

WEB TECHNOLOGIES USING **JAVA**

COURSE 6 – REST WEBSERVICES.

AGENDA

- REQUEST PARAMS
- REQUEST BODY
- RESPONSE
- HEADERS

REQUEST PARAMS

- Path param - **@PathVariable**
 - path variables may be substituted with identity-based values:
 - GET /leagues/{leagueId}/teams/{teamId}/players/{playerId}
- Query param - **@RequestParam**
 - is an URI's optional query
 - comes after the path
 - can provide clients with additional interaction capabilities (searching, pagination or filtering)
 - GET /users?role=admin
 - GET /users?pageSize=25&pageStartIndex=50
 - for complex searching / filtering, consider designing
 - a special resource such as *search*: POST /users/search
 - a GET request with a body

REQUEST PARAMS

- any required parameters should be put in the path, and any optional parameters should be query string parameters
- optional parameters in the path cause unexpected results when trying to write URL handlers that match different combinations

REQUEST BODY

- `@RequestBody`
- Usually mapped to JSON
- Usually used for POST, PUT, PATCH
- Possible to use it with a GET, less used

RESPONSE

- **ResponseEntity**: used when extra information is needed on the response, apart from the possible retrieved entity
- HTTP status codes
- HTTP headers

HEADERS

- Various forms of metadata may be conveyed through the entity headers for the HTTP request and HTTP response (**@RequestHeader** for requests)
- HTTP standard headers:
 - **Content-Type**:
 - the type of data found within a request or response message's body
 - media type: application, audio, image, message, model, multipart, text, or video
 - commonly used: text/html, image/jpeg, application/xml, application/json
 - **ETag**: identifies a specific “version” of the resource. Usually sent in response to GET requests
 - **If-Match**: identifies a specific “version” of the resource. Usually sent in request for PUT or PATCH
 - **Location**: the URI of a newly created resource. Usually sent in response to the successful creation of a resource
 - **Accept**: the type of data found within a request
- Custom headers

BIBLIOGRAPHY

- Spring in Action, by Craig Walls
- Spring REST, by Balaji Varanasi, Sudha Belida
- REST API Design Rulebook, by Mark Masse
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Q&A



THANK YOU

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