



## NIGHA AI Safety App – Project Plan Document

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### Phase 1: Ideation & Requirements (Week 1)

**Objective:** Finalize scope, requirements, and feature set for MVP

**Tasks:** - Define user personas (e.g., girls/women, guardians, police) - Prioritize features for MVP (SOS, Voice Detection, Geo-fence alerts) - Finalize tech stack (e.g., Flutter + Firebase + Python AI)

**Deliverables:** - Requirements document - Feature priority matrix - Tech stack decision sheet

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### Phase 2: MVP Development (Weeks 2-5)

**Objective:** Launch a working prototype with core safety features

#### Week 2:

- Setup Flutter project (Splash, Login, Dashboard UI)
- Integrate Firebase Auth & Realtime DB
- Build basic SOS button: sends GPS + time to pre-set contacts

#### Week 3:

- Implement AI voice stress detection (TensorFlow + mic input)
- Add background service to listen for “help” keyword
- Design local audio/video auto-recording triggers

#### Week 4:

- Geo-fencing via Google Maps API + local crime zones
- Create Anonymous Incident Reporting Form + backend

#### Week 5:

- Link notifications via Twilio or Firebase Cloud Messaging
- Secure storage of media to cloud (AWS S3 or Firebase Storage)
- Basic chatbot with Dialogflow/Rasa

**Deliverables:** - APK or iOS TestFlight build - AI model test results - GitHub repo with README

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### 🛡️ Phase 3: Testing & Feedback (Weeks 6–7)

**Objective:** Ensure app reliability, safety, and user trust

**Tasks:** - Run tests in simulated unsafe scenarios - Conduct UX feedback sessions with 5–10 women volunteers - Bug fixing + performance optimization

**Deliverables:** - Test logs - Feedback report - Patch update

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### Phase 4: Launch & Outreach (Weeks 8–9)

**Objective:** Deploy NIGHA in a real setting + get media coverage

**Tasks:** - Partner with one women's NGO or college - Local police awareness + demo sessions - Digital outreach via reels/posts on Instagram, LinkedIn

**Deliverables:** - Live app on Play Store (optional beta) - Website landing page - Launch video/demo reel

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### 💰 Phase 5: Funding, CSR & Scaling (Weeks 10–12+)

**Objective:** Pitch to CSR programs, grant bodies, and partners

**Tasks:** - Prepare grant proposals & pitch deck - Approach Ministry of Women & Child Development (MWCD) - Submit to competitions (Google.org AI, MIT Solve, etc.) - Scale to more regions, languages, and AI models

**Deliverables:** - Grant submissions - CSR MoUs/letters of support - Expansion roadmap

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### Key MVP Features to Build First

Feature	Priority	Tools
SOS Button + GPS Alert	High	Flutter, Firebase
Voice Stress Detection	High	TensorFlow, Librosa
Geo-fencing Alert	High	Google Maps API
Incident Reporting	High	Flutter + Firebase
Anonymous Reporting	Medium	Node.js + Encryption
AI Chatbot	Medium	Dialogflow / Rasa

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## Team & Roles

Role	Responsibility
Project Manager	Plan, assign, and monitor timeline
Flutter Developer	Build UI, integrate backend
AI Engineer	Train voice/emotion detection model
Backend Developer	Build APIs, cloud storage, auth
Outreach Lead	Media, NGOs, partnership
Security Auditor	Ensure data privacy + encryption

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## Impact Metrics to Track

- Number of SOS triggers activated
- Number of women registered
- Number of incidents flagged + responded to
- Number of AI detections of stress
- Feedback rating from users (1–5 scale)

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## Sample Gantt Chart Overview

Week	Task
1	Requirements gathering, tech stack setup
2	App skeleton, SOS button, Firebase integration
3	AI voice detection, audio triggers
4	Geo-fencing, Anonymous reporting
5	Notifications, Chatbot, Media storage
6	Testing phase 1, fix bugs
7	UX Feedback, Testing phase 2
8	Launch with NGO partner, demo to local authorities
9	Digital media rollout, user outreach
10+	Grant proposals, CSR tie-ups, regional expansion planning

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**Project:** NIGHA – AI Safety Monitoring for Public Welfare