

## Overview

Please complete the assignment using Java / Spring Boot. Suggested technologies for the data layer are Hibernate and Postgresql; but you may use a familiar database management system of your choice.

### Note:

- Refer online documentation and tutorials as needed to complete the assignment
- **Bonus points** are awarded if the assignment is implemented using specific technologies mentioned in each section of the assignment.

## Assignment - Part 1

*[Evaluates your knowledge on building a CRUD API]*

Build a REST API to perform CRUD operations for the following 'Event' entity.

### Event Entity Structure

```
"eventId": <UUID>
"transId": "0000abf8-d1f5-4536-8fb0-36fe934b1f28",
"transTms": "20151022102011927EDT",
"rcNum": "10002",
"clientId": "RPS-00001",
"eventCnt": 1,
"locationCd": "DESTINATION",
"locationId1": "T8C",
"locationId2": "1J7",
"addrNbr": "0000000001"
```

### Bonus

1. if Apache Camel is used for the implementation
2. Writing test cases for each CRUD operation

## Assignment - Part 2

*[Evaluates your knowledge on data transformations]*

Add a new REST endpoint that accepts a json payload (see attached sample payload) and saves it in the database.

Each payload may contain one or more records. Each record contains one or more events. Extract each “event” and create an Event entity as described in Part 1. The fields (ex transId, transTMs etc.) in the parent record needs to be used for each event.

### Bonus

1. Think how to improve the performance by processing the events in parallel
2. Write test cases to test the endpoint

## Assignment - Part 3 (Bonus)

1. Containerize the application
2. Execute the API using a docker compose script