

NURU AI – TECHNICAL ROADMAP

Hackathon: AI NIRU Hackathon

Project Duration: 6 Weeks

Team: Nuru AI Development Unit

A. Project Summary

Nuru AI is basically is an intelligence grade platform designed to detect procurement fraud, document forgery, financial irregularities, and suspicious transaction patterns across all Kenya governmental institutions. The system supports officers at the EACC office, the Auditor General office, Kenya Revenue Authority, National Intelligence Service, and internal procurement units by giving them a unified investigative dashboard capable of tracking real-time fraud, flagging and intelligence reporting.

B. Roadmap Philosophy

The roadmap mainly prioritizes the features for the AI fraud detection, an explainability system so officers trust the system, be able to clear weekly milestones, be able to give deliverables judges can actually see and test, finally be in a position that every week to produces something visible and defensible.

C. Technical Roadmap

WEEK 1: Research, Data Understanding and System Scoping

Goals	Activities	Deliverables
understand how government officers currently detect fraud,	to study procurement workflows	the AI Fraud Model Blueprint

Identify data types and system integrations needed	to model corruption behavior patterns	the workflow Diagrams
define full system requirements	to define user personas such as the Auditor, Investigator, Analyst	requirements Specification Document
	to understand where AI best fits.	
	to document the entire fraud lifecycle	

WEEK 2 — System Architecture and Security Baseline

Goals	Activities	Deliverables
To Establish the backend, database, and AI pipelines.	Design Django micro-service architecture	Architecture Document
To Ensure strong authentication.	Define PostgreSQL schema for documents, users, cases, logs	The Entity Relation Diagram
	Full API specification	Security Requirements
	Select AI stack	Environment Setup Plan
	Security planning	

WEEK 3 — Frontend Architecture and Core UI Development

Goals	Activities	Deliverables
Build a clean, serious, government-appropriate dashboard	Create React app with protected routes	Clickable navigation
	Define UI theme	Page skeletons
	Build the base pages	Unified dashboard UI/UX
		Mock data to simulate activity

WEEK 4 — Core Backend Logic and AI Integration

Goals	Activities	Deliverables
Operational document analysis	Implement OCR for PDFs, images, and scans	Working backend
fraud detection	Build fraud detection engine	Live AI responses for document verification
	Implement transaction ingestion and a risk scoring API	Risk scoring system
	Store all investigations with audit logs	Fraud detection rules + ML integration

WEEK 5 — Full System Integration and Explainability

Goals	Activities	Deliverables
Full end-to-end functionality connected to dashboard	Connect React to Django APIs	Fully functional dashboard with real data
Add explainability so intelligence officers can trust the results	Display suspicious transaction alerts	Explainable AI interface
	Show real document analysis results	Case management system
	Build case creation workflow	Analyst-ready reports
	Build reporting engine	

WEEK 6 — Hardening, Testing, Deployment and Demo Preparation

Goals	Activities	Deliverables
Stability	Penetration testing & security checks	Polished UI with real intelligence workflow
security	Load testing on large document sets	Complete documentation set
flawless demo	UI polishing and dashboard clarity	Final deployed prototype

	Deploy to a secure cloud instance	Demo-ready investigative storyline
	Write technical documentation and Prepare final pitch	