

# Microservices

Based on the codebase created during the previous module, implement follow functionality

1. Implement separate Spring boot Application (Microservice).
2. Application should implement follow REST endpoint Trainer workload with follow contract:
  - a. Request
    - i. Trainer Username
    - ii. Trainer First Name
    - iii. Trainer Last Name
    - iv. IsActive
    - v. Training date
    - vi. Training duration
    - vii. Action Type (ADD/DELETE)
  - b. Response
    - i. 200 OK
3. Implement service function corresponding to mentioned below REST endpoint. Service should calculate as in-memory saved structure trainer's monthly summary of the provided trainings. The model should be the follow;
  - a. Trainer Username
  - b. Trainer First Name
  - c. Trainer Last Name
  - d. Trainer Status
  - e. Years (List)
    - i. Months (List)
      1. Training summary duration
4. Update Existing Main Microservice implementation to call Secondary Microservice every time that new training added or deleted to the system.
5. Elaborate discovery module according to guide [Eureka Discovery Service](#).
6. Elaborate circuit breaker pattern.
7. Elaborate Authorization – Bearer token for Microservices integration Use JWT token implementation.
8. Two levels of logging should be implemented - transactions and each operation transaction level - which endpoint was called, which request came and the service response - 200 or error and response message + at this level, a transactionId is generated, by which you can track all operations for this transaction the same transactionId can later be passed to downstream services.

## Notes:

1. For REST API implementation use second level of Richardson maturity model.
2. Try to understand in which case training can be deleted.