REAL-WORLD CASE STUDY

Objective:

Design and implement a real-world networking scenario in Cisco Packet Tracer, document the process, and prepare a presentation.

Group Structure and Roles

Each group will consist of 5 members, with specific roles:

1. **Project Manager**: Coordinates tasks, sets deadlines, and ensures the project stays on track.

2. **Network Designer:** Designs the network architecture and topology.

3. **Configuration Specialist:** Configures the devices in Packet Tracer and troubleshoots issues.

4. **Documentation Lead:** Writes the detailed report and organizes findings.

5. **Presenter:** Prepares and delivers the final presentation.

Deliverables

1. **Cisco Packet Tracer Project:**

- A fully functional Packet Tracer file (*.pkt) simulating a real-world networking scenario.
- The scenario could include business networks, smart home designs, or campus network topologies.

2. **Documentation:**

- Cover Page: Project title, group number, and members' names with roles.
- Abstract: A summary of the case study and its objectives.
- Network Design:
- Network diagram (exported from Packet Tracer).
- Description of the devices, IP addressing scheme, and topology.
- Implementation Details: Step-by-step configuration processes with screenshots.
- Troubleshooting: Common issues encountered and how they were resolved.
- Conclusion: Lessons learned and recommendations.
- References (if any).

3**. Presentation:**

- Duration: 10-15 minutes.
- Contents:
    - Project overview and objectives.
    - Key elements of the design and configuration.
    - Challenges and solutions.
    - Results and conclusion.
- Include visuals like screenshots, diagrams, and videos (optional).

Timeline and Milestones

November 20 - November 26:

- Form groups and assign roles.
- Brainstorm and finalize the real-world networking scenario.
- Begin designing the network topology.

November 27 - December 3:

- Configure devices in Packet Tracer.
- Document the configuration process and start troubleshooting.

December 4 - December 8:

- Finalize the documentation.
- Create and practice the presentation.

Submission and Presentation

- Submission Date: Submit the Packet Tracer file (*.pkt) and documentation in PDF format by December 7, 2024.
- Presentation Week: During the first week of December 2024
    - UCOS 3-1: **December 3, 2024**
    - UCOS 3-2: **December 4, 2024**

Grading Criteria

- Packet Tracer Implementation (40%): Functionality, design accuracy, and complexity.
- Documentation (30%): Clarity, completeness, and professionalism.
- Presentation (20%): Delivery, visuals, and overall engagement.
- Teamwork and Coordination (10%): Equal contribution and role fulfillment.

Take note of these:

- Use the latest version of Cisco Packet Tracer.
- Collaborate effectively; the work should reflect all members' contributions.
- Reach out to the instructor for clarifications or guidance.

Good luck, and happy networking!