UTCN
Computer Science Department
Software Engineering 2025-2026

ASSIGNMENT A2

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1. Objective

The objective of this assignment is to allow students to become familiar with Spring Dependency Injection framework, Client-Server System Architecture, REST and Web Applications.

Develop an application of your own choice on a subject that you like.

2. Application Description

3 points: Demo Tutorial Completed and functional:
https://www.youtube.com/playlist?list=PLs5n5nYB22fIVO1nSiNoUTHIbQujdHYuC

2 points: The application must have a login system and at least two types of users.

2 points: Regular user:
 CRUD on data that application has(E.g. books, movies, tickets, cars, etc.)

3 points: ADMIN:
 CRUD on Regular User
 CRUD on data that application has(E.g. books, movies, tickets, cars, etc.)

 BONUS 1: Spring Security integration in the project:

 http://spring.io/guides/gs/securing-web

BONUS 2: React interface integration:
https://react.dev/learn

3. Application Constraints

Data will be stored into a **database**.
Passwords will be saved using **hashing**.

We will use the **SOLID** principles.
We will use **Design Patterns**. E.g. Dependency Injection, Factory, Builder, etc.
We will use **MVC** software architecture.
We will use **Client-Server** system architecture.

4. Requirements

- Implement and test the application
- Everything through www.github.com

5. Deliverables

- Implementation source files
- repository

6. References

https://github.com/AlexandruGH/AC_Inginerie_Software_2025-20

26