Final Project

COSE242: Data Communications

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Fall 2024

Grading

- **Midterm exam (35%), Final (35%)**
  - Avoid missing both exams
- **Assignments (10%)**
  - Online quiz per Chapter: ~13 quizzes
- **Project (10%)**
  - Group project of 5 to 10 students
- **Attendance (10%)**
  - Self-check via **Blackboard**
  - Please keep KU rules on attendance: **>1/3 → F**

Class Schedule

- ## Woojung Hall of Informatics, Mon/Wed
  - Contents could be readjusted according to circumstances.

WEEK	CONTENTS
1	Introduction to Data Communications and Networking
2	Digital and Analog Transmission
3	Data Link Control & Addressing
4	Local Area Networks (Wired and Wireless)
5	Wide Area Networks
6	Connecting Devices and Virtual LANs
7	Network Layer & **Review**
8	**Midterm Exam & Term Project Proposal**

Class Schedule

- **Woojung Hall of Informatics,** Mon/Wed 4th Period 13:30pm – 2:45pm
  - Contents could be readjusted according to circumstances.

WEEK	CONTENTS
9	Transport Layer Services and Protocols
10	Application Layer Services & Protocols
11	Multimedia Transmission & Protocols
12	Network Management
13	Introduction to Network Security
14	Modern Enterprise Networks & Review
15	**Term Project Final Presentation**
16	Final Exam

Class Schedule

- **Woojung Hall of Informatics, Mon/Wed**
  - **Week 7** : Midterm Review
  - **Week 8: Project proposal submission**
  - **Midterm Exam on Monday, October 21, 2024, at 1:30pm same place**
    - Midterm and finals exams are **closed-book exams**, **closed-note exams** where students are not allowed to access **external resources** such as the **Internet**, **cellphones**, or **textbooks**.

Group Project of 5 to 10 people

- Pick **any Topic** related to Data Communications

  - Think about a service that can be useful to you, your friends, or your family, or anyone.

  - Example: client-server services, booking something, ordering something, sharing something, peer-to-peer communication, multimedia (voice, video, picture), or anything related to data exchange, etc

- Work with your team to brainstorm, design, and implement your idea.

- You can program your solution in any programming language of your choice(i.e., Python, C, C++, C#, Java, …..)

Group Project of 5 to 10 people

- Submit **one page** of your proposal idea, your team's name, and team members on **Week 8.**

- After final implementation during **Week 14**, record a **3 minutes demo video of your solution**, create your ppt, share your GitHub project folder.

- **One person** in your team will have a **5 minutes** presentation on **Week 14**.

Group Project of 5 to 10 people

- **Be responsible** of your assigned **tasks** and do your best. You will be **assessed** by your **team member**.

- Collaborate on Github.com code sharing.

  - Create an account on **www.github.com** and use it for coding as it tracks user's activities and commits.

Group Project Evaluation and Assessment

- **Instructor evaluation**

- **Peer evaluation**

  - Team members will evaluate each other's contributions.

- **Project Understanding, Originality, Practicality, & Concept**

  - Clear understanding of core data communication concepts (e.g., protocols, networking models, transmission methods).

  - Proper use of technical terms and frameworks relevant to the project.

Group Project Evaluation and Assessment

- **Design and Implementation**
  - Well-structured design that aligns with project goals.
  - Correct implementation of communication systems (protocol design, network setup, etc.).
  - Efficient use of tools and technology.

Group Project Evaluation and Assessment

- **Analysis & Testing**
  - Detailed testing and analysis of data communication processes.
  - Evidence of network performance assessment, troubleshooting, and resolution of issues.
- **Source Code, Documentation & Presentation**
  - Clear, concise, and well-organized source code and documentation (diagrams, code comments, etc.).
  - Engaging and professional project presentation.
- **Teamwork & Collaboration**
  - Effective collaboration and division of tasks.
  - Contribution and communication between team members.

Q&A