Lesson 9: REST

- GET, PUT, POST, DELETE http requests
- Idempotent
- @RequestMapping, @GetMapping, etc.
- PathVariable
- Query Parameter
- ResponseEntity
- RestTemplate
- REST API design

You should be able to write a REST controller according API design best practices
You do not need to write a RestTemplate

Lesson 10: SOAP

- SOAP envelope
- WSDL
- Contract first, contract last
- JAXB
- WebserviceTemplate

You don't need to write SOAP related code. You should be able to understand given code.
Understand the process of how SOAP webservices are written using spring boot.

Lesson 11: Messaging

- JMS
- Point-to-point, publish-subscribe
- Spring boot JMS sender
- Spring boot JMS listener
- JMS concurrency
- Disadvantage traditional messaging broker
- Kafka
- Event sourcing
- Offset
- Partition
- Replication
- Spring boot Kafka sender
- Spring boot Kafka listener
- Consumer group, group-id

You should be able to write JMS or Kafka sender and listener
You do not have to write Kafka or Active MQ configuration. But you do need to understand the configuration.
You do not need to memorize the code to convert JSON to an object or an object to JSON

Lesson 12: Scheduling, events, configuration

- @Scheduled
- Spring boot event publisher
- Spring boot event listener
- Asynchronous events
- Asynchronous methods
- @ConfigurationProperties
- Property validation (@Validation, @Email, @NotBlank,@Size)
- Logging
  - Logging level
  - Logging level on packages
  - Logging to a file
- Actuators

You should be able to write an event publisher and event listener
You should be able to write a ConfigurationProperties file including validation constraints
You should be able to schedule a method
You should be able to write an asynchronous method
You should be able to write logging code in java, and configure the level (including packages) in application.properties

Lesson 13: Monitoring

- ELK Stack
  - ElasticSearch
  - Logstash
  - Kibana
- Micrometer
- Prometheus
- Grafana
- Unit testing
- @Test, @Before, @BeforeClass
- AssertThat
- Hamcrest matchers: equalTo
- Unit testing best practices
- Repository tests
- RestAssured tests

You do not need to know the configuration of any monitoring tool. Just understand how they work
You should be able to write unit test classes
You don't need to memorize the code for Repository test and RestAssured tests. You don't need to write this code, but you should understand given code.

Lesson 14: Security

- Stateful and stateless security
- Role based security
- Encoding
- Token based security: Jwt
- Centralized authorization server: Oauth2

You don't need to write security code, but you do need to understand given code