# Classification: Internal

# AccelAero Programming Challenge - Level 1

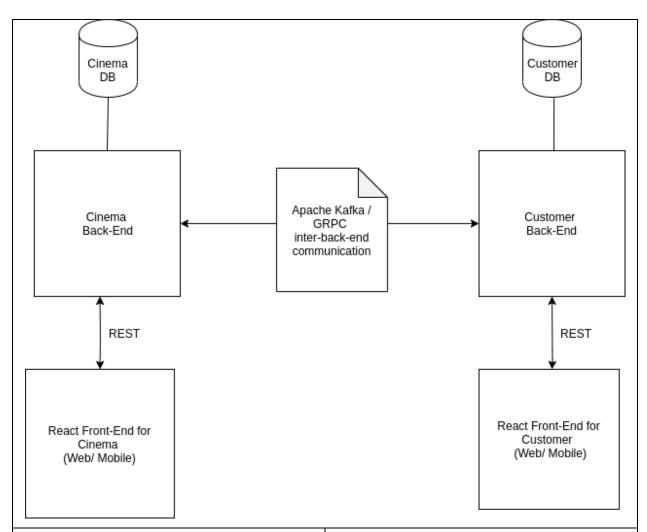
## Challenge 3: Cinema App

The task is to develop a Cinema ticket reservation app and its back-end services (e.g.: bookmyshow / tickets.lk). This project is divided into two major sections as described in the high-level diagram below. You may choose one side of the project while one of your colleagues will work on the other side(s). You should develop your side of the project independently. However, you are expected to agree on APIs / Inter-back-end communication with other colleagues who are developing the other sides of the solution for all the sides to be integrated seamlessly into a working product.

Cinema Side	Movie Fan Side

# Classification:

Internal



#### **Expected Functionalities:**

- Create / edit Cinema profile
- Cinema login by providing credentials
- Create / edit Movies
- Add / change seat inventory for the showtimes on the show days
- Validate and confirm reservations

### **Expected Functionalities:**

- Create / edit Movie Fan account
- Movie Fan login by providing credentials
- Search for movies
- Reserve tickets
- See payment and pay at the cinema.

## **Technologies and Architecture:**

- Back end Java 8, Spring boot, and Gradle
- Login Spring Security
- Database Couchbase / Postgres / MySQL (Select as per your choice.)

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- Front end Ant Design Pro (or any other design library as per your choice) and React
- Inter-back-end communication Apache Kafka / gRPC and Protobuf (Select as per your choice in agreement with the colleague doing the other side(s) of the project.)
- Deployment Docker (Dockerize all the back-end services and front-end apps.)
- Repository and Version Control- Git and Bit Bucket
- Architecture **Monolithic** or **Micro-service** architecture as per your choice.

#### **Instructions:**

- You are required to submit a weekly plan for the project period on the day following the issued date of this assignment.
- You are expected to provide your mentor with a weekly update on the tasks you have performed, weekly work plans, and the project status.
- You may ask for help or learning opportunities, problems, and clarifications on the relevant technologies, architecture, and projects from any employee of the company. We are more than eager to help you.
- You will be sent an email with some of the learning resources.
- A demo is expected to be held on the day following the deadline date.

Issued Date:	Issued Date:
Deadline:	Deadline:
Developer Name:	Developer Name: