**ACM 412 Network Programming**

**Syllabus Spring 2024**

**Instructor:** Assist. Prof. Dr. Engin Kandıran

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**Office Hours:** By Appointment

**Course Schedule:** Monday 13:00-16:00

**Lecture Hall:** TBF 206

**Aim of the Course:**

Students will be exposed to the concepts, fundamental syntax, and the thought processes behind network programming with Python and javascript( React js). Students will learn about dynamic web application development, session management, authentication, ORM, database connections, REST Services and APIs.

In this course, for backend development we will learn about **Django** framework. Django is suitable for both front-end and back-end web development. The integrated Python libraries make it easy for rapid development. Django has become widely accepted across industries. Because of its growing popularity, providers are more readily available to support Django applications on their platforms.

It is Designed for data-driven applications, where the front-end provides the user interface for a back-end database.

For front end development, we will also refer another popular library among web developers: **React**. We will learn about basics of React for web application front end development.

**Tentative Course Plan (There will be some changes)**

We will discuss the following topics in the semester:

* Introduction to Course and Review of HTTP Protocol: Request and Response Objects
* Review of MVC Pattern and Model and Migration in Django
* URL Mapping, Views, and Templates
* Introduction to Django Admin
* Forms
* Advanced Form Validation and Model Forms
* Sessions and Authentications
* Building a REST API
* Testing
* Introduction to React JS and Basics in React
* Working with APIs with React
* Connecting React with Django

**Grading Policy**

There will be one midterm examination, one project and final examination during the semester.

Grade distribution is going to be:

|  |
| --- |
| **%30\*midterm +%30\*project + %40\*final= Your Total Grade** |

Excuses from exams must be approved in advance and documented by an official medical report approved by the University Medical Service.

**Exam and Make-Up policy:** All exams will take place on the day to be announced of the week Attendance will be strictly monitored according to the University regulations.

Your official exam paper is expected to be upload to University LMS system namely **yulearn**.

The official LMS of the university is: <https://yulearn.yeditepe.edu.tr/>

**Attendance**: **Missing more than 20% of the lectures** will be treated according to university regulations.

**Honor Policy**: Any form of cheating or plagiarism is an automatic zero on the material (additional sanctions such as automatic F and/or disciplinary action will apply in serious cases). This includes copying material from each other or from the Web verbatim. If you are in doubt, look at the solution from your friend or the Web but try to then reconstruct the solution by yourself. If you wish to work together, you must acknowledge this and accept a grade reduction.

**Notes**: You are responsible for all material covered in class.

Good Luck and have good semester 😊