**📈 Shoptobd - Scope of Work (SOW) (Updated)**

**📅 Last Updated: February 26, 2025**

**1. Project Overview**

Shoptobd is a **pre-order-based platform** that allows customers to order international products seamlessly. The system includes:

🛒 **Customer Ordering Portal** - Customers place & track orders.  
👨‍💼 **Admin Backend** - Manage orders, invoices, refunds, and customers.  
🌐 **Public Website (Planned)** - Display services and order process.  
🔍 **Real-Time Product Scraping (Planned)** - Fetch product details instantly.

**🔄 Project Status:**

✅ **Backend Development:** Core tables, APIs, and authentication **(Completed).**  
🛠️ **Frontend Development:** **Pending.**  
🚀 **Real-Time Scraping:** **Planned.**

**2. System Architecture & Tech Stack**

| **Component** | **Technology** | **Status** |
| --- | --- | --- |
| **Frontend** | HTML, CSS, JavaScript, React.js (Planned) | 🛠️ Pending |
| **Backend** | Node.js, Express.js | ✅ Completed |
| **Database** | PostgreSQL | ✅ Completed |
| **Authentication** | JWT-based | ✅ Completed |
| **Hosting** | AWS/DigitalOcean (Planned) | 🛠️ Pending |
| **APIs** | bKash, Bank Payments, Web Scraper (Planned) | 🛠️ Planned |
| **Version Control** | GitHub | ✅ Completed |

**📂 Database Backup Commands:**

pg\_dump -U postgres -d shoptobd -F c -f shoptobd\_backup.sql # Backup

db\_restore -U postgres -d shoptobd shoptobd\_backup.sql # Restore

**5. Invoice System Implementation (Updated)**

**✅ 5.1 Invoice Auto-Generation**

✔ **Invoices are created automatically when an order is submitted** ✅  
✔ **Invoices start in Draft mode (not visible to customers)** ✅  
✔ **Admins can modify invoice details before approval** ✅  
✔ **Final invoices require admin approval before visibility** ✅

**✅ 5.2 Invoice Database Structure Updates**

✔ invoice\_status (Draft, Approved) ✅  
✔ invoice\_type (Initial, Final) ✅  
✔ is\_finalized (TRUE or FALSE) ✅  
✔ delivery\_charge\_bdt added to track local delivery fees ✅  
✔ weight\_category added to categorize weight charges ✅

**✅ 5.3 Weight & Delivery Charge System (Newly Completed)**

✔ **Weight charges now depend on product categories.** ✅  
✔ **Admin-defined weight categories & rates** (e.g., General = 2.5 BDT/g, Toys = 3 BDT/g) ✅  
✔ **Invoices now auto-apply weight charges based on product category.** ✅  
✔ **Delivery fees now follow standard rates:** ✅

* **Inside Dhaka** → 100 BDT
* **Outside Dhaka** → 150 BDT
* **Office Pickup** → 0 BDT
* **Rider Pickup** → 0 BDT  
  ✔ **Admins can override delivery charges per order (based on weight, size, or other factors).** ✅  
  ✔ **Updated APIs to allow invoice modification before approval.** ✅  
  ✔ **Ensured due\_amount\_bdt calculation includes all factors.** ✅

**✅ 5.4 Invoice APIs (Updated)**

✔ POST /invoices/update - Admin can modify invoice fields ✅  
✔ POST /invoices/approve - Admin approval required before visibility ✅  
✔ GET /invoices/:invoice\_id - Fetch single invoice ✅  
✔ GET /invoices - Fetch all invoices ✅  
✔ `Weight charge & delivery charge updates now reflect in invoice totals dynamically.\*\* ✅

**✅ 5.5 Final Testing & Fixes (Completed)**

✔ **Fixed missing delivery\_charge\_bdt values in invoices.** ✅  
✔ **Updated UPDATE invoices SET delivery\_charge\_bdt = ... to fix existing data.** ✅  
✔ **Ensured all invoices now have valid weight & delivery charges.** ✅  
✔ **Final validation of due\_amount\_bdt calculation with test cases.** ✅  
✔ **Database fully backed up & pushed to GitHub after successful testing.** ✅

**📌 Next Steps: Payment System Implementation**

Now that invoices are fully functional, the next step is **tracking payments & adjusting due amounts**.

**🔹 Step 1: Implement Payment System**

We will:  
✔ **Track payments in the payments table.**  
✔ **Ensure due\_amount\_bdt updates correctly when payments are made.**  
✔ **Store transaction references for bKash, Bank Transfer, and Cash payments.**  
✔ **Handle partial & full payments properly.**

📌 **Are you ready to proceed with Payments, or do you want to review anything before moving forward?** 🚀😊