Course title: Introduction to basic computer Architecture and Networking

Course Prerequisite: None

Course duration: 2 training days

Course coordinator: INTELL VISION

Course overview

In this short course, students will be introduced to basic computer architecture, how a computer works internally, network components and the OSI and TCP/IP models, how computers communicate through the local areas, wide area and internet network, and finally types of software deployment models such as local host, on-premise, cloud and hybrid deployment models will be covered.

Course objective

By the end of this course students should be able to:

- Understand the fundamentals of computer architecture such as CPU organization, memory hierarchy and input/output systems
- Gain knowledge about network components, OSI and TCP/IP models
- Understand how computer communicates through Local area, wide area and internet networks
- Understand types of software deployment models such as localhost, on-premise, cloud and hybrid deployment.

Course content

1. **Basic computer architecture**
    - Motherboard
    - Processors
    - RAM
    - Chipsets
2. **Introduction to networking**
    - Point-to-point connection
    - Local area networks
    - Wide area networks
    - The internet
3. **Introduction to cloud deployment models**
    - Private cloud
    - Public cloud (AWS, Azure and google cloud)
    - Hybrid
4. **Module discussion forum**
5. **Module survey(optional)**

References

Books:

- "TCP/IP Illustrated, Volume 1: The Protocols" by W. Richard Stevens
- "Computer Organization and Design: The Hardware/Software Interface" by David A. Patterson and John L. Hennessy
- "MuleSoft Cookbook" by Dr. Zakir Laliwala, Abdul Samad, and Azaz Desai