Here’s a complete **API documentation** for the **Work Instructions** module, including **detailed endpoints, descriptions, request/response examples**, and **how to use them in Postman**.

**📌 Work Instructions API Documentation**

📍 **Base URL:** http://localhost:3000/api/work-instructions

**1️⃣ Create a Product**

* **Endpoint:** /products
* **Method:** POST
* **Content-Type:** application/json
* **Description:** Create a new product.

**🔹 Request Body Example**

{

"name": "Product A"

}

**✅ Response Example (201 Created)**

{

"\_id": "65c8b0fcb4e16d00236e5d89",

"name": "Product A",

"\_\_v": 0

}

**2️⃣ Get All Products**

* **Endpoint:** /products
* **Method:** GET
* **Description:** Fetch all products.

**✅ Response Example (200 OK)**

[

{

"\_id": "65c8b0fcb4e16d00236e5d89",

"name": "Product A"

},

{

"\_id": "65c8b0fdb4e16d00236e5d90",

"name": "Product B"

}

]

**3️⃣ Create a Step with Media File**

* **Endpoint:** /steps
* **Method:** POST
* **Content-Type:** multipart/form-data
* **Description:** Create a step for a product with a media file.

**🔹 Request Body (form-data)**

| **Key** | **Value** | **Type** |
| --- | --- | --- |
| productId | 65c8b0fcb4e16d00236e5d89 | Text |
| stepNumber | 1 | Text |
| description | Install component A | Text |
| mediaType | image | Text |
| toolsUsed[] | 65c8b10eb4e16d00236e5d91 | Text |
| toolsUsed[] | 65c8b110b4e16d00236e5d92 | Text |
| partsInvolved[] | 65c8b115b4e16d00236e5d93 | Text |
| partsInvolved[] | 65c8b116b4e16d00236e5d94 | Text |
| media | (Upload an image/video/PDF) | File |

**✅ Response Example (201 Created)**

{

"\_id": "65c8b123b4e16d00236e5d95",

"productId": "65c8b0fcb4e16d00236e5d89",

"stepNumber": 1,

"description": "Install component A",

"mediaType": "image",

"mediaUrl": "/uploads/1707383200123\_instruction.jpg",

"toolsUsed": [

"65c8b10eb4e16d00236e5d91",

"65c8b110b4e16d00236e5d92"

],

"partsInvolved": [

"65c8b115b4e16d00236e5d93",

"65c8b116b4e16d00236e5d94"

]

}

**4️⃣ Get Steps by Product ID**

* **Endpoint:** /steps/{productId}
* **Method:** GET
* **Description:** Fetch all steps for a product.

**🔹 Example Request**

GET /steps/65c8b0fcb4e16d00236e5d89

**✅ Response Example (200 OK)**

[

{

"\_id": "65c8b123b4e16d00236e5d95",

"stepNumber": 1,

"description": "Install component A",

"mediaType": "image",

"mediaUrl": "/uploads/1707383200123\_instruction.jpg",

"toolsUsed": [

{ "\_id": "65c8b10eb4e16d00236e5d91", "name": "Screwdriver" },

{ "\_id": "65c8b110b4e16d00236e5d92", "name": "Wrench" }

],

"partsInvolved": [

{ "\_id": "65c8b115b4e16d00236e5d93", "name": "Bolt" },

{ "\_id": "65c8b116b4e16d00236e5d94", "name": "Nut" }

]

}

]

**5️⃣ Create a Tool**

* **Endpoint:** /tools
* **Method:** POST
* **Content-Type:** application/json
* **Description:** Create a new tool.

**🔹 Request Body Example**

{

"name": "Screwdriver"

}

**✅ Response Example (201 Created)**

{

"\_id": "65c8b10eb4e16d00236e5d91",

"name": "Screwdriver",

"\_\_v": 0

}

**6️⃣ Create a Part**

* **Endpoint:** /parts
* **Method:** POST
* **Content-Type:** application/json
* **Description:** Create a new part.

**🔹 Request Body Example**

{

"name": "Bolt"

}

**✅ Response Example (201 Created)**

{

"\_id": "65c8b115b4e16d00236e5d93",

"name": "Bolt",

"\_\_v": 0

}

**7️⃣ Example Postman Collection**

You can import this JSON into Postman for easy testing:

{

"info": {

"name": "Work Instructions API",

"schema": "https://schema.getpostman.com/json/collection/v2.1.0/collection.json"

},

"item": [

{

"name": "Create Product",

"request": {

"method": "POST",

"header": [

{ "key": "Content-Type", "value": "application/json" }

],

"body": {

"mode": "raw",

"raw": "{ \"name\": \"Product A\" }"

},

"url": { "raw": "http://localhost:3000/api/work-instructions/products" }

}

},

{

"name": "Get All Products",

"request": {

"method": "GET",

"url": { "raw": "http://localhost:3000/api/work-instructions/products" }

}

},

{

"name": "Create Step",

"request": {

"method": "POST",

"header": [

{ "key": "Content-Type", "value": "multipart/form-data" }

],

"body": {

"mode": "formdata",

"formdata": [

{ "key": "productId", "value": "PRODUCT\_ID" },

{ "key": "stepNumber", "value": "1" },

{ "key": "description", "value": "Install component A" },

{ "key": "mediaType", "value": "image" },

{ "key": "toolsUsed[]", "value": "TOOL\_ID1" },

{ "key": "toolsUsed[]", "value": "TOOL\_ID2" },

{ "key": "partsInvolved[]", "value": "PART\_ID1" },

{ "key": "media", "type": "file" }

]

},

"url": { "raw": "http://localhost:3000/api/work-instructions/steps" }

}

}

]

}

Here’s the complete API documentation for **Getting Tools** and **Getting Parts**, including endpoint details, request/response format, and example responses.

# ****Work Instructions API Documentation****

## ****1. Get All Tools****

### ****Endpoint:****

GET /api/work-instructions/tools

### ****Description:****

Fetches a list of all available tools.

### ****Headers:****

| **Key** | **Value** |
| --- | --- |
| Content-Type | application/json |

### ****Response:****

#### **Success (200)**

[

{

"\_id": "60d5ec49f3a2b72d1c8e9f3d",

"name": "Screwdriver",

"description": "A flat-head screwdriver for assembly"

},

{

"\_id": "60d5ec50f3a2b72d1c8e9f3e",

"name": "Wrench",

"description": "Adjustable wrench for tightening bolts"

}

]

#### **Error (500)**

{

"error": "Internal server error"

}

## ****2. Get All Parts****

### ****Endpoint:****

GET /api/work-instructions/parts

### ****Description:****

Fetches a list of all available parts.

### ****Headers:****

| **Key** | **Value** |
| --- | --- |
| Content-Type | application/json |

### ****Response:****

#### **Success (200)**

[

{

"\_id": "60d5ec89f3a2b72d1c8e9f4a",

"name": "Bolt",

"description": "M8 stainless steel bolt"

},

{

"\_id": "60d5ec90f3a2b72d1c8e9f4b",

"name": "Nut",

"description": "Hexagonal nut for M8 bolts"

}

]

#### **Error (500)**

{

"error": "Internal server error"

}

### ****Usage Example in Postman****

1. **Open Postman**.
2. **Select GET method**.
3. **Enter the URL:**
   * http://localhost:3000/api/work-instructions/tools
   * http://localhost:3000/api/work-instructions/parts
4. **Click "Send"**.
5. **Check the JSON response**.

This documentation can be shared with the frontend developer for integration. Let me know if you need any modifications! 🚀

This **comprehensive documentation** ensures the frontend developer has **all endpoints, request formats, and expected responses** to integrate smoothly. 🚀🔥

Let me know if you need modifications! 😃