

Project Requirements Document – DocuChain

1. Project Overview

DocuChain is a blockchain-based decentralized web app that enables institutions and employers to issue tamper-proof offer letters. These letters can be verified easily and instantly by applicants and immigration authorities.

2. Stakeholders

- Educational Institutions
- Employers
- Immigration Authorities
- Applicants

3. Functional Requirements

- Issuers can log in and issue offer letters
- Verifiers can upload and verify the authenticity of the offer letters
- Blockchain storage of file hashes
- Issuers and verifiers can complete their tasks without interacting with wallets, gas or private keys directly. All blockchain logic is handled transparently by the platform.

4. Non-Functional Requirements

- High availability
- Data integrity
- Legal compliance (example: PIPEDA, GDPR)

5. User Roles

- Issuer
- Verifier

- Platform Admins

6. Constraints

- Use of Ethereum-compatible blockchain
- Limited budget and team

7. Assumptions

- Institutions and employers will upload offer letters in standard formats (e.g., PDF)-

8. Success Criteria

- A letter issued through the platform can be verified by its hash publicly on-chain
- Immigration officer verifies a letter in under 10 seconds without contacting the issuer
- The system can handle at least 10,000 verifications/month without performance degradation, allowing it to grow regionally and globally.
- The verification portal maintains >99.5% uptime to ensure 24/7 access, especially critical for global verifiers in different time zones.
- At least 3 institutions or employers successfully onboarded and issuing letters via the platform during pilot rollout.