

Project Plan Development (Waterfall Methodology)

1. Project Phases Overview

| Phase | Description | Key Deliverables |
|---|--|--|
| 1. Initiation & Planning | Confirm scope, stakeholders, governance; develop PMP (scope/schedule/cost/quality); communication, risk, and procurement planning; compliance strategy and audit approach; initial resource plan | Project Charter; Project Management Plan; RACI; Risk/Issue Registers; Compliance Strategy; High-level Timeline & Budget |
| 2. Requirements & Analysis | Stakeholder workshops; elaborate 20 functional and 14 non-functional requirements; define use cases, workflows, and metadata taxonomy; compliance mapping (GDPR/HIPAA/ISO); define supported file types (PDF/DOCX/TXT); requirements traceability | BRD/FRD; NFR Specification; Use Case & Process Flows; Metadata/Data Dictionary; Workflow Specifications; Requirements Traceability Matrix (RTM) |
| 3. Architecture & Detailed Design | Select cloud (AWS/Azure/GCP) and tech stack (frontend/backend/DB from allowed options); define system and security architecture (RBAC, MFA, IP restrictions, encryption, audit); API/integration designs (cloud storage, e-signature, PM tools); backup/retention/archival; analytics/reporting design; monitoring/observability; UX wireframes; test strategy | Solution Architecture; HLD/LLD; Security Architecture; Data Model; API & Integration Specs; Backup/Retention Design; Monitoring/Logging Design; UX Wireframes; Test Strategy |
| 4. Environment Setup & DevOps | Provision Dev/Test/Stage environments; IaC; CI/CD pipelines; secrets management; observability (logs, metrics, traces); access controls/IP restrictions; baseline backups | Provisioned Environments; CI/CD Pipelines; IaC Scripts; Access Control Configuration; Monitoring Dashboards |
| 5. Development Phase 1 – Core Platform & Security Foundations | Implement repository, folder hierarchy; upload/edit/delete/archive; versioning (history/compare/restore); metadata & advanced search; templates; RBAC, MFA, IP restrictions; encryption in transit/at rest; audit logs; retention policies; watermarks; admin/configuration | Core Services/APIs; Repository/Search/Template UI; Security & Policy Services; Admin Console; Unit Tests |
| 6. Development Phase 2 – Collaboration, Notifications & Tasks, Workflow/Approvals | Real-time/asynchronous editing; comments, annotations; edit locking; notifications; task assignments and deadlines; configurable approval workflows with statuses; task dashboards | Collaboration Services/UI; Workflow Engine; Notifications Service; Task Management; Unit Tests |
| 7. Development Phase 3 – Integrations Hub, Backup & Archival | Integrate cloud storage (sync, automated backup, import/export); e-signature (request/track/store); PM tools (link docs to tasks, status updates); API activity monitoring; automate archival | Connectors/Adapters; Integration Configs & Webhooks; Import/Export Tools; Backup/Archival Jobs; Unit Tests |
| 8. Development Phase 4 – Analytics & Reporting | Implement usage/collaboration/storage/workflow efficiency analytics; dashboards; CSV/PDF exports; automated email summaries; admin monitoring for third-party API activity | Analytics Data Model; Dashboards; Reporting/Export Services; Scheduled Summary Jobs; Unit Tests |
| 9. System Integration & Testing | End-to-end integration of all modules; SIT; performance/load testing; security testing (vulnerability/penetration); defect resolution | Integrated Build; SIT Report; Performance Test Report; Security Test Report; Defect Log & Fixes |
| 10. Compliance Validation & Audit Readiness | Validate features against GDPR/HIPAA/ISO; evidence collection; audit log review; DPO/compliance review and approvals | Compliance Traceability Matrix; Audit Evidence Pack; Policies/Config Baseline; Approval Sign-offs |

| Phase | Description | Key Deliverables |
|---|---|---|
| 11. Documentation & Training | Technical/user/admin documentation; API guides; training materials; conduct training sessions; support runbooks | User/Admin Guides; API Documentation; Training Materials & Plan; Support SOPs |
| 12. User Acceptance Testing (UAT) | UAT planning and execution with personas; defect triage and fixes; business sign-off | UAT Plan & Test Cases; UAT Report; Sign-off |
| 13. Deployment & Go-Live | Cutover planning and rehearsal; production provisioning; secrets/keys; go-live; hypercare plan | Release Notes; Cutover Plan & Runbook; Production Deployment; Hypercare Plan |
| 14. Post-Implementation Review & Closeout | Hypercare support; KPI monitoring; lessons learned; operations handover; contract/financial close | Post-Implementation Report; Lessons Learned; Operations Handover; Project Closure |

2. Project Timeline and Dependencies

| Phase | Duration (Weeks) | Dependencies |
|---|------------------|--------------|
| 1. Initiation & Planning | 3 | — |
| 2. Requirements & Analysis | 5 | 1 |
| 3. Architecture & Detailed Design | 5 | 2 |
| 4. Environment Setup & DevOps | 3 | 3 |
| 5. Development Phase 1 – Core Platform & Security Foundations | 12 | 4 |
| 6. Development Phase 2 – Collaboration, Notifications & Tasks, Workflow/Approvals | 8 | 5 |
| 7. Development Phase 3 – Integrations Hub, Backup & Archival | 8 | 6 |
| 8. Development Phase 4 – Analytics & Reporting | 6 | 7 |
| 9. System Integration & Testing | 5 | 8 |
| 10. Compliance Validation & Audit Readiness | 2 | 9 |
| 11. Documentation & Training | 2 | 9, 10 |
| 12. User Acceptance Testing (UAT) | 2 | 10, 11 |
| 13. Deployment & Go-Live | 2 | 12 |
| 14. Post-Implementation Review & Closeout | 1 | 13 |

3. Gantt Chart (Textual Representation)

| Phase | Start Week | End Week |
|---|------------|----------|
| 1. Initiation & Planning | 1 | 3 |
| 2. Requirements & Analysis | 4 | 8 |
| 3. Architecture & Detailed Design | 9 | 13 |
| 4. Environment Setup & DevOps | 14 | 16 |
| 5. Development Phase 1 – Core Platform & Security Foundations | 17 | 28 |
| 6. Development Phase 2 – Collaboration, Notifications & Tasks, Workflow/Approvals | 29 | 36 |
| 7. Development Phase 3 – Integrations Hub, Backup & Archival | 37 | 44 |
| 8. Development Phase 4 – Analytics & Reporting | 45 | 50 |
| 9. System Integration & Testing | 51 | 55 |
| 10. Compliance Validation & Audit Readiness | 56 | 57 |
| 11. Documentation & Training | 58 | 59 |
| 12. User Acceptance Testing (UAT) | 60 | 61 |
| 13. Deployment & Go-Live | 62 | 63 |
| 14. Post-Implementation Review & Closeout | 64 | 64 |