# **API Documentation for ABC Commerce Inventory Management System**

## **Overview**

This document provides a comprehensive overview of the APIs used in the ABC Commerce Inventory Management System (IMS). It outlines the various API calls made during user interactions, the data fetched from respective tables, and the expected responses. The Inventory Management System is designed to streamline inventory tracking, order processing, and supplier management, ensuring that businesses can efficiently manage their stock levels and fulfill customer orders.

## **ABC Commerce IMS**

### **Page Description**

The ABC Inventory Management page contains several primary buttons and additional APIs that are called during user interactions. Below is a detailed description of each button, the associated API calls, and the data fetched from the respective tables.

### **1. Page Load API**

* **API Call:** /abccommerce/inventory-management/load-inventory-data
* **Method:** GET
* **Description:** Fetches initial data required for the Inventory Management page, including current stock levels, product details, and supplier information.

#### **Request Parameters:**

* **warehouseId** (Type: Integer) - The ID of the warehouse for which inventory data is requested.
* **category** (Type: String, Optional) - The category of products to filter the inventory data (e.g., "Electronics", "Furniture").

#### **Response:**

* **Status Code:** 200
* **Data Fetched From:**
  + **Table Name:** inventory, products, suppliers
  + **Columns:** product\_id, product\_name, current\_stock, reorder\_level, supplier\_name, category, last\_updated

### **2. Button: [Product name: View Product Details]**

* **API Call:** <https://abccommerce.com/abccommerce/inventory-management/getProductDetails>
* **Method:** GET
* **Description:** Fetches detailed information for a specific product, including its specifications, pricing, and supplier details.

#### **Request Parameters:**

* **productId** (Type: Integer) - The ID of the product for which details are requested.

#### **Response:**

* **Status Code:** 200
* **Data Fetched From:**
  + **Table Name:** products, suppliers, product\_specifications
  + **Columns:** product\_id, product\_name, description, price, supplier\_id, supplier\_name, specifications, warranty\_period

### **3. Button: [Product name: Update Stock Level]**

* **API Call:** <https://abccommerce.com/abccommerce/inventory-management/updateStockLevel>
* **Method:** POST
* **Description:** Updates the stock level for a specific product in the inventory, allowing for adjustments based on new shipments or sales.

#### **Request Parameters:**

* **productId** (Type: Integer) - The ID of the product whose stock level is to be updated.
* **newStockLevel** (Type: Integer) - The new stock level to be set for the product.
* **reason** (Type: String) - The reason for the stock level change (e.g., "New Shipment", "Sales Adjustment").

#### **Response:**

* **Status Code:** 200
* **Data Fetched From:**
  + **Table Name:** inventory
  + **Columns:** product\_id, updated\_stock\_level, updated\_at, reason\_for\_change

### **4. Button: [Product name: Delete Product from Inventory]**

* **API Call:** <https://abccommerce.com/abccommerce/inventory-management/deleteProduct>
* **Method:** DELETE
* **Description:** Deletes a specific product from the inventory system, ensuring that outdated or discontinued products are removed.

#### **Request Parameters:**

* **productId** (Type: Integer) - The ID of the product to be deleted.

#### **Response:**

* **Status Code:** 204
* **Data Fetched From:**
  + **Table Name:** products
  + **Columns:** None (Confirmation of deletion)

### **5. Button: [Product name: Generate Inventory Report]**

* **API Call:** <https://abccommerce.com/abccommerce/inventory-management/generateInventoryReport>
* **Method:** POST
* **Description:** Generates a comprehensive inventory report based on specified filters, including product categories, stock levels, and supplier information.

#### **Request Parameters:**

* **warehouseId** (Type: Integer) - The ID of the warehouse for which the report is generated.
* **dateRange** (Type: String) - The date range for the report in the format "YYYY-MM-DD to YYYY-MM-DD".
* **includeOutOfStock** (Type: Boolean) - Flag to include out-of-stock items in the report.

#### **Response:**

* **Status Code:** 200
* **Data Fetched From:**
  + **Table Name:** inventory, products, suppliers
  + **Columns:** report\_id, generated\_at, product\_id, product\_name, current\_stock, supplier\_name, report\_summary

## **Conclusion**

This API documentation provides a detailed overview of the ABC Commerce Inventory Management System's API calls, including the necessary request parameters, expected responses, and the data fetched from the database. The structure ensures that users can easily navigate and utilize the system for effective inventory management. Each API is designed to facilitate specific tasks, enhancing the overall efficiency of the inventory process.