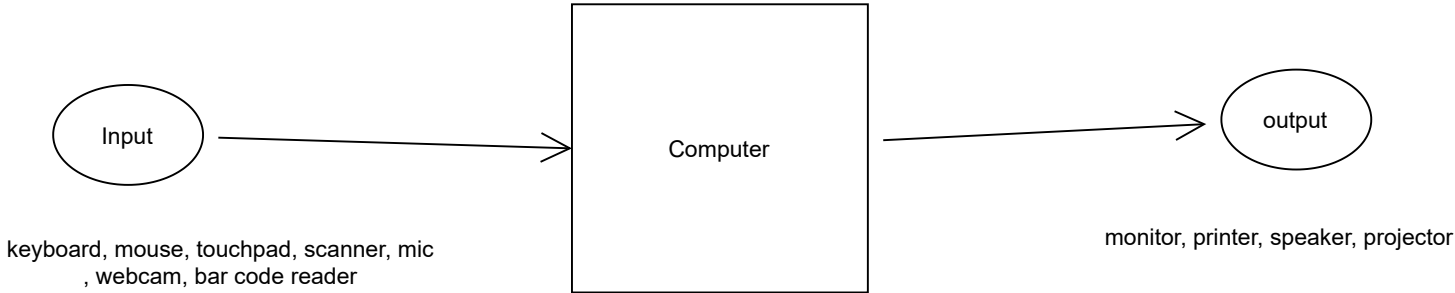


Monday - July 11



Memory
RAM

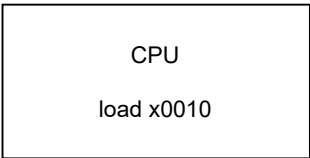
Storage
Hard disk

"Hello how are you"

Arrays in Java
= contiguous storage

SSD
Solid state device

HDD
Hard disk drive



x0010 Memory

2 seconds

1 milisecond

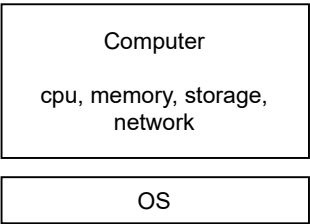
1000 ms = 1 second

I/O Operations

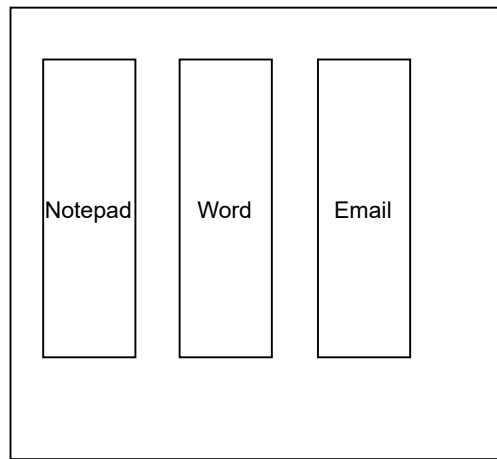
Text

Operating System - OS - Windows, MacOS, Linux

Application software



Computer - 2 cpu, 8 GB RAM, 100 GB Storage



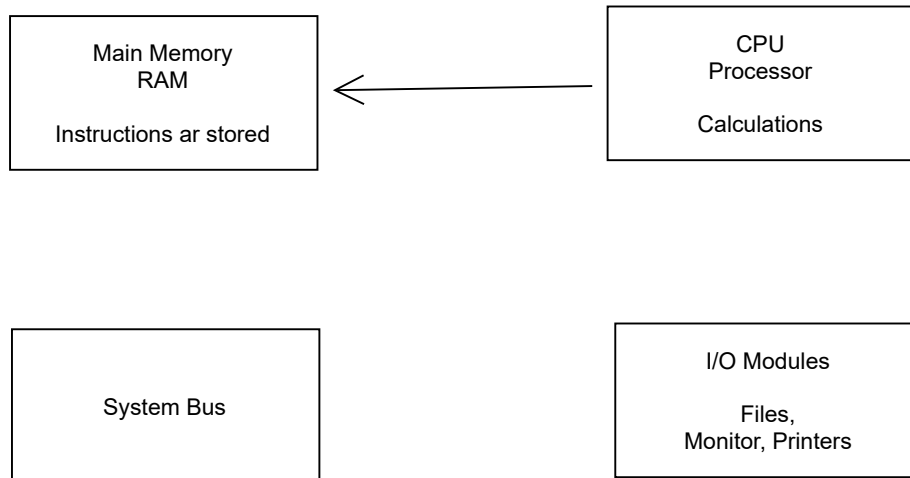
Application

When we run an application - a process is started
cpu, memory process.

In that process, a main thread is created.

security

Features of an OS



Programming Languages

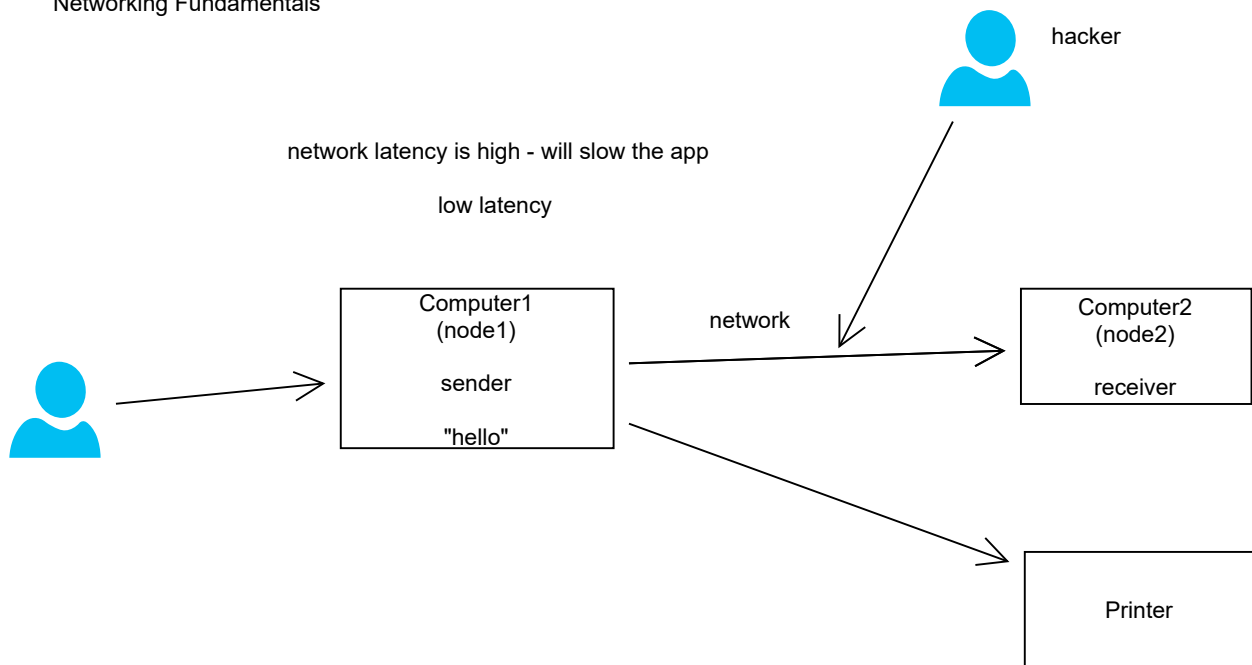
Machine Language

Assembler Language

System Language

High Level language - english - humans / developers can understand and write - Java, python, node

Networking Fundamentals



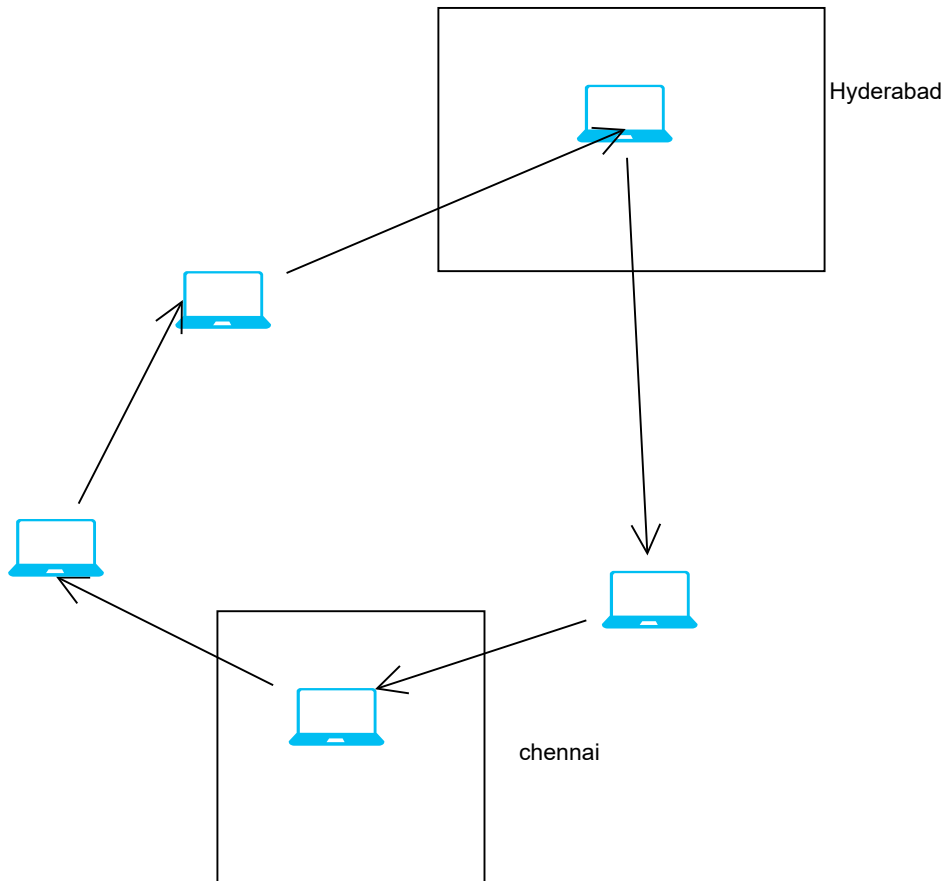
latency is the network round trip time

- time taken for the request to travel from node 1 to node 2 and
time taken for the response to travel back from node2 to node 1

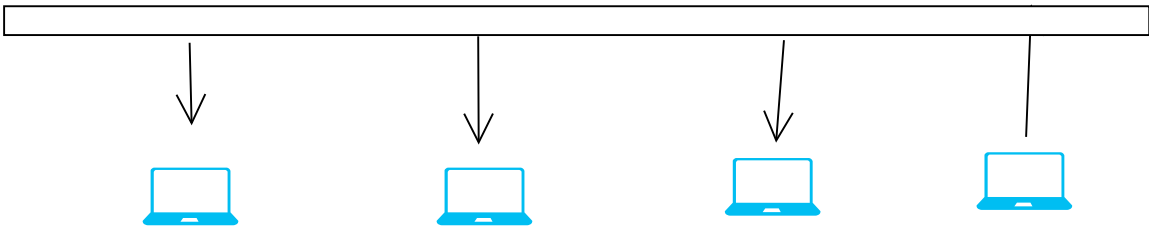
high performing network = low latency

low performing network = high latency

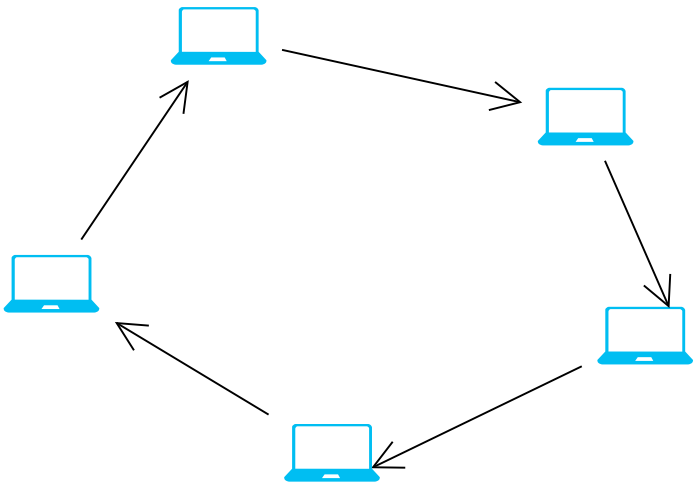
Network Topology



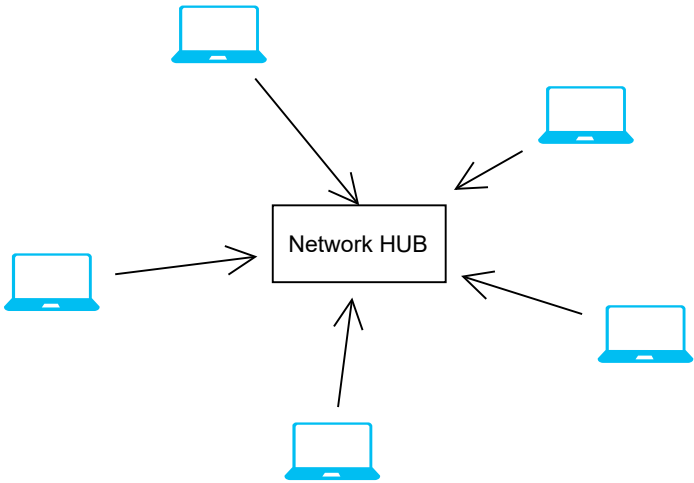
Bus Topology



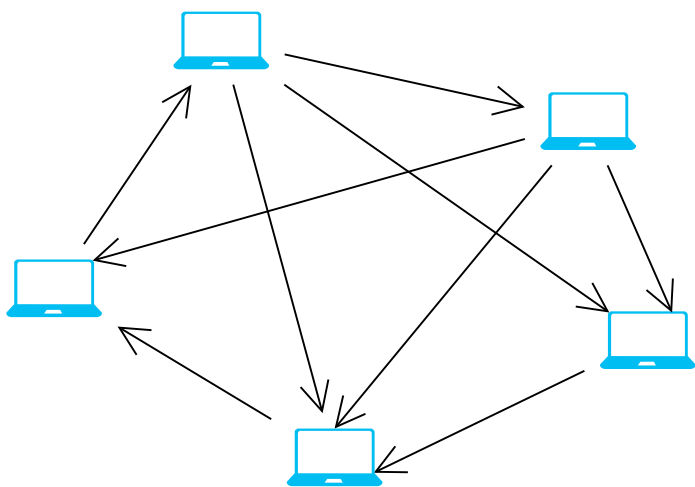
Ring topology



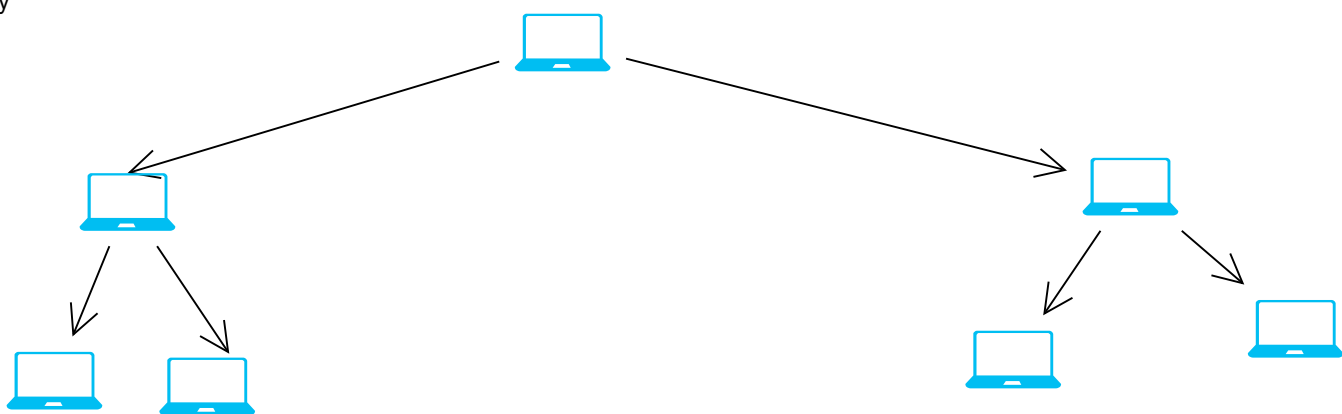
Hub Topology



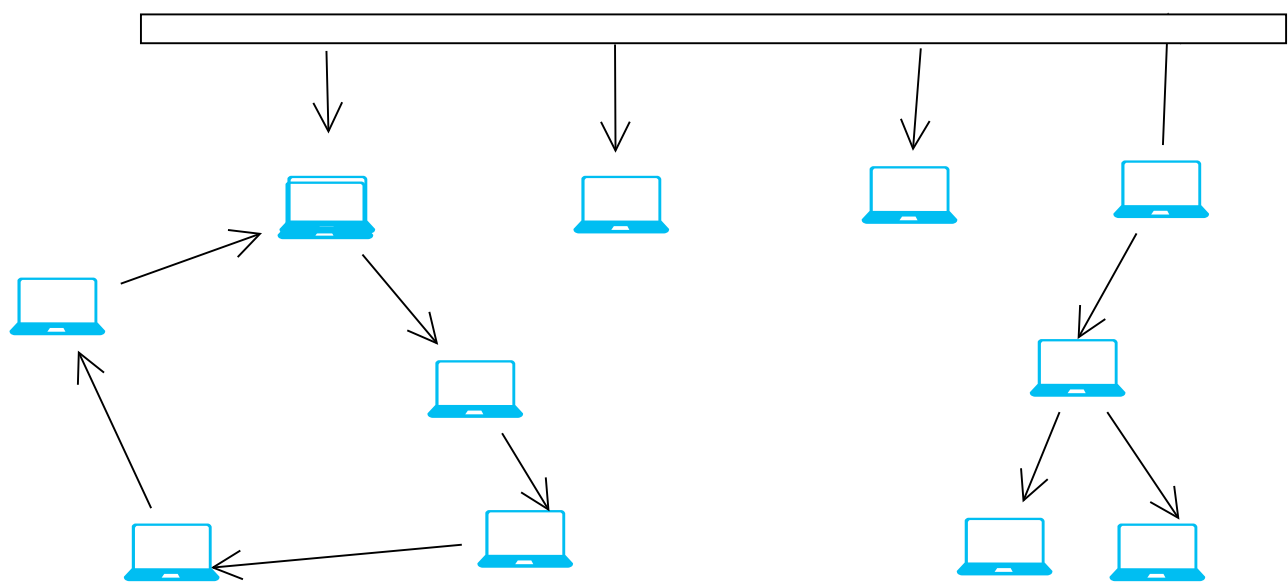
Mesh Topology



Tree Topology



Hybrid



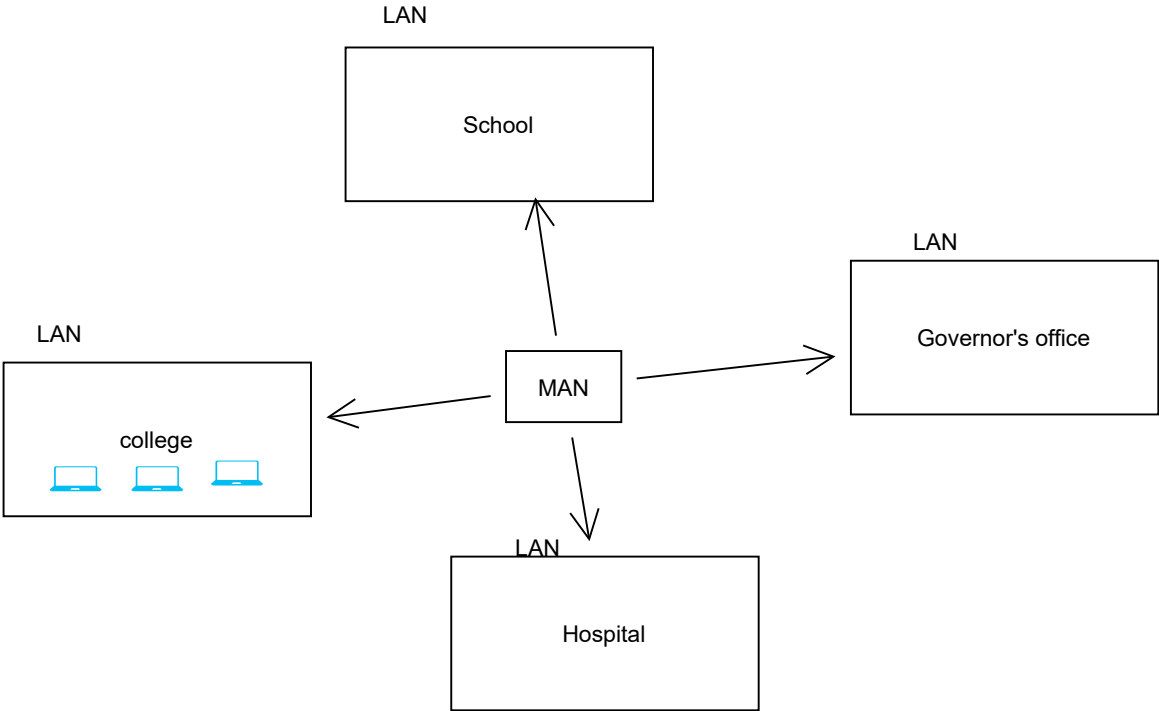
Network types



LAN - Local Area Network



MAN - Metropolitan Area network



WAN - wide area network

Transmission Modes



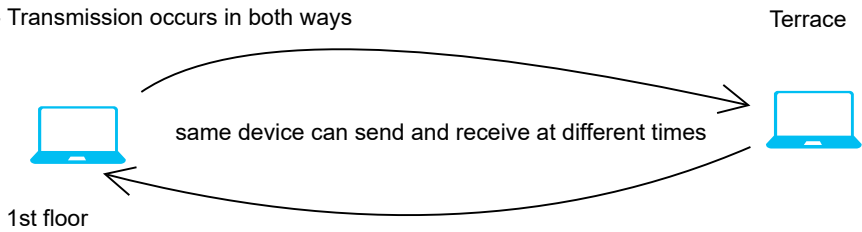
Simple Mode
Receiver - TV

Half-Duplex mode

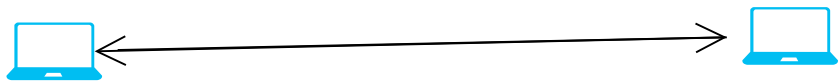
Full-Duplex mode

Simple mode - Transmission in only one direction

Half Duplex mode - Transmission occurs in both ways

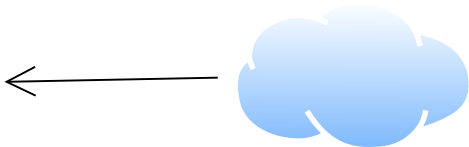


full duplex

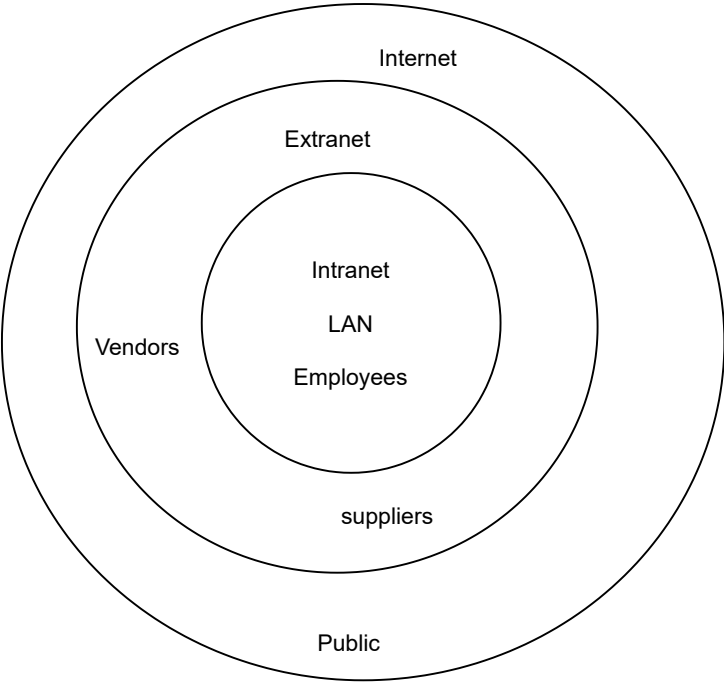


Internet
IP - Internet Protocol

Intranet
Employee Information / Company data / List of holidays / Events / Vendor Products
XYZ company
15000 employees

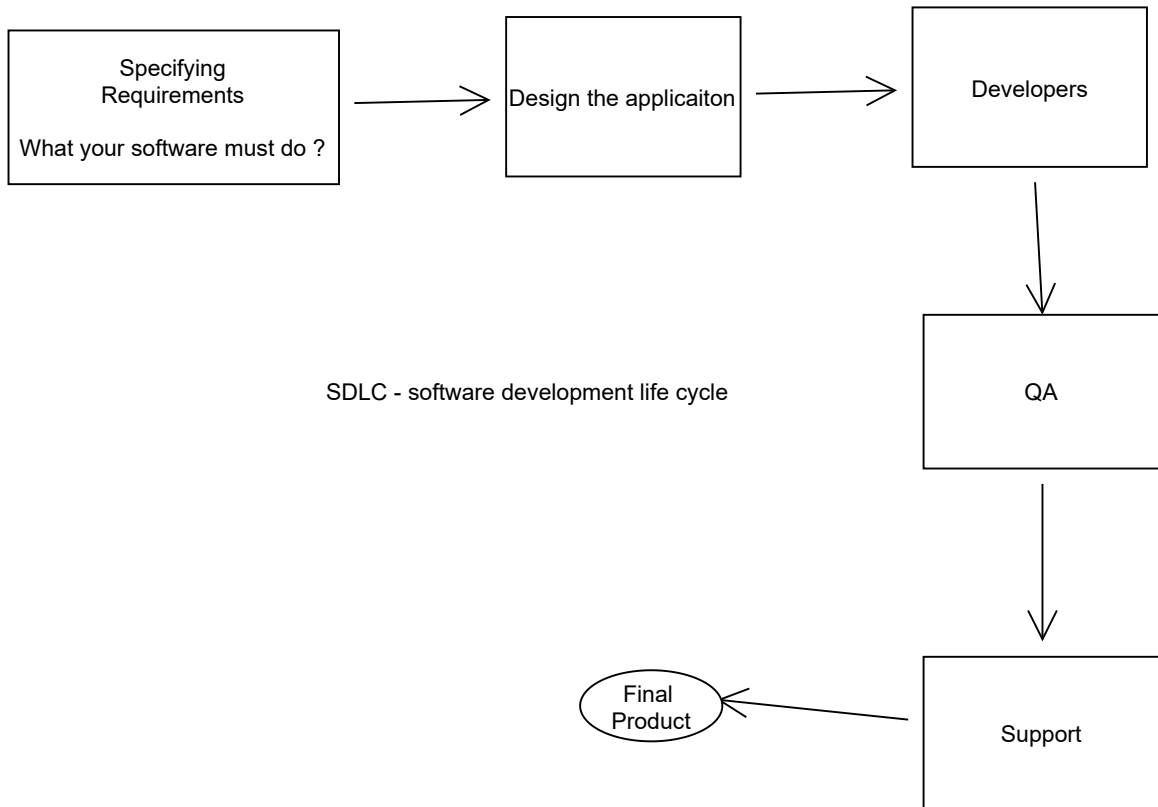
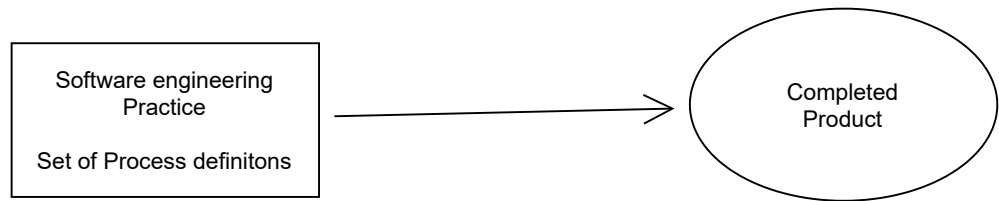


Diff Intranet and Extranet is
who all can access ?

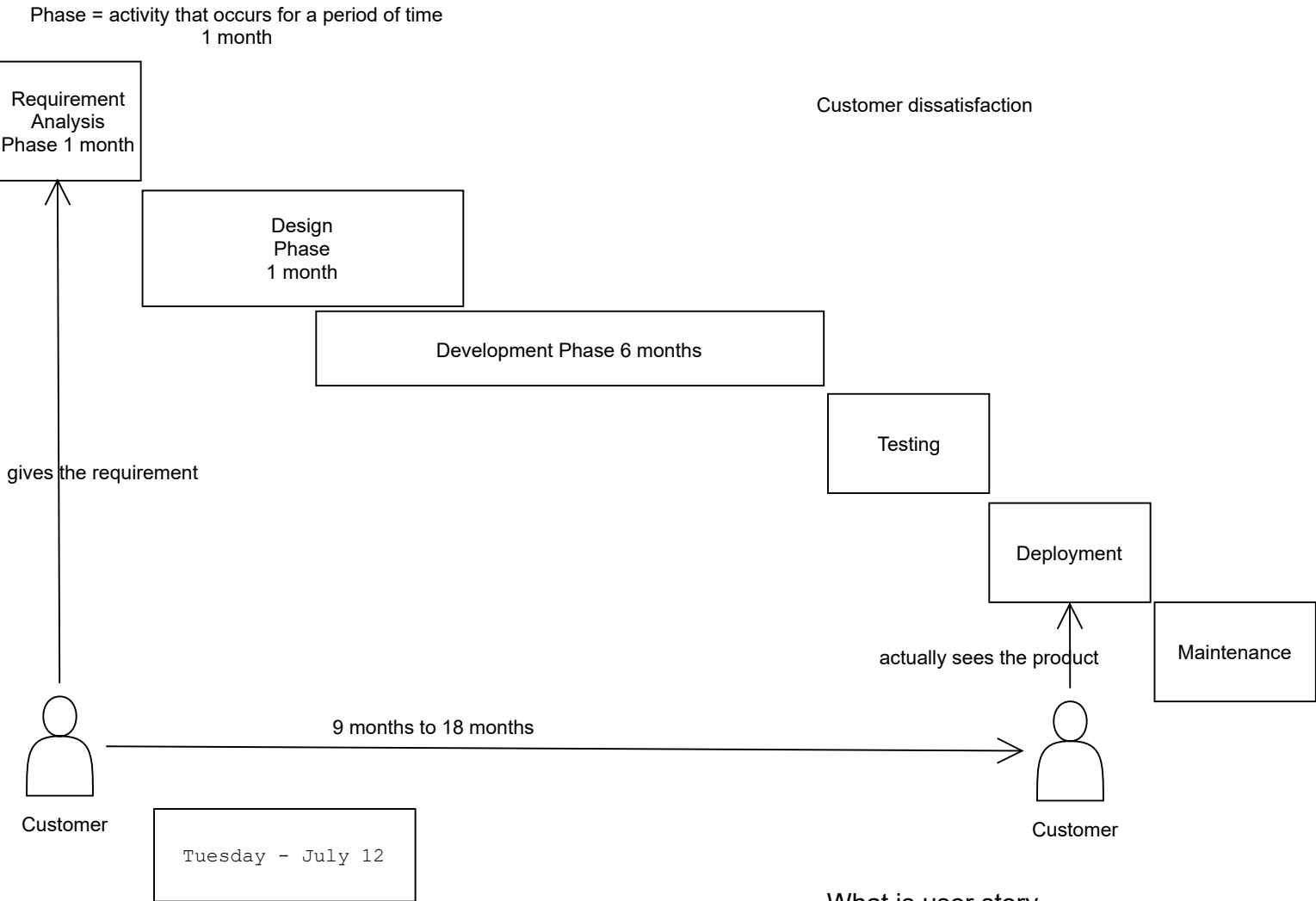


Security - Virus, Spyware, Malware

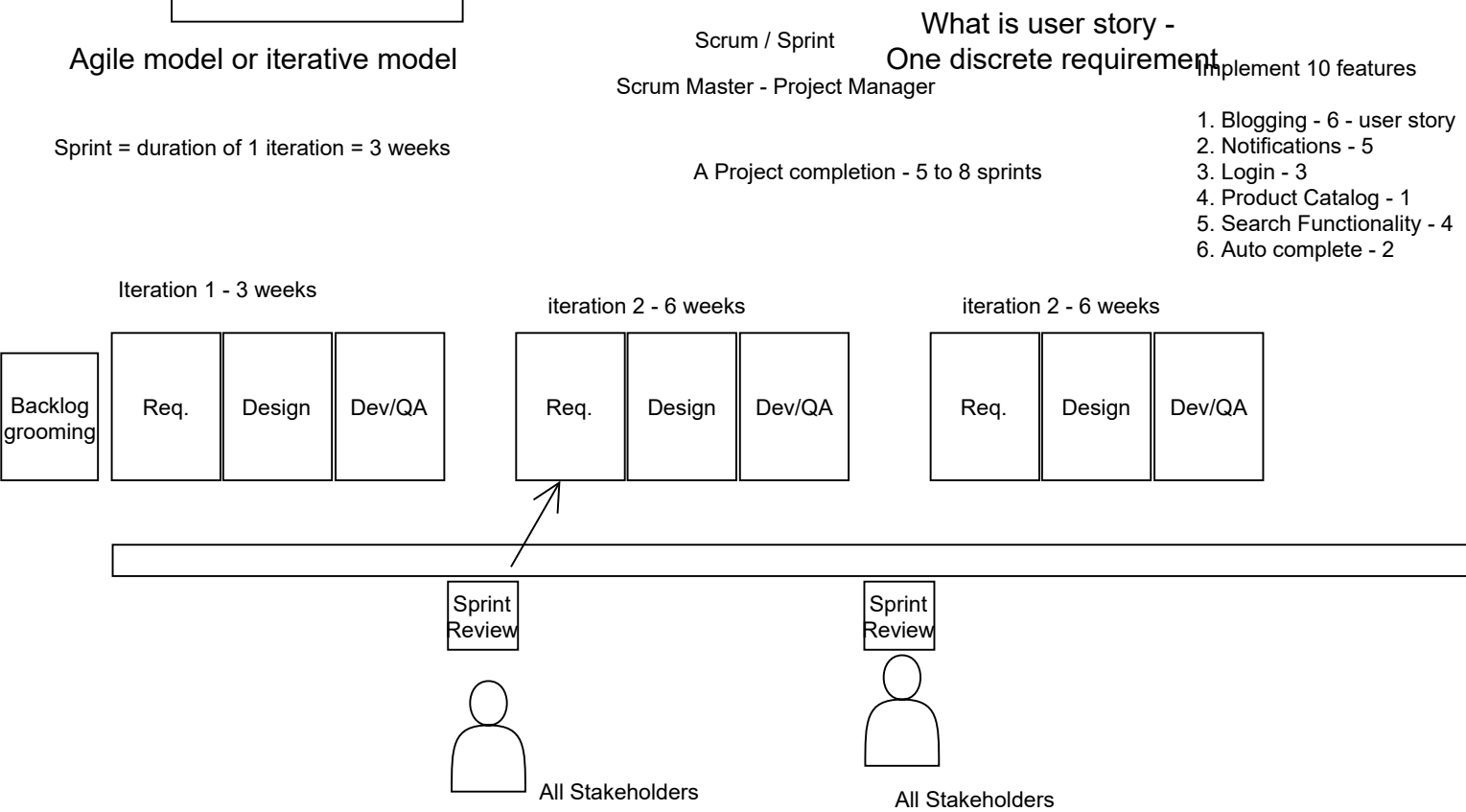
Software Engineering Practices



Waterfall Model



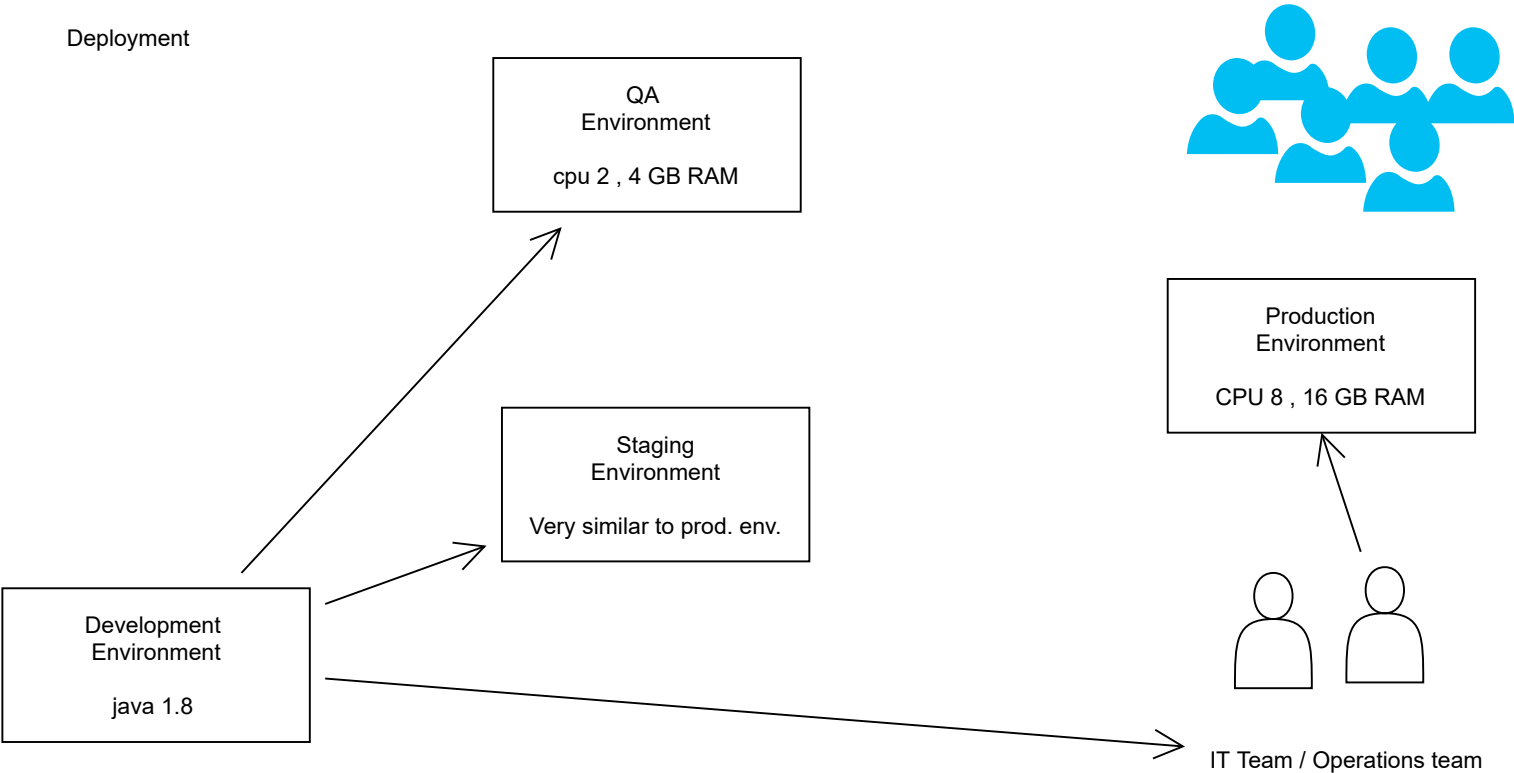
Agile model or iterative model



Devops model = Development + Operations

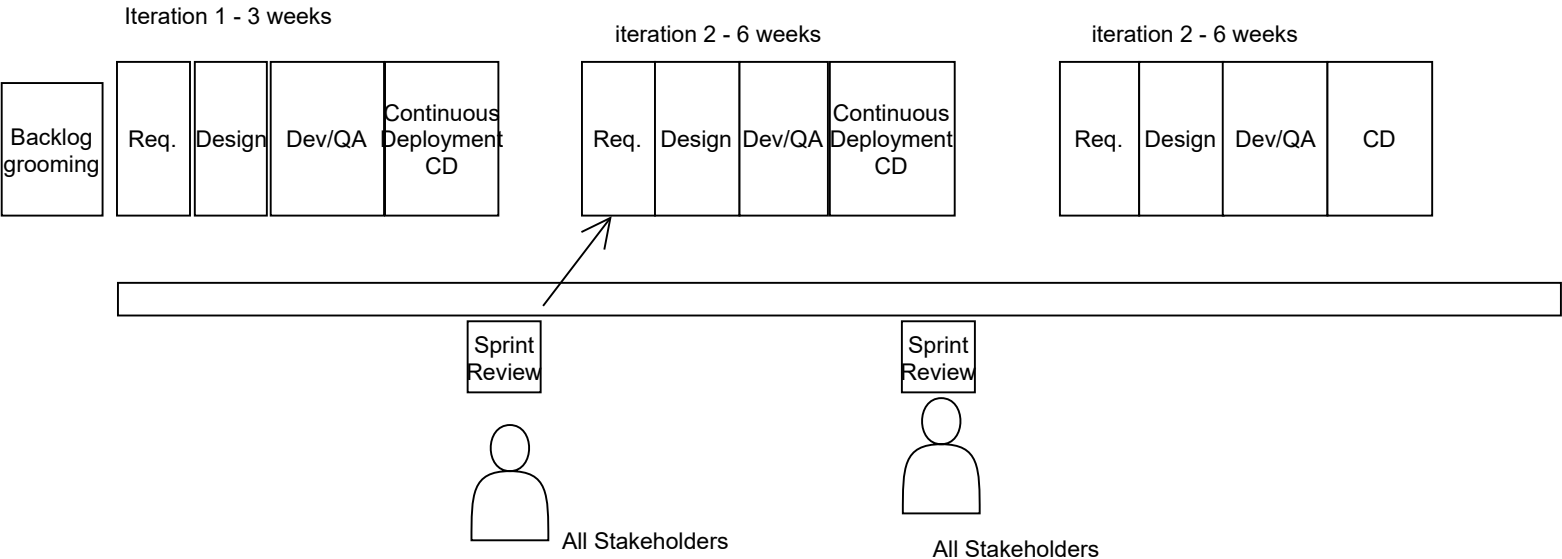
Functional testing
UI Testing

Deployment

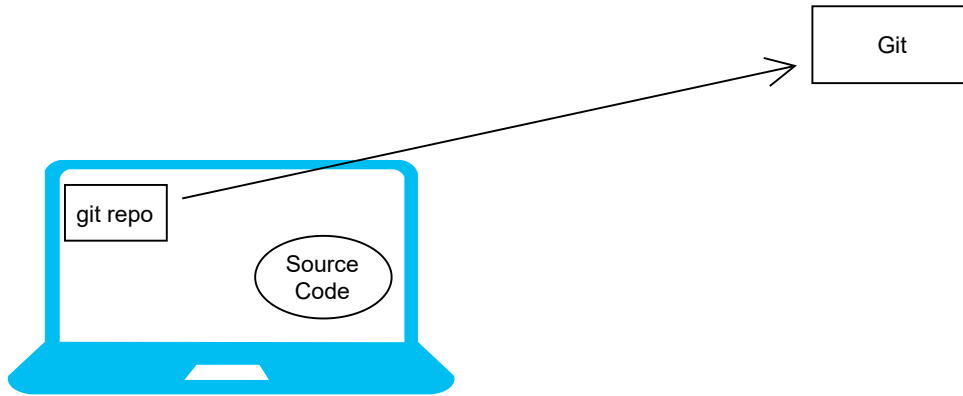


Jenkins - CI / CD tool

Docker / Kubernetes - container management tools



Git



1. Create a repo in github
2. Install git on your windows laptop -
`https://git-scm.com/download/win`
3. `git clone https://github.com/rksljfsd/javademos.git`
4. `git config --global user.email "you@example.com"`
5. `git config --global user.name "Your Name"`
6. `git status`
7. `git add .`
8. `git commit -m "changes"`
9. `git push origin main`

