**🛠️ 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 will include:

* 🛒 **Customer Portal**: Order placement, tracking, 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 ✅
  + Calculate price in BDT using backend rates ✅
  + Save orders as drafts ✅
* **Order Tracking:**
  + View order status updates ✅
  + Notification placeholders created ✅
* **Payment System:**
  + Submit advance & final payments ✅
  + 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 ✅
  + Cost adjustment for currency, weight, etc. ✅
* **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.
* Final invoice generated upon shipment arrival.

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:**

* user\_auth updated with:
  + otp\_code – stores OTP for phone logins.
  + otp\_expiry – expiration time of OTP.
  + email\_verified – tracks email confirmation.

**🚀 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 ✅

**📋 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.