

API Endpoints Description

This document provides a summary of all available API endpoints in this FastAPI-based Inventory and Sales Management System.

Each section covers endpoints by module: **Categories**, **Inventory**, **Products**, and **Sales**.

Categories (/categories)

Category refers to the grouping of products, such as "Electronics", "Groceries", etc.

Method	Endpoint	Description
POST	/categories/	Create a new category. Input: Name and optional description. Output: Returns the created category with an ID.
GET	/categories/{id}	Retrieve details of a specific category by its ID. Output: Category name, description, and ID.
PUT	/categories/{id}	Update an existing category. Input: New name and/or description. Output: Updated category details.
GET	/categories/	Get a list of all available categories.

Inventory (/inventory)

Inventory represents the current stock and availability of each product.

Method	Endpoint	Description
GET	/inventory/	Get the full list of products with their stock quantity, minimum threshold, and status.
GET	/inventory/low	Get only the products that have stock below the minimum threshold. Useful for stock alerts.
POST	/inventory/{product_id}	Update stock quantity for a product by ID. Input: New quantity and other stock details. Output: Updated inventory record.
GET	/inventory/history	View historical changes in inventory (e.g. stock increases, decreases, date of change).
GET	/inventory/{product_id}	Get inventory status for a specific product.

Products (/products)

Product refers to any item that is sold or managed.

Method	Endpoint	Description
GET	/products/	Get a list of all products including names, prices, categories, and status.
GET	/products/{id}	Get full details of a single product by its ID.
PUT	/products/{id}	Update a product's name, price, description, or category.

Sales (/sales)

Sales refer to the transactions of products that were sold.

Method	Endpoint	Description
POST	/sales/	Record a new sale. Input: Product ID, quantity sold, date of sale. Output: Sale confirmation with ID and total amount.
GET	/sales/	Get a list of sales between a start_date and end_date. Optional filters: product_id, category_id.
GET	/sales/revenue/daily	Get daily total revenue between selected dates. Output: List of daily totals with date.
GET	/sales/revenue/weekly	Get weekly total revenue. Output: Revenue grouped by week (with start and end date of each week).
GET	/sales/revenue/monthly	Get total revenue grouped by month.
GET	/sales/revenue/annual	Get revenue summaries per year.
GET	/sales/revenue/custom-range	Get custom grouped revenue (flexible period aggregation logic if implemented).

⌘ Common Parameters Used in Revenue Endpoints:

start_date (format: YYYY-MM-DD): Start date for report.

end_date (format: YYYY-MM-DD): End date for report.

Each response includes:

Time period (daily/weekly/monthly/etc.)

Total revenue