**🛠️ 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 |
| Authentication | JWT, Session-based login | ✅ Completed |
| Hosting | AWS/DigitalOcean/Vercel | 🔲 Pending |
| External 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 ✅
  + Notification placeholders created ✅
* **Payment System**:
  + Submit **advance** & **final** payments ✅
  + **Auto-apply bKash & COD charges** ✅ (NEW)
  + Payment proof upload ✅
* **Invoice Management**:
  + Generate **initial** & **final invoices** ✅
  + PDF generation pending 🛠️
* **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 ✅
* **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** ✅

🔲 **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-apply tax, shipping & bKash charges during order finalization** ✅

**🚀 7. Completed Milestones**

1️⃣ **Backend Database: Complete** ✅  
2️⃣ **Authentication Logic: Complete** ✅  
3️⃣ **Customer Registration & Login: Complete** ✅  
4️⃣ **Admin Login (Email-only): Complete** ✅  
5️⃣ **Google & Facebook Login: Implemented with mock APIs** ✅  
6️⃣ **Payment System: Initial implementation done** ✅  
7️⃣ **Order Processing & Calculation Logic: Complete** ✅ (NEW)  
8️⃣ **Invoice & Payment Auto-Calculation: 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.