / ASSISTANT HOS (aHOS) / HEAD OF SCHOOL (HOS)*  Jamiatul Zubriah
DATE: 01/02/2023	DATE: 07/02/2023

COMMENTS BY PROGRAMME LEADER/ ASSISTANT HOS (aHOS)/ HEAD OF SCHOOL (HOS) (If any)
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Due to not enough extension, the students should be aware on that. They need to charge their laptop earlier or find alternative for that due to extension cable is not been provided by estate or school.

For overall, well done cg. Keep up your good work.