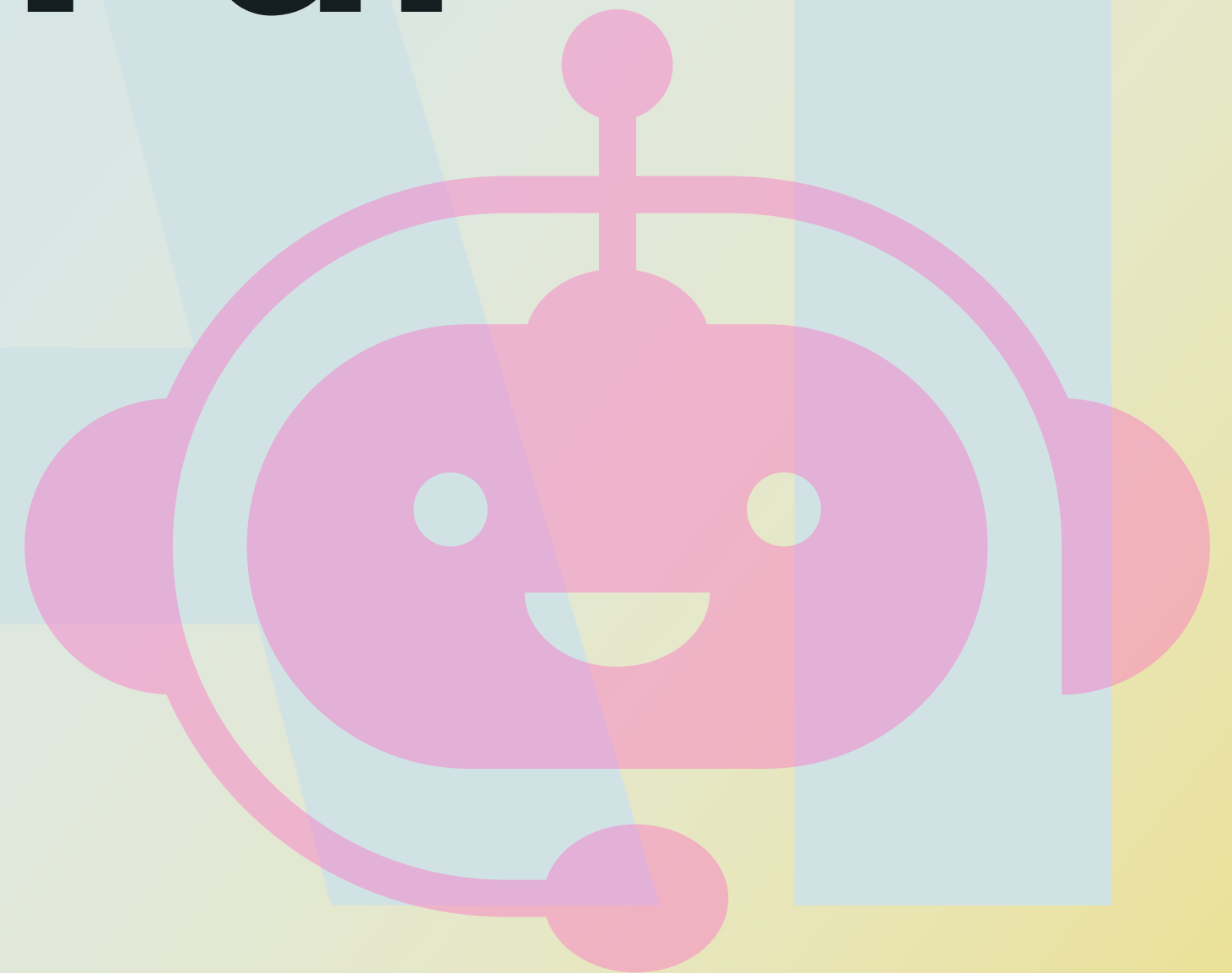


LUNA : RAG Period Pal

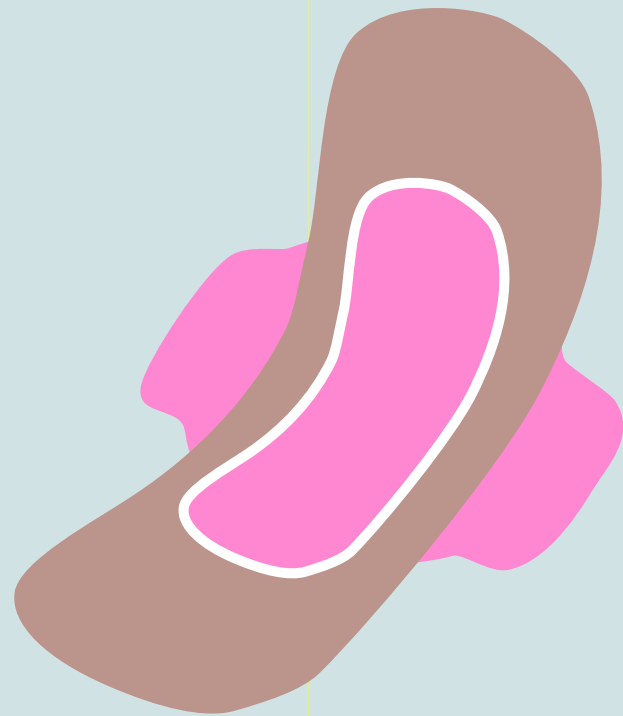
**Vectara AI Powered
Menstrual Hygiene Management**

A RAG-powered Chatbot for Improved Menstrual
Health Management in South Asia



Issue

- Globally, over **500 million** women and girls lack adequate facilities for menstruation (**UNICEF**).
- Limited access to information and resources: In some regions, only **12%** of women have access to sanitary products (**UNICEF**).
- Cultural **taboos** and stigma contribute to a lack of awareness about proper hygiene practices.
- Inadequate **sanitation** facilities exacerbate health risks, affecting both physical health and social well-being.



Problems



Problem 1

Stigma and Taboo: Open conversations about menstruation are discouraged, leading to misinformation and a lack of access to accurate health information.



Problem 2

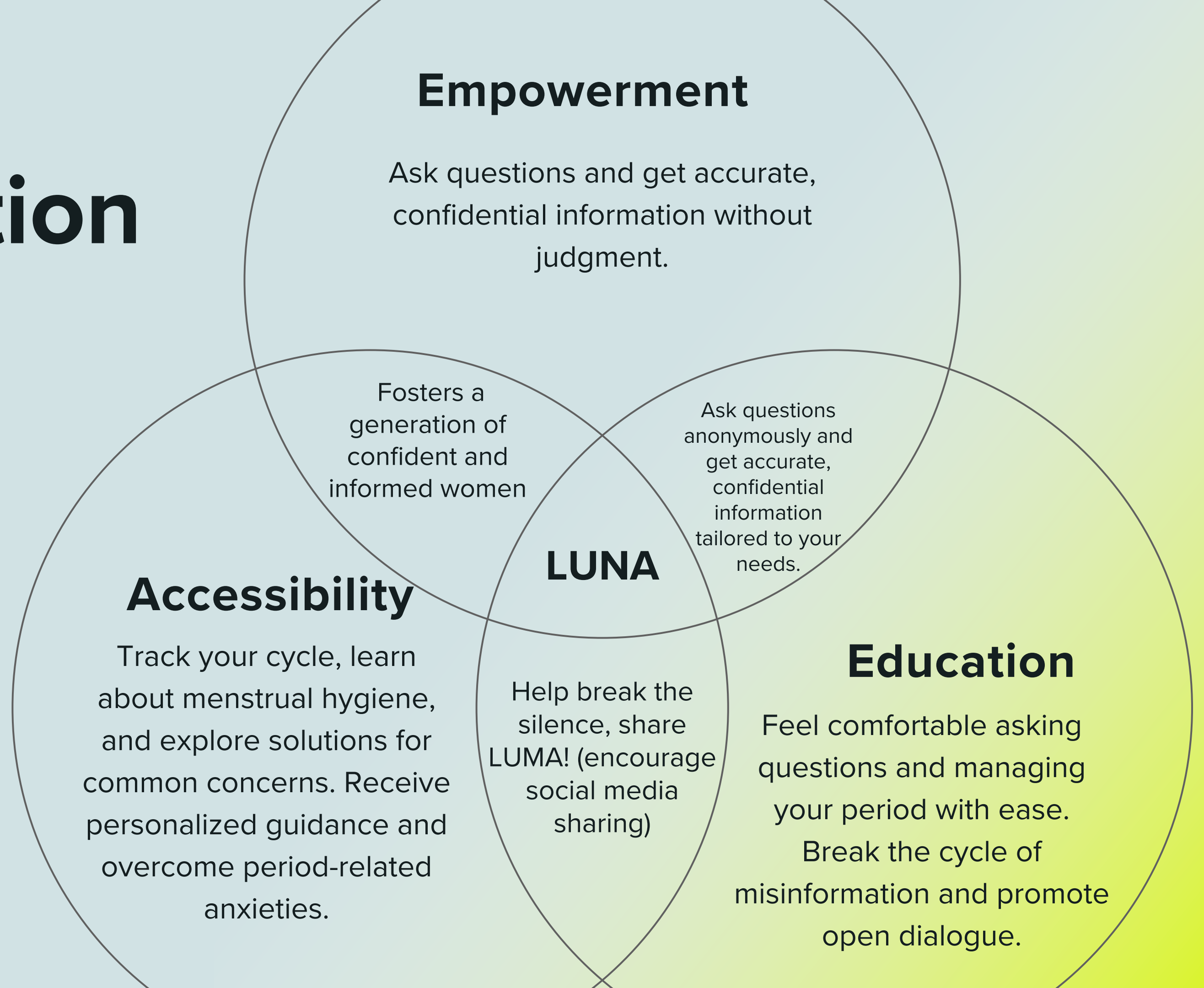
Limited Access: Fear of judgment can prevent women from seeking reliable guidance and support, potentially jeopardizing their well-being.

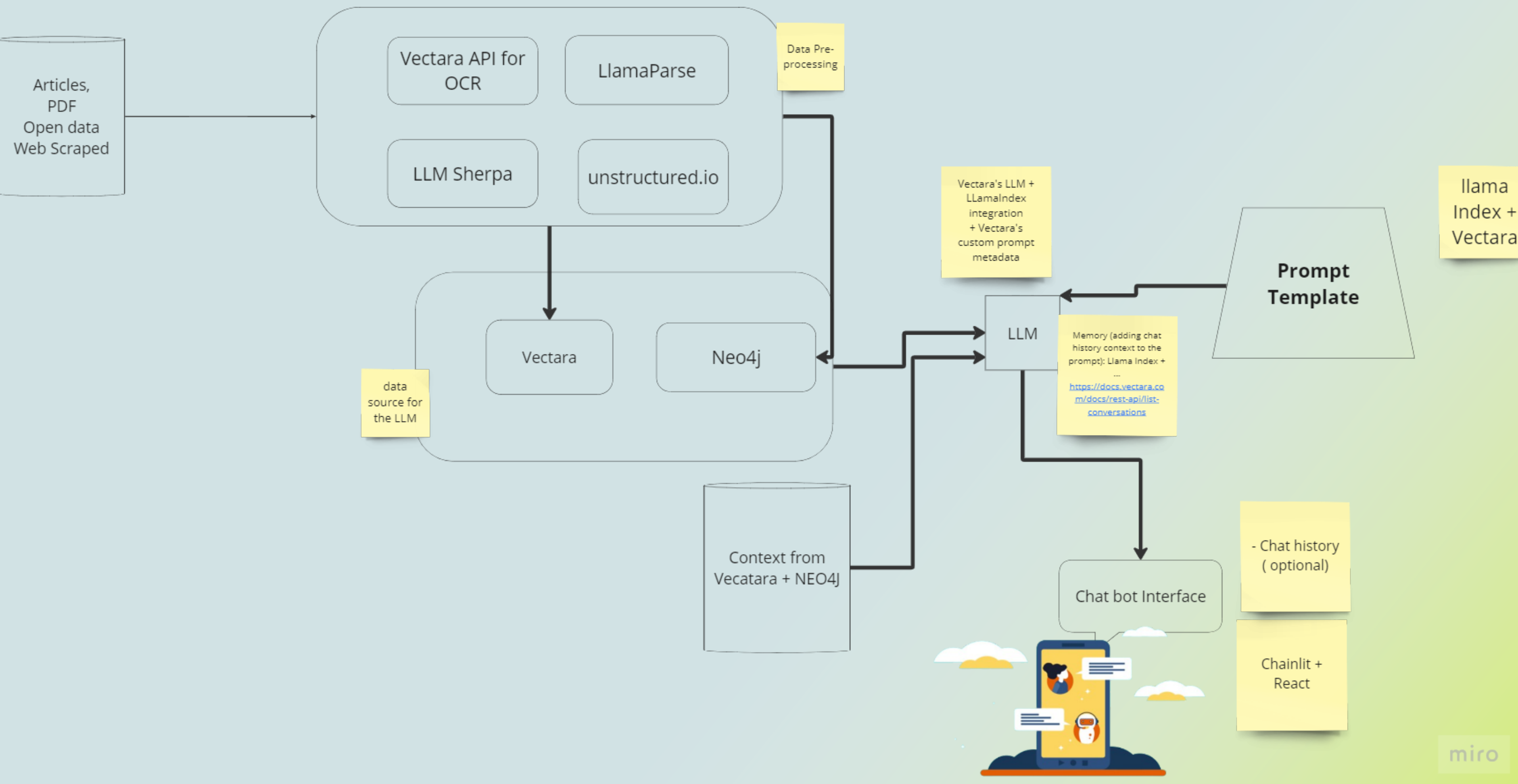


Problem 3

Empowerment Gap: Women often lack the knowledge and confidence to manage their menstrual health effectively.

The Solution





Articles,
PDF
Open data
Web Scraped

Data Pre-processing

- Vectara API for OCR
- LlamaParse
- LLM Sherpa
- unstructured.io

data source for the LLM

- Vectara
- Neo4j

Context from
Vectara + NEO4J

Vectara's LLM +
LLamaIndex
integration
+ Vectara's
custom prompt
metadata

LLM

Memory (adding chat
history context to the
prompt): Llama Index +
...
<https://docs.vectara.com/docs/rest-api/list-conversations>

**Prompt
Template**

llama
Index +
Vectara

Chat bot Interface

- Chat history
(optional)

Chainlit +
React



Market Size

A Vast & Underserved Market: Empowering Women in South Asia

The Population

- 1.38 Billion people in India (source: [Population Reference Bureau])
- 238 Million people in Pakistan (source: [Worldometer])
- Combined: 1.618 Billion people - A vast market with significant unmet needs.



Market Size

A Vast & Underserved Market: Empowering Women in South Asia

The Challenge

- At least 23% of women in South Asia lack access to reliable menstrual health information (source: [WASH United Nations])
- 79% of Pakistani women do not have access to hygienic menstrual products (source: [Cureus study referenced in cbs.lums.edu.pk])



Market Size

A Vast & Underserved Market: Empowering Women in South Asia

The Impact

- Up to 50% of schoolgirls in India miss school due to periods (source: [UNICEF WASH study referenced in cbs.lums.edu.pk]) - Similar data may be relevant for Pakistan, if available.
- Untreated menstrual health issues can lead to reproductive problems and decreased well-being for women.
- Stigma surrounding menstruation limits women's participation in education and economic opportunities.



Revenue

Foundation

- Freemium Chatbot: Basic features (period tracking, Q&A, product guidance) are free to maximize reach.
- Strategic Partnerships: NGOs, healthcare providers, educational institutions for content support and expanded user base.
- Grants: Seek funding aligned with women's health and empowerment in South Asia.

Enhanced Services

- Premium Subscriptions: Tiered access for advanced tracking, personalized health insights, potentially live consultations.
- Expert Consultations: Verified doctors provide paid consultations on specific period concerns (irregularity, pain management, etc.).

Ambition

- E-commerce Integration: Carefully curated selection of hygiene products or LUNA-branded for direct revenue.
- Affiliate Links: Strategic partnerships for product access for hard-to-reach communities.



Next Steps

Gather Feedback

Collect feedback during the hackathon and implement immediate fixes for smoother experience.

Analyze Usage

Track usage data (interactions, feature popularity) to guide future prioritization.

Seek Partnerships

Actively pursue NGOs and health experts to expand LUNA's reach and content depth.

Explore Revenue

Research viable grant options, consider potential premium features.

Plan Localization

Design a strategy to adapt LUNA (language, content) for multiple regions in South Asia.

Performance

Prioritize smooth functioning on low-bandwidth networks to serve a wider audience.

Pilot Consultations

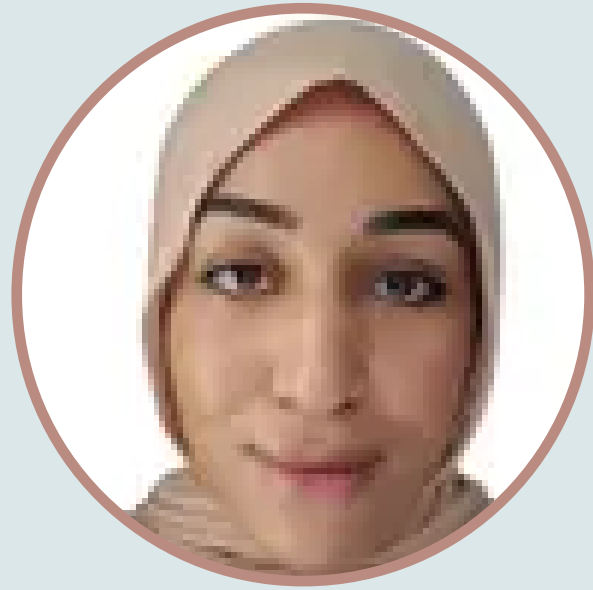
Test paid consultations with 1-2 specialists to prove the model's viability.

Assess E-commerce

Explore the logistics and ethics of product integration within the platform.



● Our Team ●



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Software Engineer



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Thank
you!

