## **Group Project: Enterprise Network Design**

## Use the following guidelines to design your network project

- ➤ Background of the Organization
- > The need of network design for the organization
- ➤ The Proposed Network Design Architecture using Cisco Packet Tracer
  - ✓ Approximate the total number of hosts in the organization's network
  - ✓ The proposed network design should contain five VLANs (subnets)
  - ✓ Use 4 or 5 sample workstations in each VLAN (Desktop and Laptop)
  - ✓ Approximate the number of hosts in each VLAN (Use VLSM to define the network address of each subnet)
  - ✓ Use the Router as DHCP server
    - The proposed network designed is a *DHCP* enabled.
    - o Use classful IP addresses (A, B or C)
  - ✓ Consider a security issue in your network design
  - ✓ Create Wireless LAN on one of the VLANs to provide Wireless connection
  - ✓ Consider Data center/Server Farm in your network design (Web server, mail server FTP server, HTTP server...)
- ➤ Basic switch and router Configuration files
  - ✓ Command description
- > Demonstration:
  - Nodes located at different VLANs should be able to communicate to each other (Check network connectivity among devices).
  - Use Network Commands to troubleshoot the network
  - Servers should be accessible from any of the VLANs
- Document submission (Hardcopy and Softcopy)
- > Group Presentations

Submission Date: May 23, 2019