# REST Assured Path vs Query Params

In **Rest Assured**, both **path parameters** and **query parameters** are used to send dynamic data in HTTP requests when testing REST APIs.

## ✅ 1. Path Parameters

Path parameters are part of the **endpoint URL path**. They are used when you want to test URLs with dynamic values (like IDs).

### 🔧 Syntax (Rest Assured):

```java
given()
    .pathParam("userId", 123)
.when()
    .get("/users/{userId}")
.then()
    .statusCode(200);
```

### 🔍 URL Constructed:

```bash
/users/123
```

## ✅ 2. Query Parameters

Query parameters are added **after a** ? in the URL and are typically used for **filtering or searching**.

### 🔧 Syntax (Rest Assured):

```java
given()
    .queryParam("name", "john")
    .queryParam("age", 30)
.when()
    .get("/users")
.then()
    .statusCode(200);
```

### 🔍 URL Constructed:

```bash
/users?name=john&age=30
```

# ✅ Combined Example: Path + Query Parameters

```java
given()
    .pathParam("userId", 123)
    .queryParam("details", "full")
.when()
    .get("/users/{userId}")
.then()
    .statusCode(200);
```

## 🔍 URL Constructed:

```bash
/users/123?details=full
```

# ✅ Notes

- **PathParam** replaces **{}** placeholders in the endpoint.
- **QueryParam** appends key-value pairs to the URL.
- Use `.queryParams(Map<String, String>)` or `.pathParams(Map<String, Object>)` if passing multiple values dynamically.

Would you like a mini project example or practice assignment on this?

Great! Let's use **banking domain examples** to demonstrate:

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# ✅ 1. Get Transaction by ID (Path Parameter)

### ◆ Use Case:

Get transaction details by ID, e.g., **/transactions/{transactionId}**

## 🔧 Rest Assured Example:

```java
given()
    .pathParam("transactionId", 98765)
.when()
    .get("/api/transactions/{transactionId}")
.then()
    .statusCode(200)
    .log().body();
```

## 🔍 Final URL:

```bash
/api/transactions/98765
```

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# ✅ 2. Filter Accounts by Type (Query Parameter)

### ◆ Use Case:

Get all accounts filtered by type (e.g., "savings", "checking"), e.g., **/accounts?type=savings**

## 🔧 Rest Assured Example:

```java
given()
    .queryParam("type", "savings")
.when()
    .get("/api/accounts")
.then()
    .statusCode(200)
    .log().body();
```

## 🔍 Final URL:

```bash
/api/accounts?type=savings
```

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# ✅ 3. Combined Example: Get transactions for a user by ID and type

- 🔹 **Use Case:**

Get all "debit" transactions for user with ID 123

## 🔧 Rest Assured Example:

```java
given()
    .pathParam("userId", 123)
    .queryParam("type", "debit")
.when()
    .get("/api/users/{userId}/transactions")
.then()
    .statusCode(200)
    .log().body();
```

## 🔍 Final URL:

```bash
/api/users/123/transactions?type=debit
```

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# 🧪 Want Practice?

Would you like a few **practice exercises or mock banking API** endpoints to try these out hands-on?