WatiqAI: Project Plan

1. Project Overview

Project Name: WatiqAI - AI-Powered KYC Document Fraud Detection **Goal**: To develop and deploy an AI-driven platform for real-time detection of forged and inconsistent identity documents during banking KYC processes in Morocco, ensuring compliance, reducing fraud, and improving operational efficiency. **Duration**: 3 Months (MVP Phase)

2. Key Objectives

- Achieve 85%+ fraud detection rate with % false positives.
- Reduce manual KYC verification time to <60 seconds per customer.
- Ensure full compliance with Moroccan banking regulations (Bank Al-Maghrib, Law 09-08).
- Develop a production-ready API for seamless integration with banking systems.
- Pilot the solution with at least one Moroccan bank.

3. Phases and Milestones

Phase 1: Foundation & Data Acquisition (Month 1)

Objective: Establish core infrastructure and gather/prepare Moroccan document datasets.

Milestone	Deliverable	Timeline	Owner
1.1 Infrastructure Setup	Cloud environment configured, API gateway ready	Week 1	CTO
1.2 Data Collection & Annotation	5,000+ Moroccan documents (IDs, utility bills) collected and annotated for training	Week 2-3	Lead ML Engineer
1.3 Core OCR & Face Matching	Initial models trained for 95%+ OCR accuracy and 90%+ face matching accuracy	Week 4	Lead ML Engineer

Phase 2: Fraud Engine Development (Month 2)

Objective: Implement core fraud detection logic and risk scoring.

Milestone	Deliverable	Timeline	Owner
2.1 Fraud Rules Implementation	10+ Moroccan-specific fraud detection rules (e.g., photo swap, font inconsistency, seal verification)	Week 5-6	Lead ML Engineer
2.2 Anomaly Detection Models	Train anomaly detection models (Isolation Forest, AutoEncoders)	Week 7	Lead ML Engineer
2.3 Risk Scoring Algorithm	Develop and integrate 0-100 fraud risk scoring algorithm	Week 8	Lead ML Engineer
2.4 Compliance Reporting Module	Generate compliance reports in French/Arabic for auditors	Week 8	Backend Developer

Phase 3: Integration & Pilot (Month 3)

Objective: Finalize API, conduct comprehensive testing, and initiate pilot program.

Milestone	Deliverable	Timeline	Owner
3.1 REST API Finalization	Production-ready API with full documentation (OAuth 2.0, JSON, base64 images)	Week 9	Backend Developer
3.2 Demo Interface	User-friendly demo interface for KYC officers	Week 10	Backend Developer
3.3 Comprehensive Testing	Test with 500 diverse cases (legit, fraud, edge cases)	Week 10-11	Lead ML Engineer
3.4 Pilot Program Launch	Initiate pilot with target bank, gather feedback	Week 12	CEO

4. Team & Roles

- **CEO/Co-founder**: Overall project management, banking compliance, business development.
- **CTO/Co-founder**: Technical architecture, cloud infrastructure, computer vision expertise.
- **Lead ML Engineer**: Model development, data science, NLP, fraud algorithms.
- **Backend Developer**: API development, system integration, database management.
- **Compliance Advisor (Part-time)**: Moroccan banking law, regulatory adherence.

5. Budget (MVP Phase - Estimated)

- **Personnel**: 5-10M MAD (Seed funding target)
- **Cloud Infrastructure**: ~5,000 MAD/month
- **Data Acquisition/Annotation**: ~10,000 MAD (one-time)
- **Software Licenses**: Minimal (focus on open-source)

6. Risks & Mitigation

Risk	Mitigation Strategy
Data Scarcity for Training	Leverage synthetic data generation, partner with institutions for anonymized data.
Regulatory Changes	Continuous monitoring by Compliance Advisor, agile adaptation of features.
Integration Complexity	Standardized API, comprehensive documentation, dedicated integration support.
False Positives/Negatives	Continuous model retraining, human-in-the-loop for edge cases, explainable AI.

7. Future Roadmap (Post-MVP)

- **Phase 2 (Months 7-12)**: Expand to 5 banks + microfinance, add passport/driver's license verification, target 750K MAD/month revenue.
- **Phase 3 (Year 2)**: 10+ banks + insurance + telecom, add KYB (company documents), target 3M MAD/month revenue.
- **Phase 4 (Year 3+)**: Pan-Maghreb expansion (Algeria, Tunisia, Mauritania), target 7.5M MAD/month revenue.