DAYANANDA SAGAR COLLEGE OF ENGINEERING

(An Autonomous Institute Affiliated to VTU, Belagavi. Approved by AICTE & ISO 9001:2015 Certified)

Shavige Malleshwara Hills, Kumaraswamy Layout, Bengaluru-560111)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Web Technology Lab 2025-26

Course Faculty: Respective Faculty Name: handling the lab
Course Name & code: Web Technology Lab 22CSL35

Semester: 3rd   **Date: 23/12/2025**

TITLE OF THE WORK	Organic food products
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USN	Diploma 20
ABSTRACT OF THE WORK	This project involves the development of a simple Organic Food Ordering Website that allows users to browse products, add items to their shopping cart, and place an order. A key feature of the system is the ability to store customer order data locally on the developer's computer using a Node.js backend and a JSON file. The frontend is built using HTML, CSS, and JavaScript, while the backend uses Node.js with Express.js to handle data storage. The system provides a complete workflow from selecting products to storing order information, enabling further analysis or expansion. This project demonstrates basic full-stack development concepts including UI design, local storage handling, API integration, and backend data processing.
INTRODUCTION	The Organic Food Order Management System is a web-based application created to simulate an online organic grocery store. Users can interact with the interface to explore products, add them to a shopping cart, and place an order by providing their details. Modern e-commerce platforms require systems that handle user interactions on the frontend while allowing persistent data storage in the backend. This project implements these features at a basic academic level by: • Designing a clean and user-friendly interface • Managing product selection and cart storage using browser local Storage • Creating a backend service to capture and store customer order data • Saving data into a JSON file for later retrieval or reporting This project demonstrates foundational skills in web development, client-server communication, and file-based backend storage.

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DESIGN	**3.1 Architecture Overview**
	The system follows a simple **client–server model**:
	Frontend (Client)
	• Built using HTML, CSS, JavaScript
	• Manages product display, cart operations, and order form
	• Sends order data to backend via HTTP POST request
	Backend (Server)
	• Built using Node.js and Express.js
	• Receives order data
	• Stores it in orders.json file
	• Acts as a lightweight local API server
	Data Storage
	• Customer data stored in:
	backend/orders.json
	• Stores fields such as:
	   o Name
	   o Address
	   o Cart items
	   o Time of order

	3.2 System Workflow 1. User opens the Organic Food Website 2. Browses products displayed on products.html 3. Adds items to cart (saved using local Storage) 4. Proceeds to order.html and fills out details 5. JavaScript sends order data using: fetch("http://localhost:5000/save Order", ...) 6. Backend receives order via /save Order route 7. Backend writes it into orders.json file 8. User gets confirmation message
PLATFORM USED	**4.1 Frontend** • **HTML5** → Page structure • **CSS3** → Styling, layout • **JavaScript (Vanilla JS)** → Cart logic, form handling, API calls **4.2 Backend** • **Node.js** → Server runtime environment • **Express.js** → Minimal web framework • **CORS Middleware** → Allows frontend to communicate with backend • **File System (fs module)** → Save and retrieve JSON data
CODE LINK (GITHUB/GOOGLE DRIVE)	https://drive.google.com/drive/folders/1wRAQydaEksQvPHTEjKwe7CinpmfxY7fD?usp=sharing

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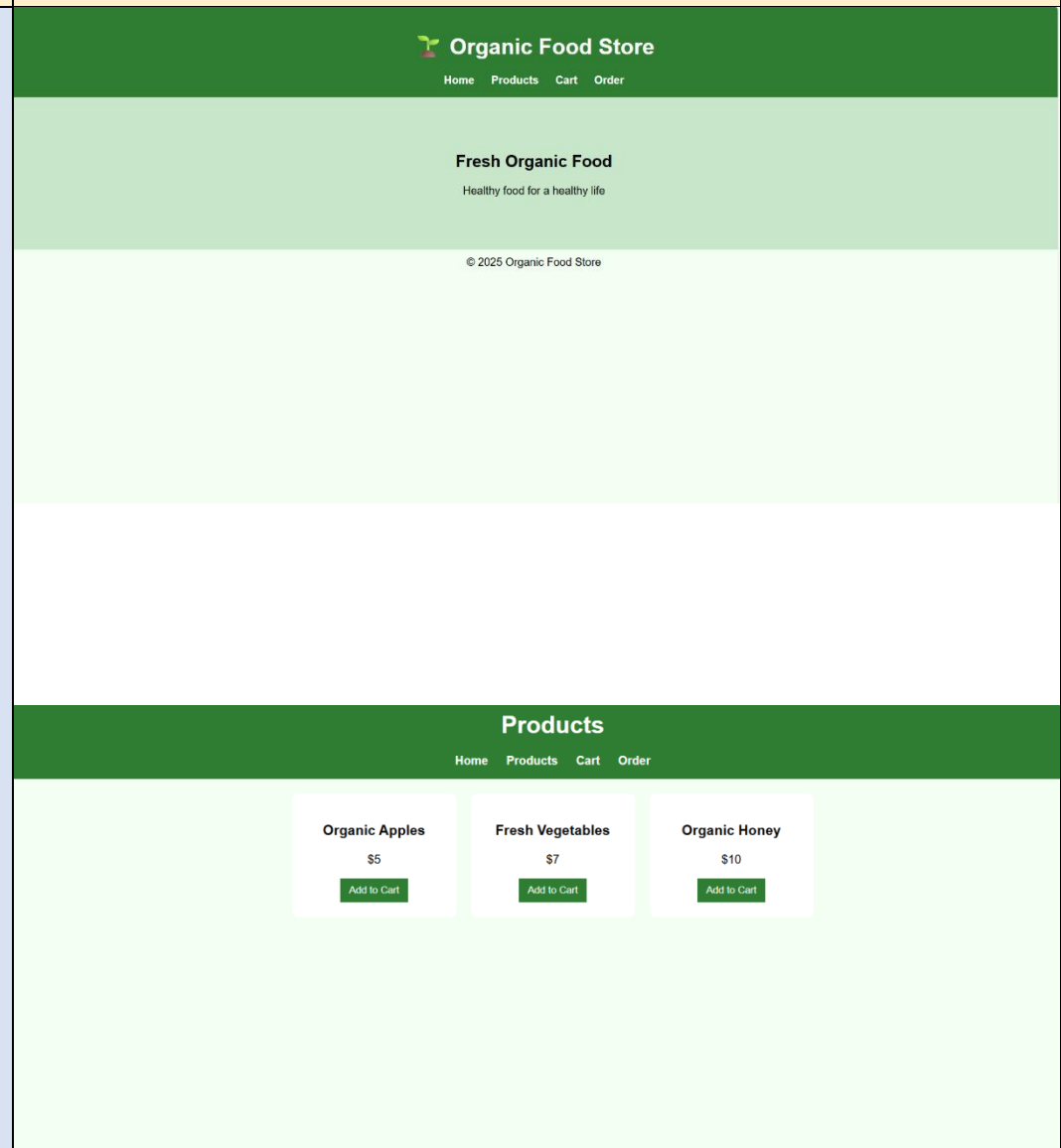Shavige Malleshwara Hills, Kumaraswamy Layout, Bengaluru-560111)

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CONCLUSION	The Organic Food Order Management System successfully demonstrates how a basic e-commerce workflow can be implemented using web development technologies. The user-friendly interface allows customers to explore organic products, manage a shopping cart, and place orders. The backend effectively captures and stores order details in a JSON file, showcasing simple data persistence using Node.js and Express.js. This project provides practical understanding of client-server interaction, API usage, local storage, and full-stack application structure. The system can be expanded further by adding a real database (MySQL/MongoDB), user authentication, admin panel, online deployment, or payment integration.
SCREENSHOT OF THE BUSINESS PORTFOLIO	

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This page says

Item added to cart 🛒

OK

Organic Apples

$5

Add to Cart

Fresh Vegetables

$7

Add to Cart

Organic Honey

$10

Add to Cart

Your Cart

Home   Products   Cart   Order

- Organic Apples - $5
- Fresh Vegetables - $7
- Organic Apples - $5

Total: $17

Place Order

Home   Products   Cart   Order

shashikantha N

malavalli

Place Order

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shashikantha N

malavalli

Place Order

This page says

Order saved to your computer! ✔

OK

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