REST API Guidelines

Architectural principles of REST

1. **Addressable Resources**

A house is identified by door number.

A resource is identified by URI

1. **Well defined methods to interact with resource**

GET-to retrieve a resource

PUT-to update a resource

DELETE-to delete a resource

POST-to create a resource

1. **Representation oriented**

To describe the data format of input content type header is used. To describe the data format of output Accept type header is used.

Data formats

application/json

text/XML

application/XML

text/plain

1. Stateless

Services are implemented as stateless to improve the scalability

Resource Modeling

Rules for naming resources

Use simple word nouns that are pluralized.

Examples: students, customers, employees.

Use lower case with hyphen to separate words, but try to use single word.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Resource | POST | GET | PUT | DELETE |
| /students | Create a new student | Retrieve a list of students |  |  |
| /students/studentid |  | Retrieve a student | Update a student | Delete a student |

Method specific annotation definitions:    
   
Get All

 @GetMapping

Get specific resource

 @GetMapping("/{id}")

Create resource

 @PostMapping

NOTE: Payload data should be sent in the body of the request    
   
Update resource

 @PutMapping

NOTE: Payload data should be sent in the body of the request    
   
Delete resource

 @DeleteMapping("/{id}")