

FINALIST SHOWDOWN BEST INNOVATORS AND RESEARCHERS

National
Conference 2023
**SEXUAL AND REPRODUCTIVE
HEALTH AND RIGHTS IN
BANGLADESH**
SHOWCASING RESEARCH THROUGH
IDEAS, INGENUITY AND INNOVATIONS

Meno-Chat: An Assistive Chatbot Against Menstrual Problems and Menopause Health for Women

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Event Partners:



Share-Net
Bangladesh



Relevance

- **1.9 billion** people are able menstruate. **500 million** are unable to attain proper menstrual health [1].
- Menstrual abnormality leads to **health complications**[2], **lifestyle disruption**[3], **anxiety disorder**[3], **deadly diseases (e.g PCOS), etc.**
- **Taboos** and **stigmas** attached to menstruation lead to an overall culture of silence around the topic, resulting in **limited information on menstruation and menstrual hygiene.**
- Several studies suggest **providing relevant information as a major solution** to all types of menstrual problems.



Fig 2: Teach students about MHM [5]



Fig 1. Had studies, and social activities interrupted[4]

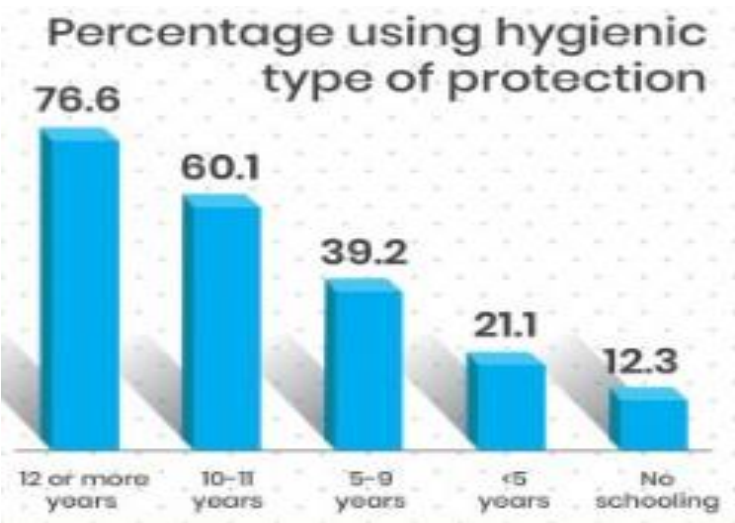
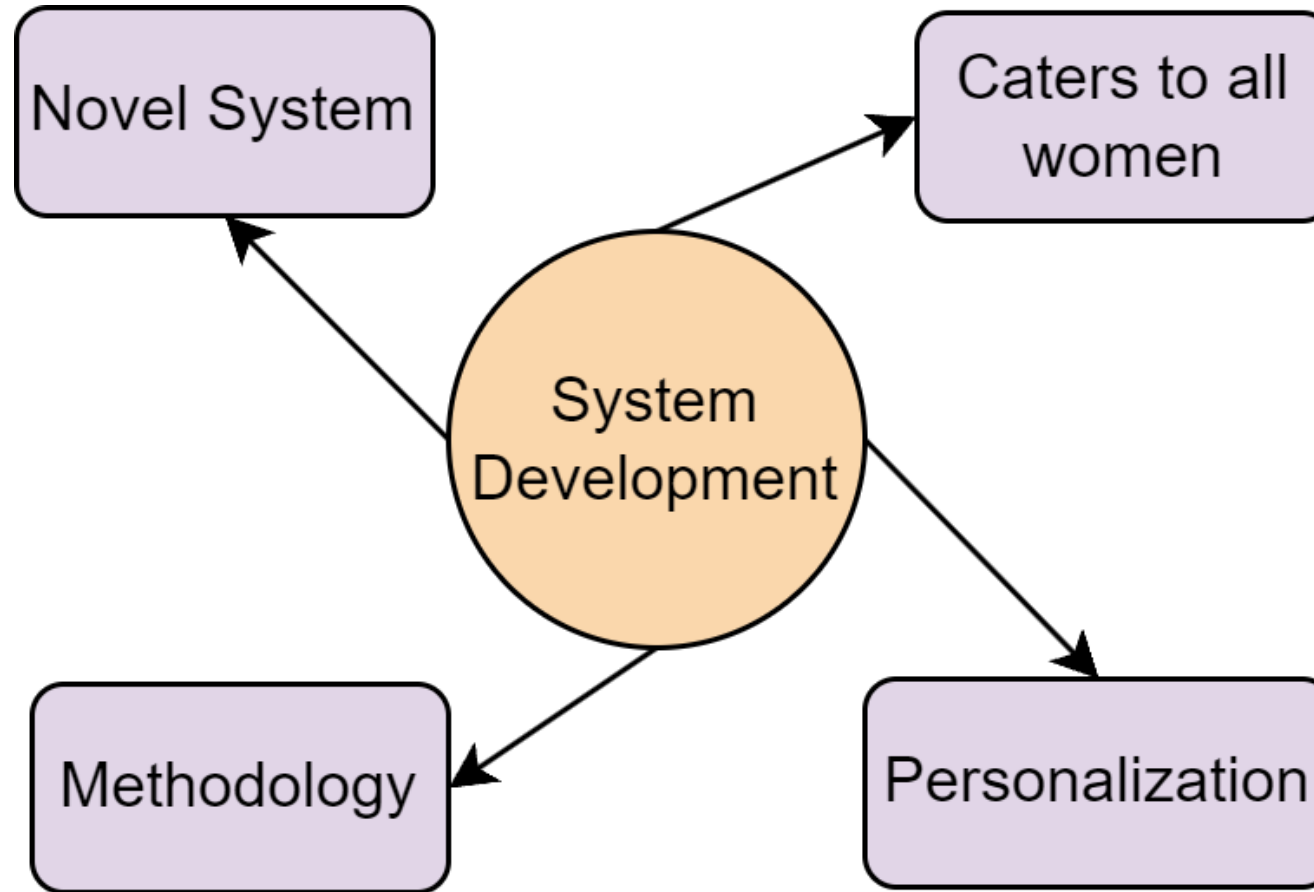


Fig 3: Information sharing shows increase in proper protection by 64.3% [6]

Why Novel?

A **novel system** that looks to aid **menstrual and menopausal health** by providing **quick and easy access to relevant information**

We use state-of-the-art retrieval **Neural Network models** and pair it with state-of-the-art fine tuning such as **RLHF**.



A **multimodal** system that allows **women of all caste/setting** to access our system.

Tracks person's searches and requests, and provides **answer personalization** accordingly.

Appropriateness and Feasibility

1. Appropriateness:

- Does not provide unethical, controversial information
- No human interaction is required
- Does not store personal information
- Bangladesh government already taking steps. E.g. hygiene corners [7]

2. Feasibility:

- Utilizes information from the internet
- Uses state-of-the-art technology
- Data Annotation
- Scalability (Fig. 1)

Study Design

Research and Development

- Data collection, annotation and updates
- Training Methodology
- Tuning and Refinement
- Testing

Product

- Interface development and multi-mode
- Server maintenance and multi-user system
- System maintenance and testing

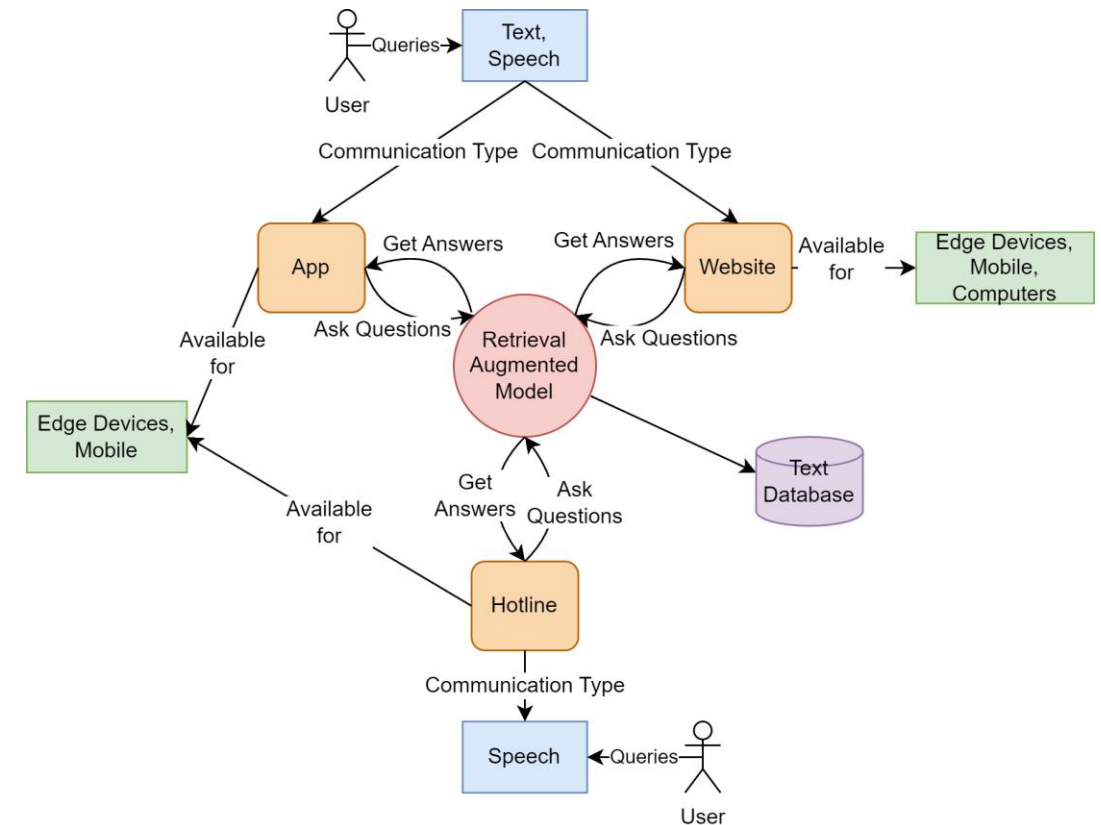


Fig. 2 Complete modules of the Meno-Chat system

Outcomes

What Meno-Chat caters to:

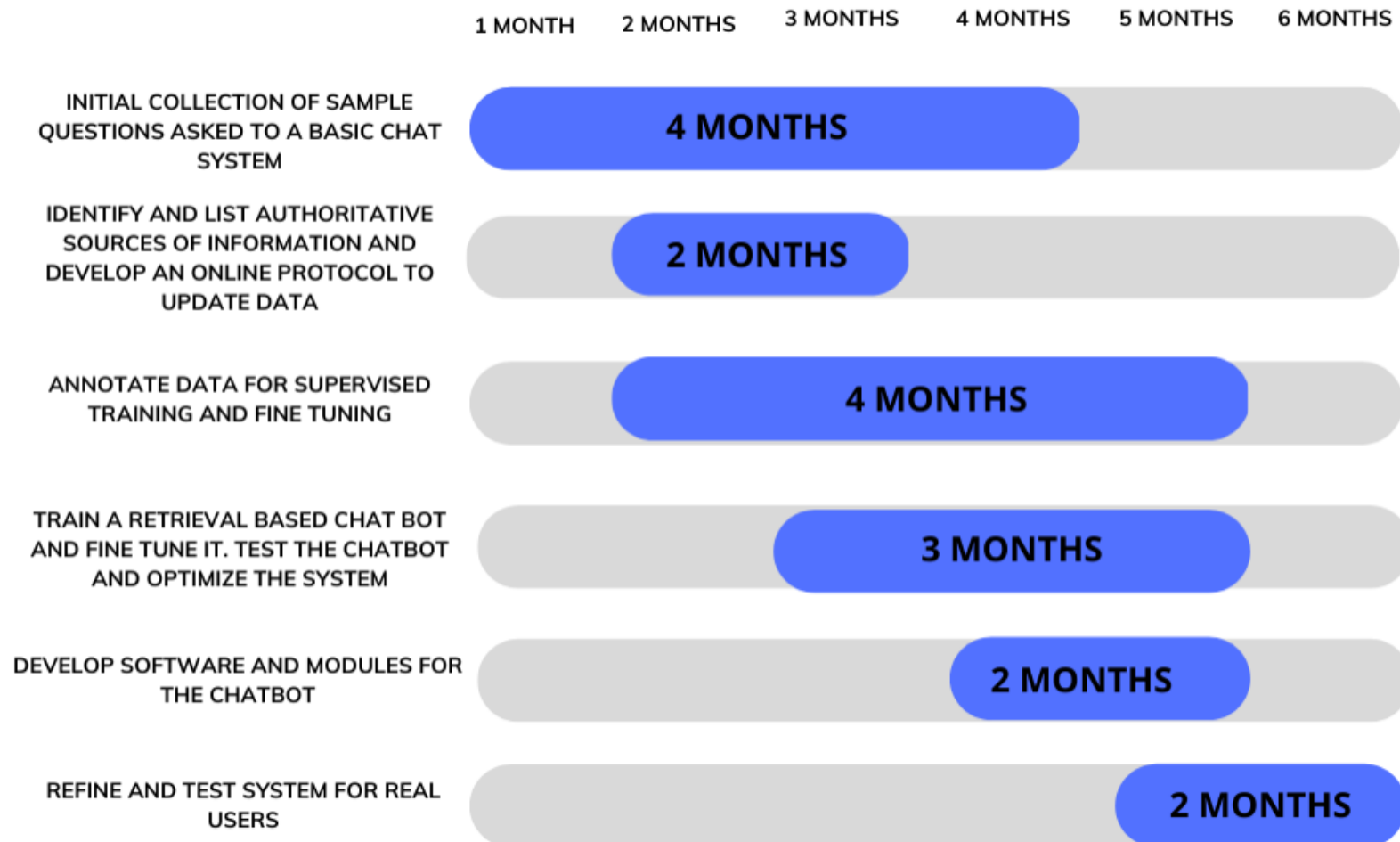
1. Aiding menstrual health that requires frequent intervention by quick/easy access to relevant information
2. Removing taboos and stigma surrounding menstruation.

By doing so,



Figure depicts scenarios the MenoChat will assist

Timeline



Budget

Phases	Timeline
A6000 GPU and computer system builds	10 lacs
Annotators for data annotation	2 lacs
Researcher Consultancy Fees	5 lacs
Machine Learning Engineer	3 lac 60 thousand
Software Engineer Fees	3 lacs
Site Fee	3 lacs
Identifying, sourcing, transforming and automating authoritative sources (and related fees).	5 lacs

References

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Thank you