Spring Boot Framework and Microservices Assessment

- What is Spring Boot?

  Marked Answer :

  A lightweight Java framework for building standalone, production-grade applications

  Correct Answer :

  A lightweight Java framework for building standalone, production-grade applications

  Total Marks : 1MARKS OBTAINED 1

- What is a microservice?

  Marked Answer :

  A software architecture that structures an application as a collection of loosely coupled services

  Correct Answer :

  A software architecture that structures an application as a collection of loosely coupled services

  Total Marks : 1MARKS OBTAINED 1

- Which of the following is NOT a benefit of using microservices?

  Marked Answer :

  Reduced complexity

  Correct Answer :

  Reduced complexity

  Total Marks : 1MARKS OBTAINED 1

- What is the purpose of the Spring Boot Actuator?

  Marked Answer :

  To provide detailed information about the running Spring Boot application

  Correct Answer :

  To provide detailed information about the running Spring Boot application

  Total Marks : 1MARKS OBTAINED 1

- Which of the following is an example of a technology commonly used for inter-service communication in microservices architecture?

  Marked Answer :

  HTTP/1.1

  Correct Answer :

HTTP/1.1

Total Marks : 1MARKS OBTAINED 1

- What is the purpose of the Eureka server in a microservices architecture?

  Marked Answer :

  To provide a registry of available microservices

  Correct Answer :

  To provide a registry of available microservices

  Total Marks : 1MARKS OBTAINED 1

- Which of the following is an example of a database commonly used in microservices architecture?

  Marked Answer :

  MongoDB

  Correct Answer :

  MongoDB

  Total Marks : 1MARKS OBTAINED 1

- What is the purpose of a circuit breaker in a microservices architecture?

  Marked Answer :

  To prevent cascading failures in a distributed system

  Correct Answer :

  To prevent cascading failures in a distributed system

  Total Marks : 1MARKS OBTAINED 1

- Which of the following is an example of a tool commonly used for containerization in microservices architecture?

  Marked Answer :

  Docker

  Correct Answer :

  Docker

  Total Marks : 1MARKS OBTAINED 1

- Which of the following is NOT a characteristic of microservices architecture?

  Marked Answer :

  Monolithic

  Correct Answer :

  Monolithic

Total Marks : 1MARKS OBTAINED 1

- Spring Boot used for developing?

Marked Answer :

Microservices

Correct Answer :

Microservices

Total Marks : 1MARKS OBTAINED 0

- What is Spring Initializer?

Marked Answer :

A web-based tool for generating a basic Spring Boot project structure

Correct Answer :

A web-based tool for generating a basic Spring Boot project structure

Total Marks : 1MARKS OBTAINED 1

- What does Spring Boot do to simplify the configuration of a Spring-based application?

Marked Answer :

Automatically configures necessary beans and dependencies

Correct Answer :

Automatically configures necessary beans and dependencies

Total Marks : 1MARKS OBTAINED 1

- How can a Spring Boot application be packaged and distributed?

Marked Answer :

All of the above

Correct Answer :

All of the above

Total Marks : 1MARKS OBTAINED 1

- Which Spring annotation is used to create RESTful web services using Spring MVC?

Marked Answer :

@RestController

Correct Answer :

@RestController

Total Marks : 1MARKS OBTAINED 1

- @RestController annotation is a combination of the below two annotations

Marked Answer :

@Controller and @ResponseBody annotations

Correct Answer :

@Controller and @ResponseBody annotations

Total Marks : 1MARKS OBTAINED 1

- Which Spring annotation is used to handle HTTP POST requests?

Marked Answer :

@PostMapping

Correct Answer :

@PostMapping

Total Marks : 1MARKS OBTAINED 1

- Which Spring annotation is used to handle HTTP GET requests?

Marked Answer :

@GetMapping

Correct Answer :

@GetMapping

Total Marks : 1MARKS OBTAINED 1

- Which Spring annotation is used to handle HTTP DELETE requests?

Marked Answer :

@DeleteMapping

Correct Answer :

@DeleteMapping

Total Marks : 1MARKS OBTAINED 1

- Which Spring annotation is used to handle HTTP PUT requests?

Marked Answer :

@PutMapping

Correct Answer :

@PutMapping

Total Marks : 1MARKS OBTAINED 1

- Which annotation do we use to mark the class as a Service class/component?

Marked Answer :

@Service

Correct Answer :

@Service

Total Marks : 1MARKS OBTAINED 1

- Which is the default implementation class of the JpaRepository interface?

Marked Answer :

JpaRepositoryImpl class

Correct Answer :

JpaRepositoryImpl class

Total Marks : 1MARKS OBTAINED 1

- Which is the default HTML template in Spring Boot

Marked Answer :

Thymeleaf

Correct Answer :

Thymeleaf

Total Marks : 1MARKS OBTAINED 1

- Which starter dependency is used to develop web applications or Restful web services?

Marked Answer :

spring-boot-starter-web

Correct Answer :

spring-boot-starter-web

Total Marks : 1MARKS OBTAINED 1

- What is the purpose of the Spring Boot Actuator?

Marked Answer :

To provide production-ready features such as monitoring and metrics

Correct Answer :

To provide production-ready features such as monitoring and metrics

Total Marks : 1MARKS OBTAINED 1

- How can you specify the port on which a Spring Boot application runs?

  Marked Answer :

  All of the above

  Correct Answer :

  All of the above

  Total Marks : 1MARKS OBTAINED 1

- Queries in microservices architecture are implemented through _____

  Marked Answer :

  CQRS

  Correct Answer :

  CQRS

  Total Marks : 1MARKS OBTAINED 1

- Microservices based architecture prefers _____

  Marked Answer :

  No Dependency on any particular DBs

  Correct Answer :

  No Dependency on any particular DBs

  Total Marks : 1MARKS OBTAINED 1

- Software built as microservices can by definition be broken down into multiple

  component services. The statement is:

  Marked Answer :

  true

  Correct Answer :

  true

  Total Marks : 1MARKS OBTAINED 1

- The benefits of microservices include _____

  Marked Answer :

  All of the above

  Correct Answer :

  All of the above

Total Marks : 1MARKS OBTAINED 1

Total Marks **29 / 30**

29/30

Question 1   1

What is Spring Boot?

○ A Java-based framework for building microservices

◉ A lightweight Java framework for building standalone, production-grade applications

○ A powerful tool for developing web applications in PHP

○ A popular Python web framework

Question 2   1

What is a microservice?

○ A small server that handles a single request

◉ A software architecture that structures an application as a collection of loosely coupled services

○ A type of web application that uses microcontrollers

○ A programming language for microprocessors

Question 3   1

Which of the following is NOT a benefit of using microservices?

○ Improved scalability

○ Improved fault tolerance

○ Improved security

◉ Reduced complexity

Question 4   1

What is the purpose of the Spring Boot Actuator?

◉ To provide detailed information about the running Spring Boot application

○ To manage the lifecycle of microservices

○ To provide security for microservices

○ To provide an interface for building user interfaces

Question 5   1

Which of the following is an example of a technology commonly used for inter-service communication in microservices architecture?

◉ HTTP/1.1

○ FTP

○ SMTP

○ SSH

Question 6   1

What is the purpose of the Eureka server in a microservices architecture?

◉ To provide a registry of available microservices

○ To provide a database for storing microservices

○ To provide an interface for managing microservices

○ To provide security for microservices

Question 7   1

Which of the following is an example of a database commonly used in microservices architecture?

○ MySQL

◉ MongoDB

○ Oracle

○ PostgreSQL

Question 8   1

What is the purpose of a circuit breaker in a microservices architecture?

◉ To prevent cascading failures in a distributed system

○ To manage the lifecycle of microservices

○ To provide security for microservices

○ To provide an interface for managing microservices

Question 9   1

Which of the following is an example of a tool commonly used for containerization in microservices architecture?

◉ Docker

○ Jenkins

○ Ansible

○ Chef

Question 10   1

Which of the following is NOT a characteristic of microservices architecture?

◉ Monolithic

○ Distributed

○ Loosely coupled

○ Independent

Question 11   1

Spring Boot used for developing?

○ Web applications

○ Distributed applications (Restful web services)

○ Microservices

◉ Microservices

Question 12   1

What is Spring Initializer?

◉ A web-based tool for generating a basic Spring Boot project structure

○ A command-line tool for generating a basic Spring Boot project structure

○ A tool for initializing a Spring-based application with a specific set of dependencies

○ A tool for creating a Spring Boot application with a specific set of features

Question 13   1

What does Spring Boot do to simplify the configuration of a Spring-based

application?

- 🔘 Automatically configures necessary beans and dependencies
- ⚪ Uses annotations to configure beans and dependencies
- ⚪ Allows for the use of XML configuration files
- ⚪ Provides a command line interface for configuring the application

Question 14   1

How can a Spring Boot application be packaged and distributed?

- ⚪ As a JAR file
- ⚪ As a WAR file
- ⚪ As a ZIP file
- 🔘 All of the above

Question 15   1

Which Spring annotation is used to create RESTful web services using Spring

MVC?

- 🔘 @RestController
- ⚪ @Controller
- ⚪ @Component
- ⚪ @Rest

Question 16   1

@RestController annotation is a combination of the below two annotations

○ @Component and @ResponseBody annotations

● @Controller and @ResponseBody annotations

○ @Service and @ResponseBody annotations

○ None of the above

Question 17   1

Which Spring annotation is used to handle HTTP POST requests?

○ @GetMapping

○ @PutMapping

○ @CreateMapping

● @PostMapping

Question 18   1

Which Spring annotation is used to handle HTTP GET requests?

● @GetMapping

○ @PutMapping

○ @CreateMapping

○ @PostMapping

Question 19   1

Which Spring annotation is used to handle HTTP DELETE requests?

○ @GetMapping

○ @PutMapping

● @DeleteMapping

○ @PostMapping

Question 20 1

Which Spring annotation is used to handle HTTP PUT requests?

○ @GetMapping

● @PutMapping

○ @DeleteMapping

○ @PostMapping

Question 21 1

Which annotation do we use to mark the class as a Service class/component?

○ @Component

● @Service

○ @Controller

○ @Repository

Question 22 1

Which is the default implementation class of the JpaRepository interface?

○ SimpleJpaRepository class

● JpaRepositoryImpl class

○ CustomJpaRepository class

○ DefaultJpaRepository class

Question 23   1

Which is the default HTML template in Spring Boot

○ JSP

○ Freemarker

● Thymeleaf

○ Groovy

Question 24   1

Which starter dependency is used to develop web applications or Restful web

services?

○ spring-boot-starter-data-jpa

● spring-boot-starter-web

○ spring-boot-starter-rest

○ spring-boot-starter-web-dependency

Question 25   1

What is the purpose of the Spring Boot Actuator?

- ⦿ To provide production-ready features such as monitoring and metrics
- ○ To provide a way to configure beans using annotations
- ○ To provide a way to run Spring Boot applications as a service
- ○ To provide a way to access the underlying database of a Spring Boot application

Question 26   1

How can you specify the port on which a Spring Boot application runs?

- ○ By modifying the application.properties file
- ○ By modifying the application.yml file
- ○ By using the --server.port command-line option
- ⦿ All of the above

Question 27   1

Queries in microservices architecture are implemented through _____

- ○ SQRS
- ⦿ CQRS
- ○ OQRS
- ○ LQRS

Question 28   1

Microservices based architecture prefers _____

○ NoSql DBs

○ RDBMS DBs

○ MySql DBs

⦿ No Dependency on any particular DBs

Question 29   1

Software built as microservices can by definition be broken down into multiple

component services. The statement is:

⦿ true

○ false

○ no idea

○ none

Question 30   1

The benefits of microservices include _____

○ Easy scaling

○ Improved fault tolerance

○ Faster to build and deploy

○ Scale development: Develop, Deploy & Scale

⦿ All of the above