

HTTP Status Codes in Spring Boot

HTTP Response Codes (also called **status codes**) are **3-digit numbers** sent by a web server (like Spring Boot) in response to a request from a client (like a browser or Postman).

They tell us **what happened** when the request was processed.

HTTP Response Status Codes

Code	Name	Description
1xx – Informational		
100	Continue	Request received, continue process
101	Switching Protocols	Server is switching protocols
102	Processing (WebDAV)	Server has received and is processing the request

Code	Name	Description
2xx – Success		
200	OK	Standard success response
201	Created	Resource successfully created
202	Accepted	Request accepted, not yet processed
204	No Content	Successful, but no response body

Spring Boot Usage Example:

```
return ResponseEntity.status(HttpStatus.CREATED).body("User created");
```

Code	Name	Description
3xx – Redirection		
301	Moved Permanently	Resource has moved to a new URL
302	Found	Temporary redirect
304	Not Modified	Resource not modified since last request

Code	Name	Description
4xx – Client Errors		
400	Bad Request	Invalid input or request syntax
401	Unauthorized	Authentication required
403	Forbidden	User is not allowed to access
404	Not Found	Resource does not exist

405	Method Not Allowed	Method (GET, POST, etc.) not supported
409	Conflict	Conflict in request (e.g., duplicate data)
415	Unsupported Media Type	Incorrect Content-Type in request
429	Too Many Requests	Rate-limiting exceeded

Spring Boot Usage Example:

```
return ResponseEntity.status(HttpStatus.NOT_FOUND).body("Data not found");
```

Code	Name	Description
5xx – Server Errors		
500	Internal Server Error	Unhandled exception occurred
501	Not Implemented	Endpoint/method not implemented
502	Bad Gateway	Invalid response from upstream server
503	Service Unavailable	Server is temporarily overloaded or down
504	Gateway Timeout	Timeout while communicating with another server

Spring Boot Usage Example:

```
return ResponseEntity.status(HttpStatus.INTERNAL_SERVER_ERROR).body("Something went wrong");
```

Important Status Codes

Code	Meaning	Typical Use Example
200	OK	GET success
201	Created	POST success
204	No Content	DELETE success
400	Bad Request	Input validation error
401	Unauthorized	Token/authentication missing
403	Forbidden	Access denied
404	Not Found	Resource not found
409	Conflict	Duplicate entry
500	Internal Server Error	Unhandled backend issue