**API Integration Engineer / Software Engineer I**

## **Create an open API V3 specification for the following API**

**EndPoint:** <https://teststore.com/v1/><storeID>/postitem **Method: POST**

{

"requestId": "dfdfa124ae",

"item": "Denim jeans",

"size": "32",

"description": "A pair of denim jeans size 32 for men",

"tags": ["trendy","male","blue",32,"denim"],

"onOffer": true,

"Price": "1000

"discount": 0

}

**Parameter Description - Request**

| Parameter | DataType | Required | Description |
| --- | --- | --- | --- |
| requestID | string | Mandatory | Uniquely identifies each API request. |
| item | string | Mandatory | Item being added to the store |
| size | string | Mandatory | Size of description of size eg large |
| description | text | Optional | Elaboration on item added |
| tags | Array of strings | Optional | Search terms to be associated with item |
| onOffer | boolean | Mandatory | True if a discount exist and false otherwise |
| discount | float | Mandatory |  |

**Parameter Description - Response**

| Parameter | DataType | Description |
| --- | --- | --- |
| requestID | string | Uniquely identifies each API request. |
| errorCode | string | A code that is mapped to an error in the backend. |
| Description | string | An explanation of operation or error encountered |
| itemCode | string | Alphanumeric string representing the item created. Can be used to retrieve the object. |

On creation http 201 with response below.

{

"requestId": "dfdfa124ae",

"itemCode": "1234sdsfrer",

"Description": "item created successfully"

}

on deletion http 204

malformed request 400 with response below.

{

"requestId": "dfdfa124ae",

"errorCode": "04XY",

"Description": "missing field xyz"

}

405 with response below.

{

"requestId": "dfdfa124ae",

"errorCode": "45XY",

"Description": "missing field xyz"

}

404 with response below.

{

"requestId": "dfdfa124ae",

"errorCode": "44XY",

"Description": "resource not found"

}

503 with response below.

{

"requestId": "fdfa132as",

"errorCode": "53QW",

"errorDescription": "duplicate requestID"

}

1. Normalize the database table whose data has been extracted as a CSV and draw and ERP diagram for it.
2. What is the difference between REST/JSON and REST/XML?
3. Please describe a significant technical problem you encountered in a **personal project, academic assignment, hackathon, or internship** that you worked on. We are interested in understanding your **problem-solving process and your technical approach**. In your response, try to address the following points.

* What was the specific technical challenge you were solving?
* The Solution You Implemented:
* Your Specific Role and Contribution:
* How did you confirm that your solution worked? What did you observe or test?
* What key technical or problem-solving lessons did you learn from this experience?
* How would this experience influence how you approach similar challenges in the future?"