Technical Annex – HealthBridge Prototype

Supporting Evidence for TRL-4 Functionality

Applicant: [Milen Milenov / MIM GAMES]
Repository: https://github.com/nydiokar/HealthBridge
Contact: [nydiokar@gmail.com]

---

1. Prototype Overview

The HealthBridge prototype demonstrates an end-to-end workflow for rural GP support in the Devetaki Plateau. At TRL-4, it validates the core system functions with seeded data and a working interface.

Current capabilities:

- **Citizen intake form (web/tablet):** structured symptom capture.

- **Rule-based triage engine:** assigns urgency (red/yellow/green) with reasoning.

- **GP dashboard:** prioritised case lists with continuity of records.

- **Database layer:** secure storage of cases, timestamps, user roles, and anonymised statistics.

Design attributes:

- Low-bandwidth operation.

- GDPR-compliant elements (consent, role-based access, anonymisation in demo).

- Offline-tolerant (basic caching, planned sync upgrade).

- Modular stack: Express/React/SQLite with open-source components.

2. Screenshots

2.1 Citizen Intake Form

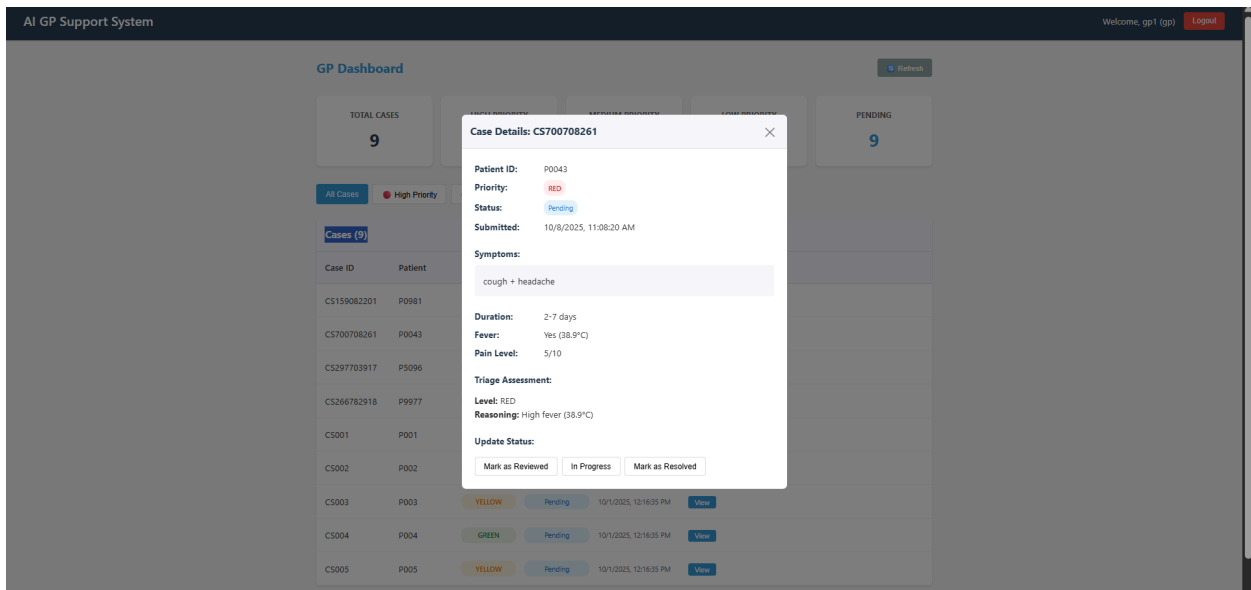[Structured form for symptoms such as fever, pain level, and allergies](). (click for full screen)

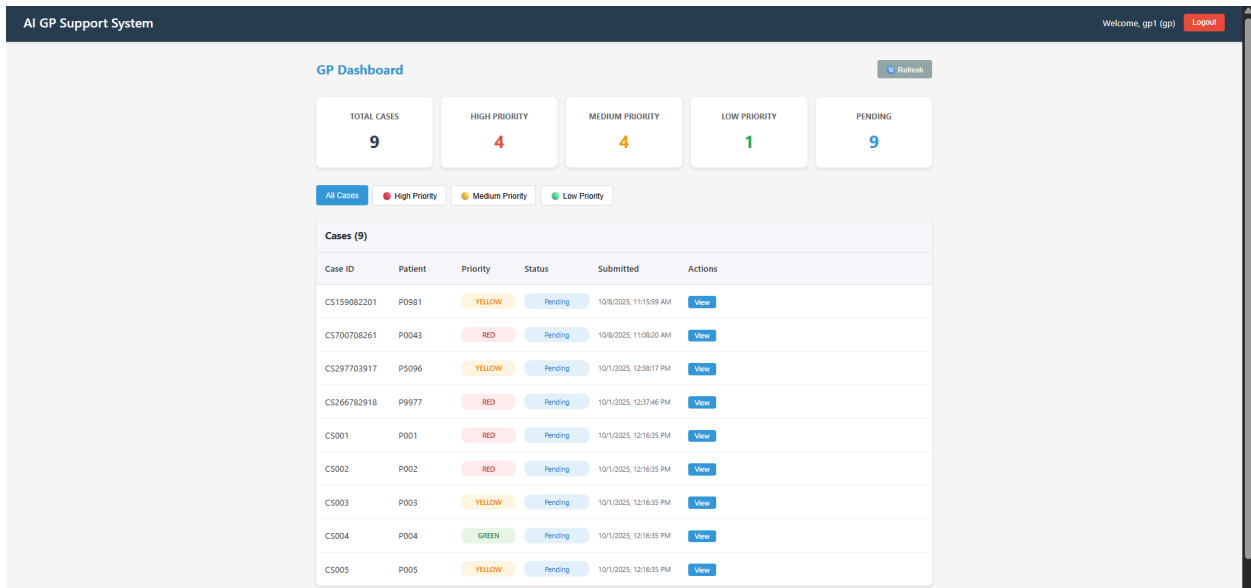[Confirmation of case submission]() (click for full screen)

2.2 Triage Result

Example of urgent case flagged "RED" with explanatory reasoning. (click for full screen)

2.3 GP Dashboard

Secure dashboard with prioritised lists by urgency, submission time, and status. (click for full screen)

3. Demonstration

Demo sequence:

1. Log in as citizen and submit a case (e.g. *"High fever and persistent cough"*).

2. System generates a triage result (e.g. "RED – high fever").

3. Log in as GP → dashboard shows case in prioritised list.

Video demonstration:
 A short video walkthrough (2 minutes) illustrates the above sequence.

---

4. Evidence of TRL-4

- Functional workflow demonstrated: intake → triage → GP dashboard.

- Validated with test cases across urgency categories (red, yellow, green).

- Screenshots and demo video provided as supporting material.

- Source code openly available with installation instructions.

---

5. Next Steps Towards TRL-6

- Integration of ML-assisted triage alongside rules.

- Enhanced offline support (store-and-sync).

- Expanded security hardening (HTTPS, encryption, sessions).

- Full training materials and replication kit for rural deployment.

Repository: https://github.com/nydiokar/HealthBridge
Contact: [nydiokar@gmail.com]