



POORNIMA FOUNDATION

DETAILED LECTURE NOTES

Campus: Course:

Class/Section:

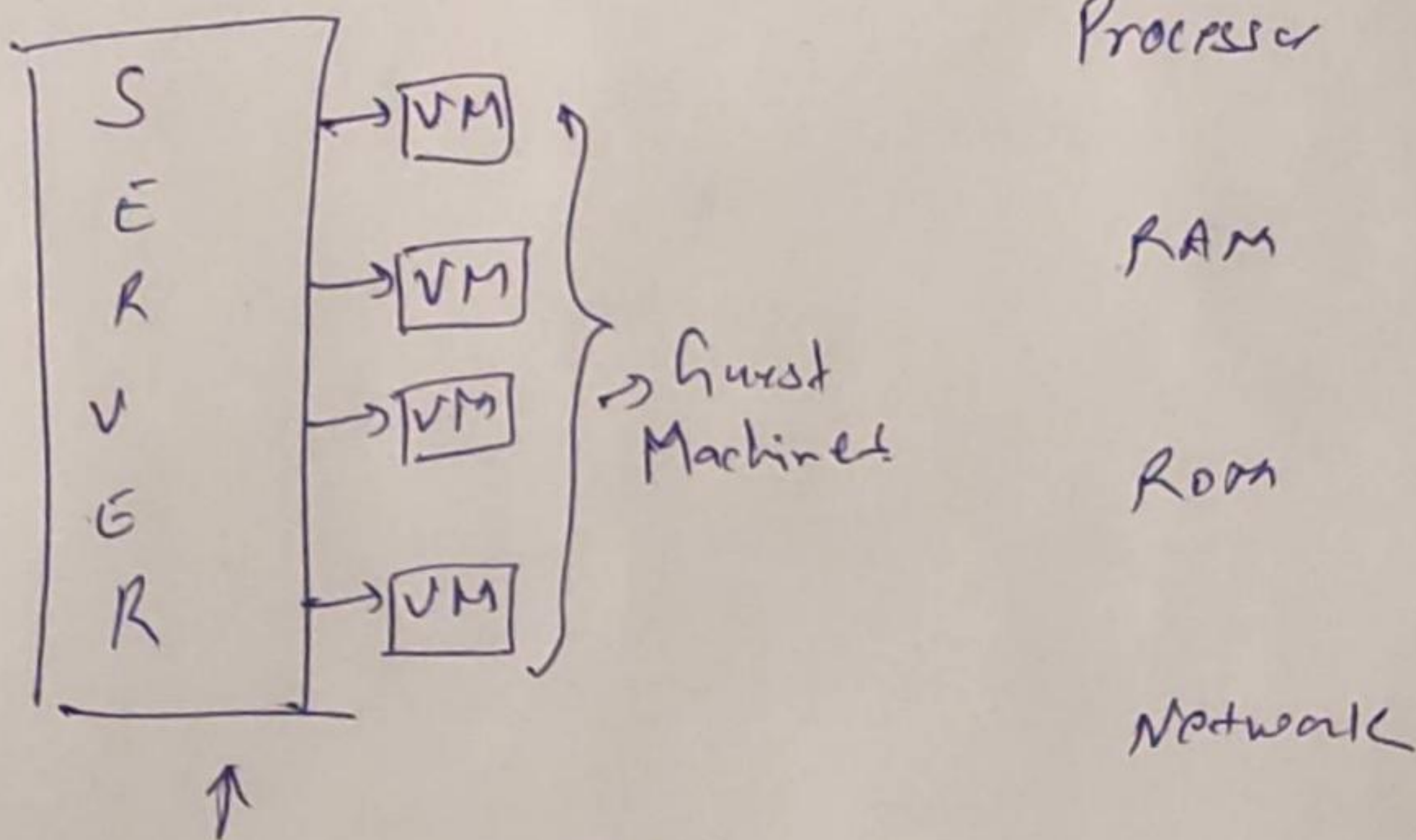
Date:

Name of Faculty:

Name of Subject:

Code:

Virtualization Unit-3



Hypervisor (VMM) is a software program → Hypervisor is a virtual machine monitor. It is used to create virtual machine.

A machine on which we create virtual machines is called host machine.



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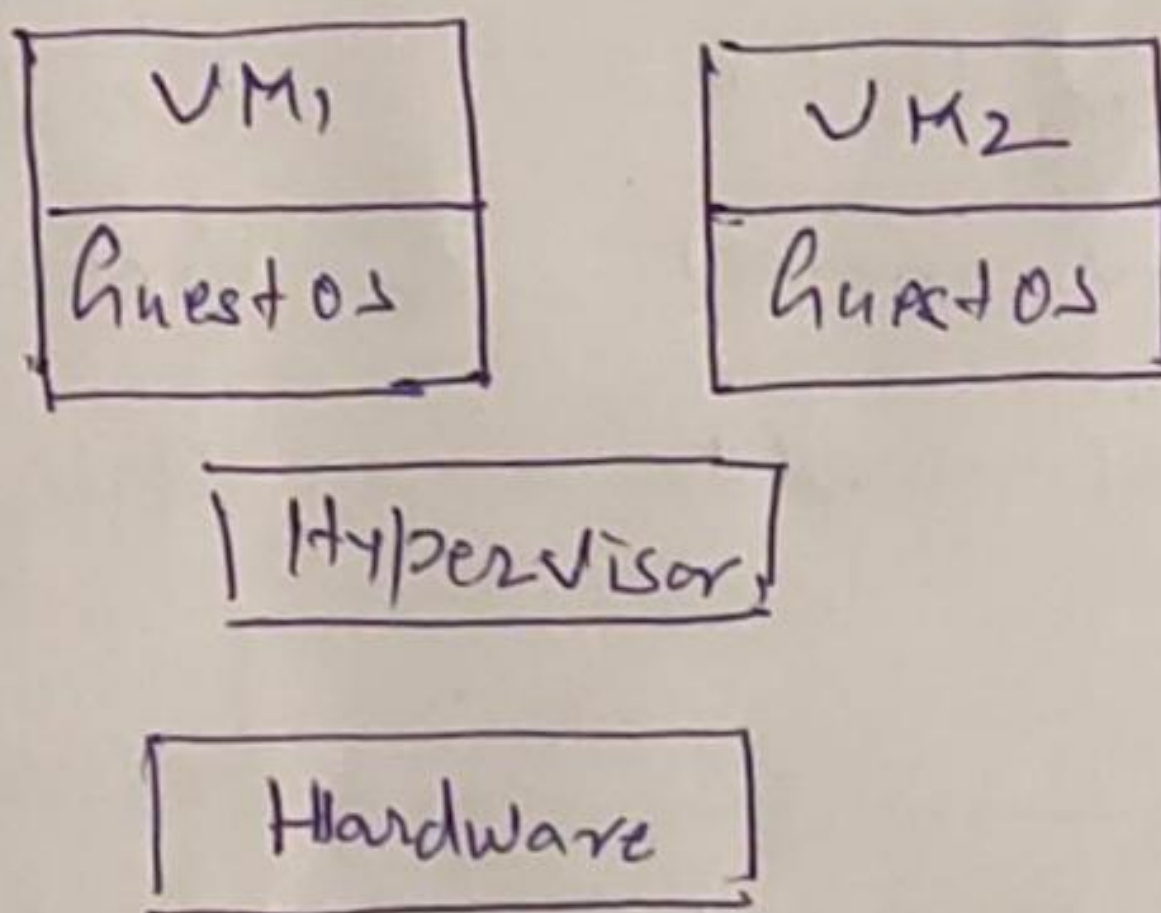
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Type 1

Full Virtualization



→ Directly Ran on host h/w.

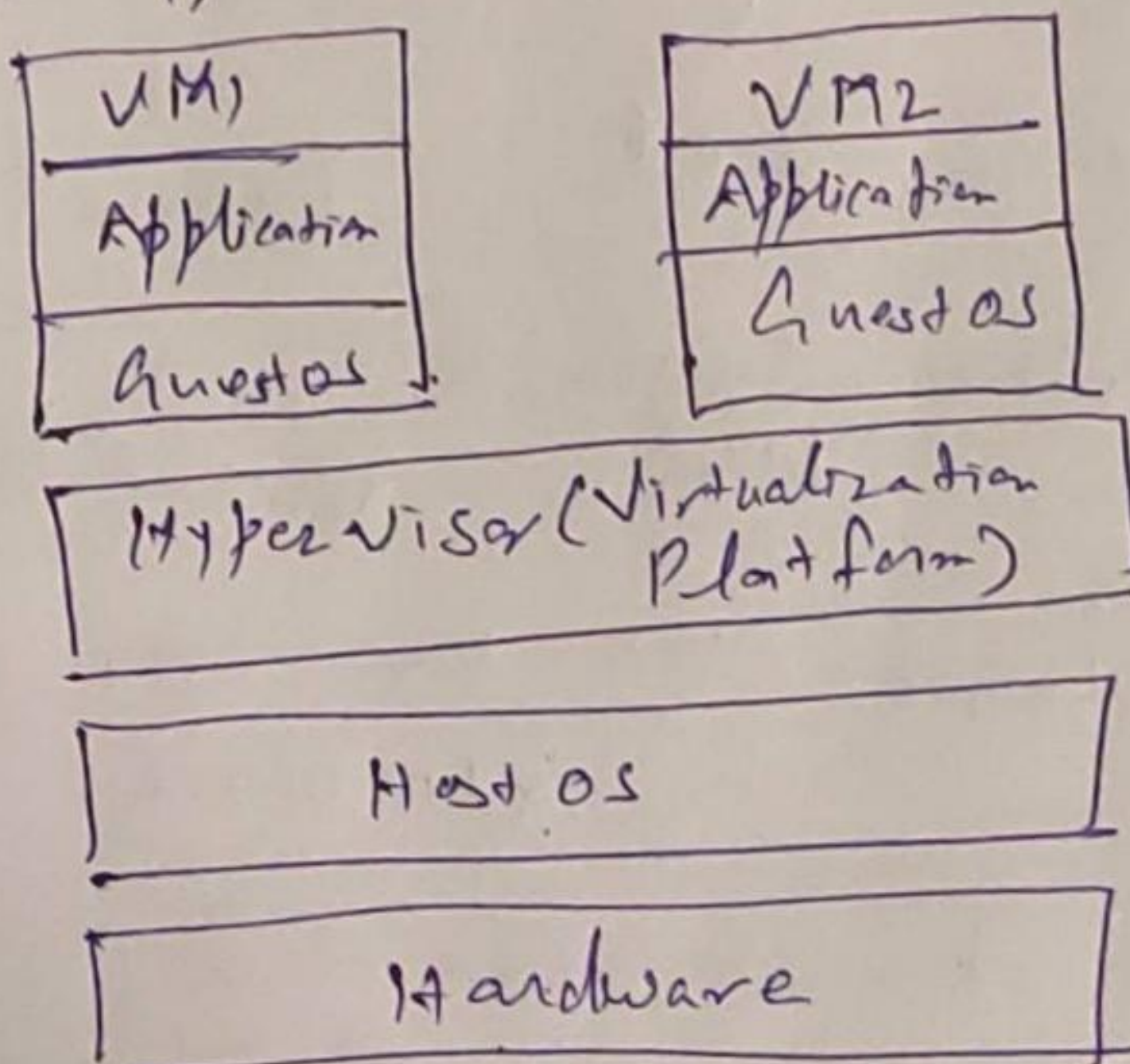
→ Stability is ~~can~~ depends on Guest OS.

Paravirtualization Type 2

→ Hosted hypervisor.

① Guest OS is aware about virtualization

② Guest OS need to be modified.



Full Virtualization

- ① Type 1 native or bare Metal hypervisor
- ② Directly runs on host hardware
- ③ No base OS, so stability is depend on guest OS.
- ④ Guest OS is unaware that it is in virtual environment
- ⑤ Guest OS is not need to modify

Para Virtualization

Type 2 or hosted hypervisor

Hypervisor installed over host OS.

stability is depends on host OS, if host OS need to reboot.

Guest OS is Aware about Virtualization.

Guest OS is modified.

Virtualization —

- Abstraction of computer resources.
- If refers to the creation of virtual resource such as server, file or network.

Level of Virtualization—

Application level

JVM

Library level

LxRun

Operating System Level

Virtual Environment

Hardware Abstraction layer
VMware

Instruction set architecture

BIOS