

## TEMASEK POLYTECHNIC SCHOOL OF INFORMATICS & IT

# VIRTUAL DESKTOP TECHNOLOGY (VRDT) CIML015 AY 2025 APRIL SEMESTER

### **PROJECT**

- 1. This project specification consists of 3 pages (including cover page).
- 2. Look at Submission Deadlines at the end of this document.
- 3. This project carries a total of **80%** weightage of the overall subject assessment with break down as follows:
  - Report 30%
  - Project 50%

#### **Scenario**

You are working in an IT department of a Software Training School, **Hard Bank** and it has 6 branches in Southeast Asia. It is estimated that they have

- Management and Admin Staff 25;
- IT Support Staff 20;
- Instructors 35;
- Student Developers 800.

The staff travel frequently to all the branches in Southeast Asia. The classes can be ad-hoc and dynamic, conducted face to face or online. The IT support staff need to be able to set up the training environment in a short time. Often instructors and students complained about the lack of technical support and slow response when their notebook or applications failed. This causes undue stress for the instructors and bad learning experience for the students.

Currently, the instructors and students are provided with Windows 10 or Ubuntu OS that runs the following applications:

- 1) Libre Office Suite
- 2) Chrome Browser
- 3) Zoom
- 4) Sublime Text IDE
- 5) Graphic rendering app (\*require GPU support; only required by certain courses)

Your manager is considering providing some Virtual Desktops with the necessary applications pre-installed as a temporary replacement measure to deal with the notebook or application failure issue. You are requested to write and present a proposal to your manager on such a solution.

#### **What You Need To Do**

#### Task 1 Report and Presentation (30%)

Present the report using Microsoft Word in the following suggested format:

- 1) Introduction Background, Aim and Purpose of this Proposal
- 2) With reference to the above scenario, report on the Virtual Desktop solution for
  - a. Compute, storage and network requirements;
  - b. Costing;
  - c. Pros and Cons;

#### Task 2 Project Documentation and Demo (50%)

Document using Microsoft Word on the PoC setup using the following suggested format:

- 1) PoC scope
- 2) PoC setup process with screenshots
- 3) Conclusion
- 4) Appendix
  - References
  - Screenshot of completed Subject Survey

Set up and demo the following Virtual Desktop Proof of Concept (PoC) for Task 1 (less the GPU app requirement).

Windows 10 VDI Client	Ubuntu VDI Client
Ubuntu VDI Hypervisor	
Virtual Box (nested VM enabled)	
Windows OS	
Laptop	

### END OF PAPER ###