

## **AGILE FRAMEWORK**

### **Sprint 0 (Foundation & Architecture)**

**Goal:** Prepare system for scalable development

#### **Stories**

- Define system architecture
- Setup Git, CI/CD
- MongoDB schema design
- Role-based access model

#### **Deliverables**

- ✓ Architecture diagram
  - ✓ Database schema
  - ✓ Dev environment ready
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### **Sprint 1: Migrant Worker Onboarding**

**Goal:** Worker can register & control consent

#### **User Stories**

- As a worker, I can register with phone/ID
- As a worker, I can turn consent ON/OFF
- As a worker, I can see my profile

#### **Acceptance Criteria**

- Consent defaults to OFF
  - No data visible without consent
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### **Sprint 2: Healthcare Provider Module**

**Goal:** Providers can add health data (with consent)

#### **User Stories**

- Doctor logs in securely
- Can scan QR / OTP to get consent
- Can add symptoms, diagnosis, vitals

#### **Acceptance Criteria**

- Backend blocks access without consent
- Records tagged with worker ID + date

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### **Sprint 3: Self-Reporting & History**

**Goal:** Workers can self-report and view history

#### **User Stories**

- Worker submits symptoms
  - Worker views own health timeline
  - System marks self-reported vs clinical data
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### **Sprint 4: Backend Consent Enforcement**

**Goal:** Absolute data ownership enforcement

#### **User Stories**

- API checks consent before every read/write
  - Consent logs maintained
  - Data access audit trail
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### **Sprint 5: AI Integration (Gemini)**

**Goal:** Disease pattern detection without identity

#### **User Stories**

- Backend anonymizes health data
- Gemini receives symptom + location + date
- AI returns outbreak signals

#### **Acceptance Criteria**

- No PII sent to AI
  - AI runs on schedule or trigger
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### **Sprint 6: Alerts Engine**

**Goal:** Convert AI insights into action

#### **User Stories**

- Worker gets personal alerts
- Doctor sees AI diagnosis hints
- Authority receives outbreak alerts

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### **Sprint 7: Public Health Dashboard**

**Goal:** Authority can monitor trends

#### **User Stories**

- View heatmaps by district
- View disease trends
- Export reports

#### **Acceptance Criteria**

- No personal data visible
  - Aggregated data only
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### **Sprint 8: Security, Performance & Hardening**

**Goal:** Production readiness

#### **User Stories**

- Penetration testing
- Load testing
- Role misuse prevention