Spring Professional Exam Tutorial v5.0

Question 19

Question 19 - What are the advantages of the RestTemplate?

RestTemplate is a synchronous HTTP client wrapper to perform HTTP requests. It exposes simple API over underlying HTTP client libraries:

- JDK HttpURLConnection
- Apache HttpComponents
- OkHttp
- …

It supports:

- Automatic Object Serialization/Deserialization:
  - JAXB2, Jackson2, GSON, JSONB, …
- Automatic HttpMessageConverters registration
- URI Templates
- Exchange Operation – send and retrieve, for example HTTP POST that takes input object and returns object
- HTTP GET for Object
- HTTP HEAD for Headers
- HTTP POST for Object
- HTTP PUT with Object
- HTTP PATCH for Object
- HTTP DELETE

Question 19 - What are the advantages of the RestTemplate?

RestTemplate has following advantages:

- Simplicity
- Automatic Object Serialization/Deserialization
- High-Level API allows you to focus on business side of operations
- Provides support for common HTTP GET, POST, PUT, PATCH, HEAD, OPTIONS, DELETE operations
- Flexibility:
  - Allows Custom Error Management with usage of ResponseErrorHandler
- Extendibility:
  - Allows to register custom HttpMessageConverters
  - Allows to register custom ClientHttpRequestFactory
- URI Templates Support
- Minimal amount of code required
- Automatic content type detection

Question 19 - What are the advantages of the RestTemplate?

Because of it's simplicity, REST Template is often used in testing code, however it can be used as general purpose HTTP Client.

* Whenever using REST Template as HTTP Client, also consider Spring Cloud components if the purpose is to build distributed system

User → request → Web UI → REST Template /api/customers/* → Backend