**6. Spring Boot**

1. What is an API?

Application Programming Interface (API) is used by developer to communicate between software components. API has developed using definitions and protocols.

1. What are http methods?

* GET
* POST
* PUT
* DELETE

1. What are http status codes?

When we send a request from browser to the server, the server will process the request and will send a response to the server. This response contains a status code. The server uses this status code to indicate whether or not that request can be fulfilled.

* 200,201

Indicates that the request processing is success and the server can send the expected response to the user. **200** is the standard response for successful http request. If we use GET method the server response with the expected results. **201** used to indicate that a resource has been successfully created.

* 301

Indicates permanent redirect. This can happen if the request url has moved permanently to a new url.

* 400, 401, 403, 404, 405

Indicates client errors. It says there is something wrong the way browser. **400** indicates the client has been sent a wrong request such as wrong request syntax, invalid request body, size too large and etc. **401** indicatesunauthorized access. **403** it is same as the 401, this code will return if a user trying to access some resource without necessary permissions.**404** indicates that the requested resource cannot be found. **405** indicates that the request method not allowed.

* 500, 501, 502, 503, 504

Indicates server errors. This code can be sent by the server if the server cannot fulfill the request. **500** indicates the internal server error. This is the generic error message to say an unexpected event happened when processing the request. **501** indicates the request method has not implemented yet and it can be available in the future. **502** indicates a bad gateway if the server was acting as a gateway or proxy and received an invalid response from upstream server. **503** indicates the service unavailable. This can happen when the server is down for maintenance. **504** indicates gateway timeout if the server is acting as a gateway, this can happen the if the upstream server didn`t response before the timeout.