# Design Document Version 1

## Architecture Constraints and design decisions

### Backend Framework: Spring boot(Java)

Design decision:

* I chose Spring boot as my backend framework because this is the framework we are learning this semester. Spring boot is well known for its speed, and ease of development. Spring boot follows the SOLID principles, especially the single responsibility Principle.
* The spring boot ecosystem provides a comprehensive set of libraries for various functionalities, which aligns with the don’t Repeat Yourself(DRY) principle by minimizing already existing code.

## Frontend Framework: React

Design Decision:

* I selected React as the frontend framework again with the reason that we are learning React this semester. React is well known due to its component-based architecture, which sticks to the SOLID principle, especially the open/closed principle (OCP). It enables us to extend and modify the application’s user interface without modifying existing code.
* React promotes the “Keep it simple, Stupid” (KISS) principle by encouraging a straightforward, declarative approach to UI development. This enhances code maintainability.

### Database: MySQL

Design Decision:

* I chose MySQL because we will learn to use this, incoming semester. MySQL is well known