

Explain common HTTP response codes associated with REST APIs

Following is a brief overview of status code categories and a few of the status codes that you are likely to encounter when working with web-based APIs. A complete list of status codes is available in RFC 7231, which describes the HTTP/1.1 standard.

1xx (Informational)

Most codes from this category indicate that the request was received and understood. They usually mean that the request processing continues and alerts the client to wait for the final response. They are rarely used.

2xx (Successful)

200 (OK): Standard response for a successful HTTP request. The information returned depends on the request method.

201 (Created): Indicates that a resource has been successfully created.

204 (No content): The server has successfully fulfilled the request and the response body is empty. A 204 code is useful when you want to confirm that a POST request was received by the server.

3xx (Redirection)

301 (Moved Permanently): This and all future requests should be directed to the given URI.

302 (Found): The requested resource resides temporarily under a different URI.

304 (Not Modified): Indicates that the resource has not been modified since the version specified by the request headers. Useful for reducing overhead.

4xx (Client error)

400 (Bad Request): The server cannot process the request because of a malformed request (bad syntax, deceptive routing, size too large).

401 (Unauthorized): The request requires a valid authorized user. It usually means that the user is not authenticated or that authentication failed.

403 (Forbidden): The request was valid, but the server is refusing action. The user might not have the necessary permissions for a resource.

404 (Not Found): The server has not found anything matching the request URI. No indication is given whether the condition is temporary or permanent.

429 (Too Many Requests): The client has exceeded the rate limit. Will need to wait before retrying.

Other status codes include more specific information about the request error.

5xx (Server error)

500 (Internal Server Error): A generic error message, given when an unexpected condition was encountered, and no more specific message is suitable.

501 (Not Implemented): The server does not support the functionality required to fulfil the request.

503 (Service Unavailable): The service cannot handle the request. It is usually a temporary condition attributed to a server crash, maintenance, overload, and so on.

Other status codes include more specific information about the server error.