Loopin

No vulnerabilities, only possibilities

Problem Statement

Dementia gradually erodes memory, routines and social bonds. In India, limited awareness and resources leave families with the full burden of care: patients feel lost and anxious while caregivers struggle to keep them safe and engaged. Existing tools lack both empathy and personalisation. **Loopin** bridges this gap with GenAI-driven games, reminders and voice guidance tailored to each patient, sustaining mental activity and easing caregiver stress.

Target Audience & Context

Primary users – People in early-moderate dementia stages who need gentle cognitive stimulation and familiar cues.

Secondary users – Family caregivers managing daily routines with minimal external support.

In most Indian households, dementia care is home-based, particularly outside metros. Loopin delivers struc- tured, personalised engagement that fits these realities and lightens caregiver workload.

Use of GenAI

Caregivers answer a short, guided questionnaire. GenAI (via OpenAI API) converts these responses into a care profile that:

- selects games and difficulty levels,
- schedules text or voice-cloned reminders,
- provides song, story and photo prompts for emotional lift.

The same model powers an AI Story Builder, turning patient speech about photos into short narratives. Continuous feedback keeps the experience adaptive and personalised.

Solution Framework

Core Idea – A single Flask backend and Lovable frontend deliver personalised games, reminders and com- fort through GenAI.

1. **Onboarding:** Caregiver completes tick-box / short-answer form.

- 2. **Planning:** Flask sends data to GenAI; receives JSON plan (games, difficulty, reminders).
- 3. **Game Play:** Frontend loads lightweight HTML/JS games per plan.
- 4. **Reminders:** APScheduler in Flask pushes daily/monthly notifications.

Feedback: Emoji ratings/scores posted to /feedback and used to refresh the plan

Feasibility & Execution

Loopin uses Python Flask, Lovable UI, OpenAI APIs and develops entirely in Cursor. Games are pure HTML/CSS/JS; data stored in SQLite/PostgreSQL. No heavy frameworks or specialised hardware, keeping deployment lightweight and affordable.

Scalability & Impact

Our app can easily grow to support many users without slowing down. It uses lightweight tools, so we don't need expensive servers or complex systems. As more people in India face dementia—especially in small towns—Loopin can help families everywhere. It gives patients fun, familiar ways to stay active, and gives caregivers peace of mind. With just a phone or tablet, families can access meaningful support right from home—making a big difference in daily life.

Business Potential (Minimum Lovable Product)

Freemium model: core games and reminders free; subscription unlocks voice cloning, family video streams and caregiver analytics. Hospitals, elder-care centres and NGOs form B2B channels. Low operating costs and high emotional value drive retention and revenue.

Conclusion

Loopin blends GenAI with empathy, turning basic caregiver input into personalised care that is engaging, dignified and scalable. By transforming vulnerabilities into possibilities, it sets a new standard for home-based dementia support.