

Onboarding Portal – MVP Product & Technical Documentation

Hyperlegal LTD

Onboarding Portal – MVP

Version: 1.0

Company: Hyperlegal LTD (London, UK)

Product: Onboarding & Risk Assessment Tool for UK Law Firms

1. Product Overview

1.1 Purpose

The **Hyperlegal Onboarding Portal** is a SaaS platform that enables UK law firms to:

- Send secure onboarding forms to clients
- Collect matter and identity data
- Trigger third-party risk checks (Experian, SmartSearch, Web Search)
- Automatically generate AI-assisted risk assessments
- Generate AI-powered adverse media reports
- Store all outputs in the firm's SharePoint environment
- Maintain audit logs and administrative control

The system supports:

- Individual clients
 - Business clients
 - Multiple individuals per matter
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2. User Roles & Permissions

2.1 Law Firm Users

Standard User

- Login
- Start onboarding
- Generate webform links
- Receive notifications
- Start risk assessments

- Review and edit AI-generated risk assessments
- Submit final risk assessment
- View completed matters

Company Admin (Law Firm)

- All Standard User permissions
 - Add/remove/manage firm users
 - View activity logs (audit trail)
 - Manage company settings (future enhancement)
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2.2 Hyperlegal Platform Admin

Separate internal admin panel.

Permissions:

- Create/manage law firm companies
 - Configure company profile
 - Add/manage company admins
 - View system-level logs
 - Suspend/activate companies
 - Manage red flag policies per firm
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3. Matter & Onboarding Workflow

3.1 Start Onboarding

User Flow:

1. User logs in
 2. Clicks “Start Onboarding”
 3. Modal appears:
 - Select form type (Individual / Business / Conveyancing etc.)
 - Notification email
 - Optional Matter ID (auto-generated if empty)
 4. System generates:
 - Unique secure URL (token-based access)
 - Matter record in database (status = “Link Generated”)
 5. User pastes URL into email alongside engagement letter and sends to client
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3.2 Client Webform

Requirements

- Public access via secure tokenised URL
- Multi-individual support
- File upload (ID documents)
- Business-specific fields (if applicable)
- Validation and required field enforcement

Data Captured

Matter Data

- Matter ID
- Transaction type
- Property details (if conveyancing)
- Estimated value
- Jurisdiction

Individual Data

- Full name
- Date of birth
- Address history
- Nationality
- Identity document upload
- PEP declaration

Business Data (if applicable)

- Company name
- Company number
- Registered address
- UBO details
- Directors

3.3 On Submission

When client submits:

- Matter status → **“Form Received”**
- Notification email sent (via SES)
- Structured data stored in database

- Documents stored in S3
 - Data replicated to firm SharePoint
 - Matter becomes visible in dashboard
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4. Risk Assessment Engine

4.1 Risk Check Selection

When user clicks **“Start Risk Assessment”**:

A modal displays for each Individual / Business:

Web Search

- Yes / No

Experian

- No
- KYC
- KYB
- AML

SmartSearch (Multi-Select)

- KYC
- Sanctions & PEP
- International AML
- Enhanced Due Diligence
- (If Business: KYB, UBO, Director Screening)

Notification email is required.

4.2 Risk Execution Flow

After clicking **“Run Checks”**:

1. Matter status → **“Checks in Progress”**
2. Async job created via SQS
3. Lambda functions triggered:
 - Experian API
 - SmartSearch API
 - Web Scraping Lambda
4. Results stored:

- Structured data in DB
- PDFs / JSON in SharePoint

5. Notification email sent when complete

5. Web Search (Adverse Media) Functionality

If **Web Search = Yes**, the system performs an AI-assisted adverse media search.

5.1 Adverse Media Process Flow

Step 1 – Google Search Query

The system submits:

- Individual full name (+ DOB if available)
- OR
- Company name (+ company number if available)

To Google search (via scraping service or compliant search API).

Search parameters should include:

- News
 - Legal actions
 - Sanctions
 - Fraud
 - Regulatory penalties
 - Criminal proceedings
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Step 2 – Result Retrieval

A **Web Scraping Lambda**:

- Retrieves top search results (configurable range, e.g., 20–50 results)
 - Extracts URLs, titles, snippets
 - Removes duplicate results
 - Filters obvious irrelevant matches
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Step 3 – Content Extraction

For relevant URLs:

- Extract article body text

- Remove ads / boilerplate
 - Structure content into machine-readable format
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Step 4 – AI Adverse Media Analysis

Content passed to AI model to:

- Identify genuine matches vs name confusion
 - Detect adverse indicators:
 - Fraud
 - Money laundering
 - Sanctions
 - Regulatory enforcement
 - Criminal charges
 - Insolvency issues
 - Categorise severity (Low / Medium / High Risk)
 - Generate concise summary
 - Provide reasoning
 - Provide confidence score
 - Include source references
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5.2 Adverse Media Report Output

AI generates a structured **Adverse Media Report** including:

- Subject details
- Executive summary
- Detailed findings
- Source links
- Risk categorisation
- Confidence score
- AI reasoning explanation

The report is:

- Stored in structured JSON format in database
- Converted to PDF
- Saved to SharePoint under relevant Matter ID folder

This output becomes an input into the broader AI Risk Assessment engine.

6. AI Risk Assessment Generation

6.1 Input Sources

- Matter data
 - Experian output
 - SmartSearch output
 - Adverse Media report
 - Firm-specific red flag policies
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6.2 AI Processing

Structured data passed to AI model with deterministic prompt structure.

AI generates:

- Pre-filled risk assessment
 - Per-question answer
 - Confidence score (Low / Medium / High)
 - Short reasoning summary
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6.3 Review & Submission

User interface displays:

For each question:

- AI Answer
- Confidence level
- Explanation

User can:

- Edit answers
- Override AI
- Submit final version

Upon submission:

- Status → **“Complete”**
 - Final risk assessment saved to SharePoint
 - Audit log updated
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7. Technical Architecture (AWS)

Frontend

- React (TypeScript)
- Hosted on S3
- Distributed via CloudFront
- Route53 for DNS

Backend

- API Gateway
- AWS Lambda (Main API & processing)
- Web Scraping Lambda
- SQS (async orchestration)
- SNS / SES (notifications)
- AWS AppSync (optional GraphQL)

Database & Storage

- RDS (Primary + Replica)
- DynamoDB (optional high-speed storage)
- S3 (file uploads & documents)
- SharePoint integration for final storage

Authentication

- AWS Cognito

DevOps

- GitHub repositories
 - CodePipeline
 - CodeBuild
 - CloudFormation (Infrastructure as Code)
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8. Security & Compliance

- Multi-tenant data isolation
- Encryption at rest (RDS, S3)
- HTTPS enforced
- Signed form URLs
- Audit logging (who did what & when)

- GDPR compliance
 - UK data residency (AWS London region)
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9. Non-Functional Requirements

- 99.5% uptime target (MVP acceptable)
 - Horizontal scalability (Lambda-based)
 - Async processing for checks
 - Immutable audit trail
 - Secure third-party API handling
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10. MVP Scope

In Scope

- Onboarding webforms
- Risk check orchestration
- AI-generated adverse media reports
- AI-assisted risk assessment
- SharePoint integration
- Admin panels

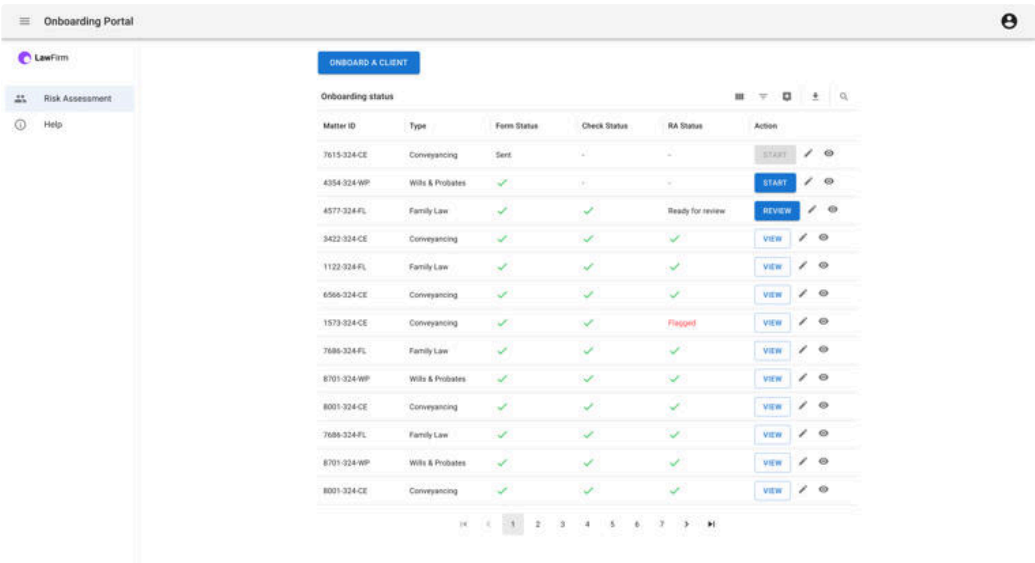
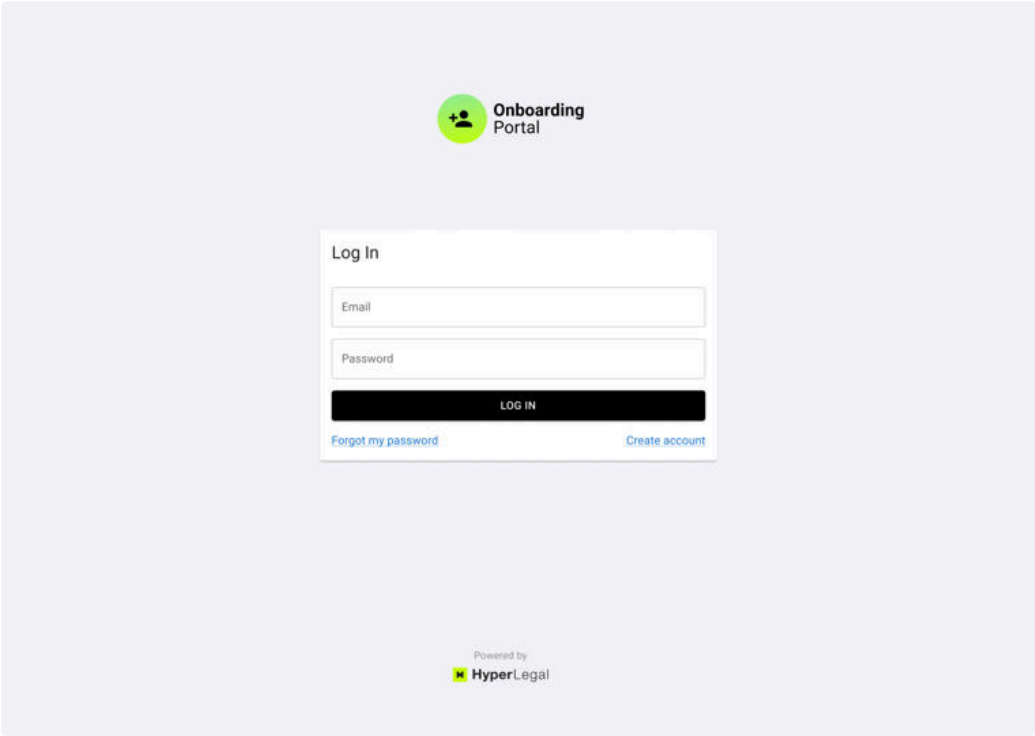
Out of Scope

- Engagement letter generation
 - Billing
 - CRM integrations
 - Full case management
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11. Deliverables Required from Dev Team

- Production-ready AWS infrastructure (IaC)
- Frontend web application
- Backend API
- Admin portal
- CI/CD pipeline
- API documentation (OpenAPI)
- Database schema
- Security review

12. UI Screens



Onboarding Portal

Onboarding Portal

Lawfirm

Risk Assessment

Help

GO BACK

JOHN DOE

JANE DOE

Status: unsubmitted

Status: unsubmitted

Client details

Client name: John Doe

Client date of birth: 1989-01-01

Client address: 19 Melrose street, N19 5HT, London, United Kingdom

New or existing client: New

Due diligence last updated: N/A

Occupation / Source of income: Employment

Type of client: Private

Initial risk assessment

Client risk

Is it unusual for this client to instruct us?

Yes

No

AI Confidence: High

AI Reasoning: Based on data Jane is a typical homemaker, with no sign of anomalies. Read more

Do you have any concerns about the client?

Yes

No

AI Confidence: High

AI Reasoning: Based on available data no concerns have been detected.

Is the client linked with a high-risk industry for money laundering purposes?

Yes

No

AI Confidence: Low

AI Reasoning: Jane is not linked directly with a high-risk industry. But her company was acquired by. Read more

Is the client a PEP or high net worth individual?

Yes

No

AI Confidence: High

AI Reasoning: Based on SmartSearch data the client is not a Politically Exposed Individual.

Does the client pose a proliferation financing risk?

Yes

No

AI Confidence: High

AI Reasoning: Based on SmartSearch data the client has no sign of being involved with. Read more

Is the client a Designated Person?

Yes

No

Not yet known

AI Confidence: High

AI Reasoning: Based on SmartSearch Jane is not on any sanction list.

If a third party is instructing, do we have evidence of their authority to act?

Yes

No

Not applicable

AI Confidence: High

AI Reasoning: Based on matter data from Jane, there are no third party instructing.

Do you have any concerns about this client, agent or third parties?

Yes

No

AI Confidence: High

AI Reasoning: Based on available data there are no reasons for concerns. Read more

Provide details of any issues in this section (if there are no issues, please leave the field blank):

AI Confidence: High

AI Reasoning: Based on data no issues were found

Jurisdiction risk

Delivery channel risk

Due diligence review

Due diligence

Matter risk assessment

Matter risks

Product/Service risks

Enhanced due diligence

Risk level and justification

Due diligence

Ongoing monitoring

I confirm I have read and reviewed the risk assessment and there are no changes required at this time

I confirm I have read, reviewed, and made necessary amendments

I confirm that I have followed our Policies, Controls, and Procedures (PCPs) in relation to this matter

SUBMIT

Pre-Filled Risk Assessment Form