This Node.js project provides a simple backend server using Express to manage IoT devices. It allows for registering new devices, displaying all registered devices, receiving data from devices, and sending commands to devices. The project stores device information in a JSON file and logs all activities with timestamps.

Features

Register New Devices: Add new devices with unique IDs and types.

Display All Devices: View a list of all registered devices.

Receive Data: Endpoint to receive and log data from devices.

Send Commands: Endpoint to send commands to devices.

Activity Logging: Logs all activities with timestamps to a log file.

Prerequisites

Node.js installed on your machine.

Installation

Navigate to the project directory.

Install the required npm packages using npm install

Running the Server

Start the server with the following command:

node index.js

The server will start listening on port 3000. You can access the endpoints via http://localhost:3000.

API Endpoints

POST /register: Register a new device. Requires deviceId and deviceType in the request body.

GET /show: Displays all registered devices.

POST /data: Endpoint for devices to send data. Requires deviceId and data in the request body.

POST /command: Send commands to devices. Requires deviceId and command in the request body.

Data Persistence

Devices: Stored in devices.json.

Logs: All activities are logged with timestamps in logs.txt.