28.02.2024

[CMSE-201 Fundamentals of Software Engineering 1](#_Toc160034155)

[Spring 2024 Term Project Task (25 points in total) 1](#_Toc160034156)

[Term Project Subject List 1](#_Toc160034157)

# CMSE-201 Fundamentals of Software Engineering

## Spring 2024 Term Project Task (25 points in total)

1. Arrange your group of **four** students.
2. Select a subject from the Term Project Subject List of 15 subjects concerning a particular Information System. It is allowed **at most two** groups to work on one and the same subject.
3. Notify Lab Coordinator on the selected subject for its approval latest by March 6, 2024. Later notification will be fined by 10% of the Term Point per day. **If not approved**, another subject shall be selected.
4. Develop Project documentation on the subject of your choice. Documentation shall cover **project proposal, requirements specification, and project design**. Program implementation is **optional** and is appreciated (up to **5 bonus** **extra** points).
5. Project documentation will be arranged as three reports: 1) Project planning and management, submit April 22, 2024, 2) Software requirements specification, **defence** May 06, 2024, and 3) Final report, **defence** May 27, 2024. Templates for the reports and samples can be found at <https://staff.emu.edu.tr/alexanderchefranov/en/teaching/cmse201/labs>, click Project package. All the questions mentioned in the templates shall be answered in the reports. PowerPoint presentations (**defences**) will be arranged for Reports 2) and 3).
6. Project requirements shall be defined both **functional** and **non-functional** (including performance, usability, and security at least). **The requirements shall be elicited from the stakeholders (interview real people).** The number of actors (roles, classes of users) shall be at least **four**. The number of services your Information System provides to each **actor** shall be at least **five**. The **minimal** set of diagrams you prepare shall include:
	1. General System Architecture Diagram
	2. UML Modelling
		1. Use Case Diagrams and Tables
		2. Sequence Diagrams
		3. Activity Diagrams
		4. BPMN diagrams
	3. DFD Diagrams
	4. E-R Diagrams
	5. Relationship diagrams
	6. Class diagrams
	7. Package diagram
	8. Physical Database Tables

Object methods’ interfaces shall be defined. Information Systems shall keep persistent data in **databases** described by E-R diagrams.

1. Reports shall explicitly define **each** team member contribution to the project.
2. Reports shall be submitted both in electronic form (via Teams) and as a hard copy with CD supplied.
3. Deadlines for reports submission are April 22, 2024 (1st PPM report), May 5, 2024 (2nd SRS report), and May 27, 2024 (3rd Final report).

## Term Project Subject List

1. Medical Hospital Information System
2. University Information System
3. Restaurant Information System
4. Hotel Information System
5. Pharmacy Information System
6. Bank Information System
7. Transportation Information System
8. Car Shop Information System
9. Computer Shop Information System
10. Printing House Information System
11. Petrol Station Information System
12. Car Maintenance and Repair Information System
13. Furniture Shop Information System
14. Construction Company Information System
15. Supermarket Information System