Product Requirement Document

Here is the comprehensive Product Requirement Document (PRD) for the 28HSE Assignment Platform. This document consolidates all approved workflows, technical specifications, and compliance logic into a formal directive for the development team.

📝 Product Requirement Document (PRD)

Project Name: 28HSE Assignment Platform

Version: 2.1

Status: Approved for Development

Date: November 24, 2025

1. Introduction

1.1 Purpose

The purpose of the 28HSE platform is to create a secure, compliant, and efficient marketplace for pre-sale condo assignments in Vancouver, BC. It resolves the liquidity crisis caused by REDMA and MLS restrictions that prohibit public advertising of these assets.

1.2 Scope (MVP)

The Minimum Viable Product (MVP) will focus on:

- User Authentication & Role Management (Homeowner vs. Realtor).
- Listing CRUD (Create, Read, Update, Delete) with "Teaser" vs. "Full" visibility states.
- "Verified Owner" Onboarding Flow (Document Upload).
- Realtor Lead Pool Engine (Automated FSBO conversion).
- Credit-Based Monetization System.
- Compliance Tools (BC Home Flipping Tax Calculator).

2. User Personas & Roles

Role	Description	Key Permissions
Guest (Public)	Unregistered visitor.	View "Teaser" listings (Neighborhood + Floorplan only).
Registered Member	Homeowner, Investor, or Buyer.	View full details, create listings, "Verify" ownership, request Realtor help.
Verified Realtor	Licensed Agent (Subscriber).	Access "Lead Pool", view analytics, boosted listing priority, "Verified Agent" branding.
Admin	Platform Operator.	Verify IDs/Contracts, manage disputes, refund credits, view global stats.

3. Functional Requirements

3.1 Authentication & Onboarding

- FR-001: Sign Up/Login: Support Email/Password and Social Login (Google/Apple).
- FR-002: Mobile Verification (MFA): Mandatory SMS OTP verification for all accounts to reduce bot activity.
- FR-003: Realtor Verification:
  - User inputs License Number and Brokerage.
  - *MVP:* Admin manually verifies status via public regulator search.
  - *Future:* API integration with CREA/Board.
- FR-004: Terms of Service Gate: Mandatory digital signature (check-box) acknowledging the "Private Member Non-Disclosure Agreement" upon signup.

3.2 "Verified Owner" Workflow (Core Feature)

- FR-005: Compliance Declaration: Before listing, user must check:
  - "I am the contract holder."
  - "I have reviewed developer advertising restrictions."
- FR-006: Proof of Ownership Upload:
  - User uploads Page 1 of Purchase of Sale Agreement (PDF/IMG).
  - System instructs user to redact sensitive financial data but keep Name, Unit #, and Developer Name visible.
  - File stored in encrypted AWS S3 bucket.
- FR-007: Verification Logic:
  - Admin Dashboard displays User Profile Name vs. Document Preview.

    - Admin clicks "Approve" -> Listing gets "Verified Owner" Badge.
    - Admin clicks "Reject" -> User notified with reason code.
- FR-008: Fallout Strategy (Lead Gen):
    - If a user abandons the upload step for >24 hours, system automatically emails: "Need help? Hire an Expert." (Converts to Realtor Lead).

3.3 Listing Management & Visibility

- FR-009: Data Fields:
    - *Mandatory:* Project Name, Unit #, Original Price, Asking Price, Deposit Paid, Developer Assignment Fee %.
- FR-010: Teaser View (Public):
    - System shall mask: Unit #, Specific Price (show range), Seller Name.
    - System shall show: Neighborhood, Floorplan Image, Bedroom/Bath count, Completion Year.
- FR-011: Full View (Member):
    - Full details visible only to logged-in users with positive credit balance (if applicable model) or simply registered status.
- FR-012: Integrated Tax Calculator:
    - Input: Original Contract Date, Assignment Date.
    - Logic:
        - If < 365 days: Warn "Estimated 20% BC Home Flipping Tax applies on profit."
        - If 365-730 days: Calculate sliding scale %.
        - If > 730 days: "0% BCHFT (Federal Capital Gains may apply)."

3.4 The Realtor Lead Pool (Revenue Engine)

- FR-013: Lead State Machine:
    - Trigger A (Stagnation): Listing > 14 days old AND < 3 inquiries.
    - Trigger B (Manual): Homeowner clicks "Hire an Expert".
    - Action: Listing status changes to LEAD_POOL_CANDIDATE.
- FR-014: Tiered Visibility:
    - Tier 1 (Pro Agents): Instant Push Notification. Exclusive view for first 24 hours.
    - Tier 2 (Basic Agents): Viewable after 24 hours.
- FR-015: Claim Transaction:
    - Agent clicks "Claim Lead" (Cost: 50 Credits).
    - System uses Optimistic Locking to prevent double-claiming.
    - On success: Deduct credits -> Update assigned_agent_id -> Reveal Homeowner Phone/Email to Agent.
- FR-016: Post-Claim Handover:
    - Listing "Contact" button now routes to the *Claiming Agent*, not the Homeowner.
    - Listing displays "Represented by [Agent Name]".

3.5 Communication System

- FR-017: Internal Messenger:
    - Cost: Low (e.g., 5 Credits).
    - Features: Text only. System filters out phone numbers/emails (regex check) to prevent platform leakage (Phase 1).
- FR-018: Contact Unlock:
    - Cost: High (e.g., 25 Credits).
    - Action: Reveals Seller's Phone Number and Email permanently to the buyer.

4. Technical Specifications

4.1 Database Schema (Key Extensions)

Listings Table:

```SQL
lead_pool_status ENUM('NOT_IN_POOL', 'ACTIVE_TIER_1', 'ACTIVE_TIER_2', 'CLAIMED')
assigned_agent_id UUID (FK to Users)
verification_status ENUM('UNVERIFIED', 'PENDING_DOCS', 'VERIFIED_OWNER')
proof_document_url VARCHAR (S3 Link)
developer_assignment_fee DECIMAL (Precision 4,2)
```

Lead_Transactions Table:

```SQL
transaction_id UUID
listing_id UUID
agent_id UUID
credit_amount INT
timestamp UTC
```

4.2 Security & Compliance

- **Data Residency:** All user data (especially Contracts) must be hosted in Canada (AWS ca-central-1) to comply with PIPEDA/BC Privacy laws.
- **Encryption:** At rest (AES-256) for documents; In transit (TLS 1.3).
- **Audit Trail:** Immutable logs for all "Lead Claim" and "Verification" actions.

5. Monetization Logic

- **Subscription Engine (Stripe):**
  - *Basic Agent:* $X/mo.
  - *Pro Agent:* $Y/mo (Includes Tier 1 Lead Pool access).
- **Credit Logic:**
  - One-time purchase packs (20, 50, 100 credits).
  - Auto-reload option when balance < 10.
- **Refunds:** Admin tool to refund credits for "Bad Leads" (e.g., property already sold).

6. Development Phasing

Phase 1: The "Safe Harbor" (Months 1-3)

- **Focus:** Authenticated Marketplace + Compliance.
- **Deliverables:** Registration, Document Upload (Verified Owner), Listings (Public/Private view), Basic Search, BCHFT Calculator.

Phase 2: The "Revenue Engine" (Months 4-5)

- **Focus:** Realtor Tools + Lead Pool.

- **Deliverables: Lead Pool State Machine, Agent Dashboard, Credit System Integration (Stripe), Automated Notifications.**

Phase 3: Scale (Months 6+)

- **Focus: Automation & Mobile.**
- **Deliverables: Mobile App (Push Notifications), CREA API Integration (Auto-KYC), AI Recommendations.**

7. Success Metrics (KPIs)

1. **Verification Rate: % of Registered Members who complete Document Upload (Target: >40%).**
2. **Lead Velocity: Avg time from "Lead Pool Entry" to "Claimed" (Target: <4 hours for Tier 1).**
3. **Liquidity: % of Listings that receive at least 1 inquiry within 14 days.**