

# Assume you are expert in rest Assured and got hired in many interviews then Answer the question given by interviewer "what is rest Assured and its key features"

Absolutely! Here's how you can confidently answer the interview question:

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## Q: What is Rest Assured and its key features?

### Answer:

Rest Assured is a **Java-based library** that simplifies the process of testing and validating RESTful APIs. It is widely used in automation testing because it provides a **domain-specific language (DSL)** that makes writing API tests intuitive and human-readable, even for complex requests.

It is built on top of libraries like **Java, Groovy, Apache HttpClient, and JsonPath**, which makes it very powerful and flexible.

### Key Features of Rest Assured:

#### 1. Simple and Readable Syntax:

- Its fluent interface allows easy chaining of methods.

Example:

```
given().param("key", "value").when().get("/endpoint").then().statusCode(200);
```

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#### 2. Support for All HTTP Methods:

- Easily test **GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD**.

#### 3. Built-in Validations:

- You can validate status codes, headers, cookies, response time, and body content using powerful matchers like Hamcrest.

#### 4. **Seamless Integration with Test Frameworks:**

- Integrates well with **JUnit**, **TestNG**, **Cucumber**, and **Allure** for BDD and reporting.

#### 5. **JSON and XML Support:**

- Out-of-the-box support for parsing and validating **JSONPath** and **XMLPath** responses.

#### 6. **Authentication Mechanisms:**

- Supports various authentication types like **Basic Auth**, **OAuth 1.0 & 2.0**, **Bearer Tokens**, and more.

#### 7. **Request and Response Logging:**

- Helps in debugging by logging full requests/responses.

#### 8. **Supports Parameterization:**

- Query parameters, path parameters, and headers can be dynamically set.

#### 9. **Reusable Specifications:**

- You can define common **RequestSpecification** and **ResponseSpecification** to avoid code duplication.

#### 10. **Schema Validation:**

- Supports JSON Schema and XML Schema validation to verify the structure of API responses.

**Conclusion:** Rest Assured is a go-to tool for API automation in Java due to its simplicity, power, and flexibility. It reduces boilerplate code and allows QA engineers to focus on validating the actual business logic of the API.

Let me know if you want a version with a real-world example or to practice how to say it confidently in an interview!