

Software Requirements Specification (SRS) Document

Conveyancers Marketplace System

Document Version: 1.0

Date: 2025-10-20

Prepared by:

Project: Conveyancers Marketplace - Australian Property Transaction Platform

1. Introduction

1.1 Purpose

This Software Requirements Specification (SRS) document outlines the functional and non-functional requirements for the Conveyancers Marketplace, a web-based platform that connects clients with licensed conveyancers and property professionals to facilitate efficient, compliant property transactions in Australia. s The system aims to streamline workflows, ensure regulatory compliance, and provide secure tools for document management and payments. s This document serves as a comprehensive reference for developers, stakeholders, and testers to guide the implementation and validation of the system. s

1.2 Scope

The Conveyancers Marketplace includes:

- User registration and role-based access for clients, conveyancers, property professionals, and admins.
- Marketplace features for service discovery, job initiation, and collaboration.
- Workflow management for conveyancing processes, including milestones, documents, and e-signatures.
- Secure payment processing via escrow and trust accounts.
- Compliance tools for KYC, licensing, and auditing.

Out of scope: Physical hardware integration, international expansion beyond Australia, or non-property-related legal services. [s](#) [s](#)

1.3 Definitions, Acronyms, and Abbreviations

- Conveyancer: Licensed professional handling property title transfers and settlements. [s](#)
- KYC: Know Your Customer - Verification process for user identity and licensing. [s](#)
- ARNECC: Australian Registrars' National Electronic Conveyancing Council - Regulatory body for e-conveyancing standards. [s](#)
- UUID: Universally Unique Identifier - Used for primary keys in the database. [s](#)
- CPD: Continuing Professional Development - Required annual training for conveyancers. [s](#)
- E-Signature: Electronic signing via providers like DocuSign for contracts. [s](#)

1.4 References

- Conveyancers Marketplace Developer Guidebook (Content ID: jbaRx3WLFuDyxeM) [s](#)
- Product Overview Guide (Content ID: TPdfFDRi3jJwZ37) [s](#)
- System Requirements (Content ID: KdiavzkuheVgyt1) [s](#)
- Starter Kit (Content ID: XS9zHLnJ4tmeWUb) [s](#)
- Australian Property Law Standards (ARNECC Guidelines) [s](#)

1.5 Overview

Section 2 describes the overall system perspective and product functions. Section 3 details specific requirements. Section 4 covers supporting information. [s](#)

2. Overall Description

2.1 Product Perspective

The Conveyancers Marketplace is a SaaS platform revolutionizing Australian conveyancing by digitizing manual processes, reducing settlement times, and ensuring compliance with state-specific regulations (e.g., NSW Fair Trading, Victorian Legal Services Board). [s](#) [s](#) It builds on existing e-conveyancing frameworks like PEXA but focuses on marketplace matchmaking and integrated workflows. [s](#)

2.2 Product Functions

- User Management: Registration, authentication, and role-based profiles. s
- Marketplace Services: Search, listing, and hiring of conveyancers. s
- Job Management: Create, track, and complete property transactions with milestones. s
- Communication: Secure in-app messaging and notifications. s
- Document Handling: Upload, e-sign, and audit documents. s
- Payments: Escrow holds, releases, and trust account integrations. s
- Compliance and Reporting: KYC, license verification, and audit logs. s s
- Admin Tools: User oversight, reports, and system maintenance. s

2.3 User Classes and Characteristics

- Clients (Buyers/Sellers): Individuals or businesses seeking conveyancing services; basic tech-savvy, use web/mobile. s
- Conveyancers: Licensed professionals (must have Diploma + license); experienced in property law, require secure access. s s
- Property Professionals: Real estate agents/lawyers; collaborative role, moderate tech use. s
- Admins: Platform operators; technical/administrative skills for oversight. s

2.4 Operating Environment

- Hardware: Client-side: Devices with 4GB RAM, modern CPU; Server-side: Cloud (e.g., AWS/GCP) with scalable instances. s
- Software: Backend: PostgreSQL 16, Node.js/Python; Frontend: React/Vue; OS: Linux servers, cross-platform clients. s
- Network: Stable internet (10 Mbps+ download); HTTPS for all communications. s

2.5 Design and Implementation Constraints

- Use the PostgreSQL schema as defined in backend/sql/1_schema.sql. s
- Comply with Australian Privacy Principles (APP) and ARNECC standards for data retention (7 years). s s
- Integrate third-party services: DocuSign for e-signatures, Stripe/Adyen for payments, MinIO/S3 for files. s s
- Role-based access control (RBAC) is enforced via JWT tokens. s

2.6 Assumptions and Dependencies

- Users have valid Australian licenses where required. s
- Third-party APIs (e.g., payment gateways) are reliable and compliant. s
- Internet connectivity is assumed; offline mode is not supported. s

3. Specific Requirements

3.1 External Interfaces Requirements

3.1.1 User Interfaces

- Web Dashboard: Responsive UI for job tracking, messaging, and profiles (mobile-first design). s
- Search Interface: Filters by state, property type, and fees; autocomplete for locations. s
- Document Viewer: PDF preview with annotation and e-sign prompts. s

3.1.2 Hardware Interfaces

- None; purely software-based. Scanners/printers for document upload are optional. s

3.1.3 Software Interfaces

- API Endpoints: RESTful APIs for jobs, users, and payments (e.g., POST /jobs, GET /milestones/{id}). s
- Integrations: DocuSign API for signatures; Email/SMS via Twilio/SendGrid; Payment gateways for escrow. s s
- Database: PostgreSQL with JSONB for flexible fields (e.g., attachments). s

3.1.4 Communications Interfaces

- HTTPS/TLS 1.3 for all data transmission; WebSockets for real-time messaging. s
- Email notifications for status updates; SMS for 2FA. s

3.2 Functional Requirements

3.2.1 User Management (FR-UM)

- FR-UM-1: System shall allow registration with email/phone, role selection, and KYC upload (e.g., ID, license). s
- FR-UM-2: Authenticate users via email/password or OAuth; issue JWT refresh tokens. s
- FR-UM-3: Conveyancers must submit license details; admin verifies before activation. s s
- FR-UM-4: Support profile updates, including specialties and fees; enforce state-specific compliance. s

3.2.2 Marketplace (FR-MP)

- FR-MP-1: Clients search conveyancers by filters (state, experience, fees); display profiles with reviews. s s
- FR-MP-2: Conveyancers list services with hourly/fixed fees and availability. s
- FR-MP-3: Initiate job quotes; clients accept to assign a conveyancer. s s

3.2.3 Job Management (FR-JM)

- FR-JM-1: Create jobs with property details (address, type, state); assign milestones (e.g., contract exchange, settlement). s s
- FR-JM-2: Track status (quote_pending → completed); notify parties on changes. s
- FR-JM-3: Property professionals join jobs for collaboration (e.g., agent input). s

3.2.4 Communication (FR-CM)

- FR-CM-1: Job-specific chat with encrypted messages and file attachments (stored in S3). s
- FR-CM-2: Real-time notifications for milestone updates or new messages. s

3.2.5 Document Management (FR-DM)

- FR-DM-1: Upload/share documents (contracts, titles); store with metadata and access logs. s
- FR-DM-2: Initiate e-signature requests via DocuSign; track signers and audit the chain. s
- FR-DM-3: Generate compliance certificates (e.g., hash for immutability). s

3.2.6 Payments (FR-PM)

- FR-PM-1: Authorize escrow per milestone; hold funds until completion. s
- FR-PM-2: Release payments to the conveyancer's trust account upon verification. s
- FR-PM-3: Generate payout reports with reconciliation. s

3.2.7 Compliance and Reporting (FR-CR)

- FR-CR-1: Automate KYC/license checks; flag non-compliant users. s s
- FR-CR-2: Maintain immutable audit logs for all actions (e.g., via triggers). s
- FR-CR-3: Admins generate reports (e.g., transaction volumes, compliance stats). s

3.2.8 Reviews (FR-RV)

- FR-RV-1: Clients rate/review conveyancers post-job (1-5 stars, comments). s
- FR-RV-2: Display aggregated reviews on profiles; moderate for abuse. s

3.3 Non-Functional Requirements

3.3.1 Performance Requirements

- System shall handle 1,000 concurrent users with <2s response time for API calls. ^s
- Database queries (e.g., job search) <500ms via indexes on user_id, job_id. ^s

3.3.2 Safety Requirements

- Encrypt PII at rest/transit; comply with APP for data breaches (notify within 72 hours). ^s
- Escrow funds are protected per Australian Financial Services License standards. ^s

3.3.3 Security Requirements

- RBAC: Conveyancers view only assigned jobs; admins full access. ^s
- 2FA for logins; rate limiting on APIs (e.g., 100 req/min per IP). ^s
- Audit all sensitive actions (e.g., payment releases). ^s

3.3.4 Software Quality Attributes

- Reliability: 99.9% uptime; automated backups daily. ^s
- Usability: Intuitive UI with tooltips/guides from Starter Kit. ^s
- Maintainability: Modular code; schema versioned in migrations. ^s
- Scalability: Horizontal scaling via cloud; supports 10x user growth. ^s

3.3.5 Data Integrity Requirements

- CHECK constraints (e.g., ratings 1-5); cascades for deletions (e.g., job → milestones). ^s
- 7-year retention for transaction data; anonymize after. ^s

4. Supporting Information

4.1 Database Schema Overview

Refer to Section 2.5 for core tables (users, jobs, milestones, etc.). Full ERD available in Developer Guidebook. ^{s s}

4.2 Use Case Diagram

See attached or prior documentation for a visual representation of actors and interactions. ^{s s}

4.3 Appendices

- State-Specific Variations: E.g., Queensland requires additional stamp duty fields in jobs. ^s
- Testing Guidelines: Unit tests for APIs; end-to-end for workflows. ^s
- Deployment Notes: Dockerized services; CI/CD via GitHub Actions. ^s

This SRS is finalized based on available project documentation and can be iterated upon with stakeholder feedback. For implementation, consult the Developer Guidebook. ^{s s}