Project Submission Guideline (Optional)

IT 413(AL) Advanced Networking
Department of Mathematics and Information Technology
Concordia University of Edmonton

Project Format

Submission File Requirements:

- **Project Packet Tracer File:** Submit as `project.pkt`.

- **Project Report:** Submit as `<studentID>.pdf`.

Project Report Contents

1. Configuration Commands for Each Router

- Include all necessary commands used to configure each router in the network.

- Ensure each command is documented clearly, making it easy to replicate the configuration.

2. IP Address Table

- Structure your table with the following columns:

    - **Device** (e.g., Router1, PC1, etc.)
    - **Interface** (e.g., G0/0, F0/1)
    - **IPv4 Address**
    - **Subnet Mask**
    - **Default Gateway**

- **Note:** Assign IP addresses efficiently and avoid using addresses from the given topology diagram.

3. VLSM Table

- Structure your VLSM table with these columns:

    - **Network**
    - **Hosts**
    - **Required IPs**
    - **Given/Available IPs**
    - **Host Bits**
    - **Network Bits**

- Assume at least 100 hosts for each network, excluding router-to-router networks.

- Use the most efficient IP address allocation based on your VLSM planning.

Network Requirements

- Configure the following devices:

    - **Servers:** DNS Server, Web Server, Email Server
    - **Network Devices:** Printer, PCs, Laptops

- Use **six routers** as indicated in the provided diagram. Retain the router names for consistency.

- **Design Flexibility:** You may design the network to your preference, using the topology diagram as a reference.

Important Notes

- **Independent Work:** This is an individual project; each student is expected to complete the project independently.

- **Originality:** Incomplete projects or any form of copying will result in disqualification of the project.

- **Assumption of IP Addresses:** Select IP addresses that are not in the provided topology diagram.

Deadline

Please refer to Moodle for the submission deadline and platform details.