# WareFlow - Complete Setup from Scratch

## Backend Setup from Scratch

### Prerequisites Installation

* **Node.js**: Download from [nodejs.org](https://nodejs.org) (v16+)
* **MongoDB**: Download from [mongodb.com](https://www.mongodb.com/) or use MongoDB Atlas
* **Code Editor**: VS Code recommended

### Step 1: Create Project Structure

mkdir wareflow-project  
cd wareflow-project  
mkdir backend  
cd backend

### Step 2: Initialize Node.js Project

npm init -y

### Step 3: Install Backend Dependencies

npm install express mongoose dotenv cors bcryptjs jsonwebtoken express-validator multer cloudinary

### Step 4: Install Development Dependencies

npm install --save-dev nodemon

### Step 5: Update package.json Scripts

Open package.json and update the scripts section:

{  
 "scripts": {  
 "start": "node server.js",  
 "dev": "nodemon server.js"  
 },  
 "type": "commonjs"  
}

### Step 6: Create Folder Structure

mkdir config controllers middlewares models routes utils uploads  
mkdir controllers/user controllers/warehouse controllers/product  
mkdir uploads/userProfiles uploads/productImages

### Step 7: Create .env File

touch .env

Add to .env:

PORT=5000  
NODE\_ENV=development  
MONGO\_URI=mongodb://localhost:27017/wareflow  
JWT\_SECRET=your\_super\_secret\_jwt\_key\_change\_this\_in\_production  
CLOUDINARY\_CLOUD\_NAME=your\_cloudinary\_cloud\_name  
CLOUDINARY\_API\_KEY=your\_cloudinary\_api\_key  
CLOUDINARY\_API\_SECRET=your\_cloudinary\_api\_secret  
CLIENT\_URL=http://localhost:3000

### Step 8: Create .gitignore File

touch .gitignore

Add to .gitignore:

node\_modules/  
.env  
logs/  
\*.log  
.DS\_Store  
Thumbs.db  
uploads/  
dist/  
build/

### Step 9: Create Configuration Files

**config/db.js**

**config/cloudinaryConfig.js**

### Step 10: Create Models

**models/User.js**

**models/Warehouse.js**

**models/Product.js**

### Step 11: Create Utilities

**utils/generateToken.js**

**utils/validators.js**

### Step 12: Create Middlewares

### Step 13: Create Controllers

### Step 14: Create Routes

### Step 15: Create Main Server File

**server.js**

### Step 16: Start MongoDB

### Step 17: Run Backend Server

npm run dev

You should see:

MongoDB connected  
Server running on port 5000

## Frontend Setup from Scratch

### Step 1: Navigate to Project Root

cd .. # You should be in wareflow-project directory

### Step 2: Create React App

npx create-react-app frontend  
cd frontend

### Step 3: Install Frontend Dependencies

npm install react-router-dom redux react-redux @reduxjs/toolkit lucide-react

### Step 4: Install Tailwind CSS

npm install -D tailwindcss postcss autoprefixer  
npx tailwindcss init -p

### Step 5: Configure Tailwind CSS

**tailwind.config.js**

### Step 6: Update CSS Files

**src/index.css**

### Step 7: Create Environment File

touch .env

Add to .env:

REACT\_APP\_API\_URL=http://localhost:5000

### Step 8: Create Folder Structure

cd src  
mkdir components pages redux utils  
mkdir components/auth components/layout components/product components/profile components/shared components/warehouse  
mkdir redux/api redux/slices  
mkdir pages

### Step 9: Start Frontend

npm start

The app will open at http://localhost:3000