

# API Endpoints Report for E-Commerce Project

Endpoint	Method	Description	Role Required	Request Body	Response
/api/auth/signup	POST	Register a new user (Buyer, Staff, or Vendor)	None	{ "email": "john.doe@example.com", "password": "password123" }	{ "token": "jwt.token.1234567890" }
/api/auth/login	POST	Login with email and password to receive a token	None	{ "email": "john.doe@example.com", "password": "password123" }	{ "token": "jwt.token.1234567890" }
/api/admin/products	POST	Create a new product (Admin only)	Admin	{ "name": "Laptop", "description": "High performance laptop", "category": "Electronics" }	{ "id": 1, "name": "Laptop", "description": "High performance laptop", "category": "Electronics" }
/api/admin/users	GET	Admin retrieves all users	Admin	None	[ { "id": 1, "email": "john.doe@example.com", "role": "User" }, { "id": 2, "email": "jane.smith@example.com", "role": "Staff" } ]
/api/staff/products	POST	Create a new product (Staff only)	Staff	{ "name": "Smartphone", "description": "Latest model smartphone", "category": "Electronics" }	{ "id": 2, "name": "Smartphone", "description": "Latest model smartphone", "category": "Electronics" }
/api/vendor/products	POST	Create a new product (Vendor only)	Vendor	{ "name": "Washing Machine", "description": "Top load washing machine", "category": "Home Appliances" }	{ "id": 3, "name": "Washing Machine", "description": "Top load washing machine", "category": "Home Appliances" }
/api/vendor/products	GET	Vendor retrieves all products created by them	Vendor	None	[ { "id": 3, "name": "Washing Machine", "description": "Top load washing machine", "category": "Home Appliances" } ]
/api/user/products	GET	User retrieves available products (with pagination and search)	User	{ "page": 1, "limit": 10, "search": "laptop" }	[ { "id": 1, "name": "Laptop", "description": "High performance laptop", "category": "Electronics" }, { "id": 2, "name": "Smartphone", "description": "Latest model smartphone", "category": "Electronics" }, { "id": 3, "name": "Washing Machine", "description": "Top load washing machine", "category": "Home Appliances" } ]

## General Information

### Authorization:

All endpoints require a valid JWT token in the `Authorization` header.

### Role-Based Access:

- Admin: Access all endpoints.
- Staff: Can add products.
- Vendor: Can create and view their own products.
- User (Buyer): Can view products.

### Pagination:

Supported in `GET /api/user/products` using `page` and `limit`.

### Search:

Supported via `search` query in `GET /api/user/products`.

### Response Codes:

- 200 OK: Successful request.
- 201 Created: Resource created successfully.

- 400 Bad Request: Invalid request data.
- 401 Unauthorized: Missing or invalid JWT token.
- 403 Forbidden: Insufficient permissions.
- 404 Not Found: Resource not found.
- 500 Internal Server Error: An unexpected error occurred.