**🛠️ Scope of Work (SOW) for Shoptobd Pre-Order System**

**🖥️ 1. Project Overview**

Shoptobd is a pre-order-based platform that enables customers to order products from international websites with ease. The system includes:

* **🛒 Customer Portal:** Order placement, tracking, and payments.
* **🧑‍💻 Admin Backend:** Order, invoice, and user management.
* **🌐 Public Website:** Informative content about services.
* **🔍 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 if needed) | 🔲 Pending |
| **Backend** | Node.js (Express.js) | ✅ Completed |
| **Database** | PostgreSQL | ✅ Completed |
| **Auth** | JWT, Session-based login | ✅ Completed |
| **Hosting** | AWS/DigitalOcean/Vercel | 🔲 Pending |
| **APIs** | bKash, Bank Payments, Web Scraper | 🛠️ Partially Planned |
| **Version Control** | GitHub (Fully Synced) | ✅ Completed |

**🔹 Database Backup Commands:**

bash

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

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

**👥 3. System Modules & Features**

**🛒 3.1 Customer Portal**

✅ **Completed Features:**

* **User Registration & Login:**
  + Email/password login ✅
  + Phone login with OTP ✅
  + Social login (Google/Facebook) ✅ (API integration pending)
* **Order Placement:**
  + Add product details, quantity ✅
  + **Tax & Shipping charges applied per product ✅ (NEW)**
  + Save orders as drafts ✅
* **Order Tracking:**
  + View order status updates ✅
  + **Order Status Journey implemented ✅ (NEW)**
* **Payment System:**
  + Submit advance & final payments ✅
  + **Auto-apply bKash & COD charges ✅ (NEW)**
  + Payment proof upload ✅
* **Invoice Management:**
  + Generate initial & final invoices ✅
  + **Auto-update invoices based on weight & shipping ✅ (NEW)**
* **Profile & Address Management:**
  + Edit personal information ✅
  + Add/manage max 2 addresses ✅

🔲 **Pending:**

* Improved UI for customers.
* Real-time product price scraping logic.

**🧑‍💼 3.2 Admin Backend**

✅ **Completed Features:**

* **Role-Based Access:**
  + Super Admin (Full Access) ✅
  + Standard Admin (Limited Access) ✅
* **Order Management:**
  + View and modify customer orders ✅
  + **Auto-calculate total invoice with taxes, weight, shipping, and bKash/COD charges ✅ (NEW)**
  + **Track payment history per order ✅ (NEW)**
* **Invoice & Payment Management:**
  + Generate invoices ✅
  + Track payments and pending balances ✅
  + Manual payment proof verification ✅
* **Reports & Analytics:**
  + Track revenue & orders ✅
  + **Sales Reports auto-update during order finalization ✅ (NEW)**
* **User Management:**
  + Add/edit/delete customers ✅
  + Track customer activity ✅

🔲 **Pending:**

* Advanced reporting dashboard for insights.

**🌐 3.3 Public Website (Frontend UI)**

🛠️ **Planned Features:**

* **Home Page:** Overview of services & how-to guide.
* **Login/Sign-Up Pages:** Simple, user-friendly interface.
* **FAQ & Support:** Address customer questions.
* **SEO Optimization:** Improve search rankings.

🔲 **Pending:**

* Frontend development.

**🔑 4. Authentication System**

✅ **Completed Logic:**

* **Customer Login:**
  + Email Login: Password-based ✅
  + Phone Login: OTP-based ✅
  + **Google & Facebook Login:** Working with mock data ✅ (API keys pending)
* **Admin Login:**
  + **Email/password only ✅** (Phone login removed as per instructions)
* **Security:**
  + JWT for secure communication ✅
  + **2FA for admins planned 🛠️**

🔲 **Pending:**

* Integrate live APIs for Google/Facebook login.

**🛠️ 5. Technical Implementation Details**

**🔹 5.1 Customer Authentication Flow**

1️⃣ **User Registration:**

* Email/password or phone/OTP-based signup.
* Data stored in user\_auth table.  
  2️⃣ **Login:**
* Check email/password or OTP.
* Generate JWT upon success.  
  3️⃣ **Social Login:**
* Verify Google/Facebook ID.
* Register new users if not found.

**🔹 5.2 Order Workflow**

1️⃣ **Order Placement:**

* User inputs product URL & details.
* Backend fetches price and calculates cost.  
  2️⃣ **Invoice Generation:**
* Initial invoice created upon order submission ✅ (NEW)
* Final invoice generated upon shipment arrival ✅ (NEW)  
  3️⃣ **Order Tracking:**
* **Admin updates status based on order progression ✅**

**🔹 5.3 Payment Processing**

* Customer uploads payment proof ✅
* **Admin verifies and marks invoice as paid ✅**
* **Payments now track COD & bKash charges separately ✅ (NEW)**

🔲 **Pending:**

* Automate notifications for status updates.

**🗄️ 6. Backend Database Structure**

| **Table Name** | **Purpose** | **Status** |
| --- | --- | --- |
| **customers** | Stores customer information | ✅ Completed |
| **user\_auth** | Tracks login methods & credentials | ✅ Completed |
| **orders** | Tracks all customer orders | ✅ Completed |
| **order\_items** | Line items for each order | ✅ Completed |
| **invoices** | Tracks all invoices | ✅ Completed |
| **payments** | Records payments & proofs | ✅ Completed |
| **refunds** | Tracks refund requests | ✅ Completed |
| **sales\_reports** | Monthly/yearly sales data | ✅ Completed |
| **shipments** | Tracks international shipments | ✅ Completed |
| **local\_delivery** | Manages local delivery info | ✅ Completed |
| **activity\_logs** | Logs admin actions | ✅ Completed |
| **tax\_rates** | Stores currency & tax info | ✅ Completed |
| **admin\_users** | Admin user information | ✅ Completed |
| **admin\_roles** | Defines admin permissions | ✅ Completed |

**🔹 Key Changes (NEW):**

* order\_items now tracks weight & shipping per product ✅
* payments now tracks COD & bKash charges separately ✅
* **Auto-update Sales Reports when finalizing an order ✅**

**🚀 7. Completed Milestones**

✅ Backend Database: **Complete**  
✅ Authentication Logic: **Complete**  
✅ Order Processing & Calculation Logic: **Complete (NEW)**  
✅ Invoice & Payment Auto-Calculation: **Complete (NEW)**  
✅ Order Status Tracking: **Complete (NEW)**

**📋 8. Next Steps**

🛠️ **Frontend UI Development:** Build a clean, responsive customer interface.  
🛠️ **API Integration:** Connect with Google & Facebook live APIs.  
🛠️ **Real-Time Product Scraping:** Start implementation.  
🛠️ **Notification System:** Notify customers about order updates.  
🛠️ **Admin Dashboard:** Add advanced reporting metrics.