Scope of Project - EasyInsure



1. Vision

Goal: Revolutionize insurance using AI and real-time analytics.

* Admin Benefits:
  + AI dashboard for live fraud alerts, claim tracking, and partner performance.
  + Faster decisions, less paperwork.
* User Benefits:
  + Self-service portal to check claims, manage policies, and get personalized offers.
* Key Targets:
  + Process claims in <4 hours (down from days).
  + Reduce fraud by 30% using AI.
  + Ensure 95% of partners (hospitals/garages) meet service deadlines.

2. Business Requirements

Critical questions answered:

* Policy Types: Motor, Health, Travel, Life insurance (e.g., "Pay per km" for cars).
* Claims:
  + Documents needed (e.g., bills, FIR reports).
  + Fraud detection via AI image analysis (e.g., spotting fake damage photos).
* Customer Experience:
  + WhatsApp chatbot for queries, self-service policy downloads.
* Security:
  + Encrypt data (AES-256), verify users via Aadhaar e-KYC.
* Analytics:
  + Dashboards showing fraud hotspots, claim delays.

3. Business Outcomes

Phased rollout (MVP = "Minimum Viable Product"):

* Core MVP: Basic policy purchase, claim tracking, fraud detection.
* MVP+1: Auto-renewal reminders, compliance automation.
* MVP+2: AI risk scoring, partner integration hub.
* MVP+3: Mobile app launch, customer satisfaction boosts.
* MVP+4: Multi-language support, disaster risk modelling.

Example: \*"Reduce claim time to <4 hours" (MVP+1), "Launch mobile app" (MVP+4) \*.

4. Scope & Solutions

Problems Solved:

* Manual claim delays → AI-powered auto-approval.
* Fraudulent claims → Image recognition (e.g., AWS Rekognition).
* Static pricing → Dynamic premiums based on driving habits/health data.
* Partner delays → Real-time APIs for hospitals/garages.

Innovations:

* Pay-as-you-drive insurance: Bills per km driven.
* Disaster simulator: Predicts flood/earthquake risks.
* No-code insurance builder: Create custom policies (e.g., flight delay insurance) without coding.

5. Themes

Feature categories for development:

* Claim Automation: AI validates claims instantly.
* Self-Service Portal: Customers manage policies online.
* Dynamic Pricing: Premiums adjust using real-time data (e.g., driving behavior).
* Fraud Detection: AI spots duplicate claims via "image hashing."
* Compliance: Auto-updates for insurance regulations (IRDAI).

6. Initiatives & Epics

Projects grouped by goals:

* Self-Service Mobile Suite: Let users buy policies/riders via WhatsApp.
* AI Claim Automation: Auto-route claims to specialists.
* Fraud Intelligence Center: Flag suspicious claims using AI.
* Real-Time Analytics: Dashboards for claim TAT, fraud trends.

Phased Execution:

* Phase 1 (MVP): Core features (policy purchase, claim tracking).
* Phase 2: Efficiency boosts (chatbots, dynamic pricing).
* Phase 3: Advanced AI (telematics, disaster modelling).

7. Use Cases

Real-life scenarios:

* UC-01: Buy a policy in 2 minutes with Aadhaar e-KYC.
* UC-07: File a claim via mobile using photo upload + face recognition.
* UC-10: AI estimates vehicle damage from photos.
* UC-13: Auto-pay claims within 4 hours of approval.

8. User Stories & Tasks

Technical execution:

* User Story: "As a customer, I want mobile photo claims to avoid paperwork."
  + Task: Build image compression + OCR to auto-fill forms.
  + Sub-task: Train AI model to read damage photos.
* Tools Used:
  + APIs: UIDAI (Aadhaar), Google Maps, Paytm/UPI payments.
  + AI: AWS Rekognition, CNN (image analysis), NLP (chatbots).
  + Security: AES-256 encryption, role-based access (RBAC).

9. Glossary

Key Tech Terms:

* TAT: Claim processing time (target: <4 hours).
* e-KYC: Digital ID verification via Aadhaar.
* OCR: Extract text from images (e.g., bills).
* WORM: Unchangeable audit logs for compliance.
* Perceptual Hashing: AI technique to detect duplicate images.

In a Nutshell

This project builds a smart insurance platform where:

1. Users buy policies in minutes, file claims via phone, and track everything in real-time.
2. Admins use AI dashboards to stop fraud, monitor partners, and ensure compliance.
3. AI/APIs handle heavy lifting: pricing, approvals, damage assessment, payments.
4. Phased rollouts start simple (MVP) and evolve to advanced features (e.g., disaster risk modeling).

End Result: Faster, cheaper, and fraud-resistant insurance for everyone! 🚀