Project on C-Programming

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March 16, 2025

TrackHer- A period Tracking Calander

Empowering you to track, understand, and embrace your cycle—because when you know your body, you can better care for it

Introduction

- - A lightweight, offline period tracking app in C and Raylib Library
- - Developed with the aim of tracking menstrual cycles, estimating ovulation and fertility
- -Built With:

  Language: C

  Graphics Library: Raylib

Features

- **Menstrual Cycle Tracking**: Log period dates, cycle length

- **Cycle Prediction**: Forecast next period & fertility

- **Calendar View** – A visual period tracker for easy navigation.

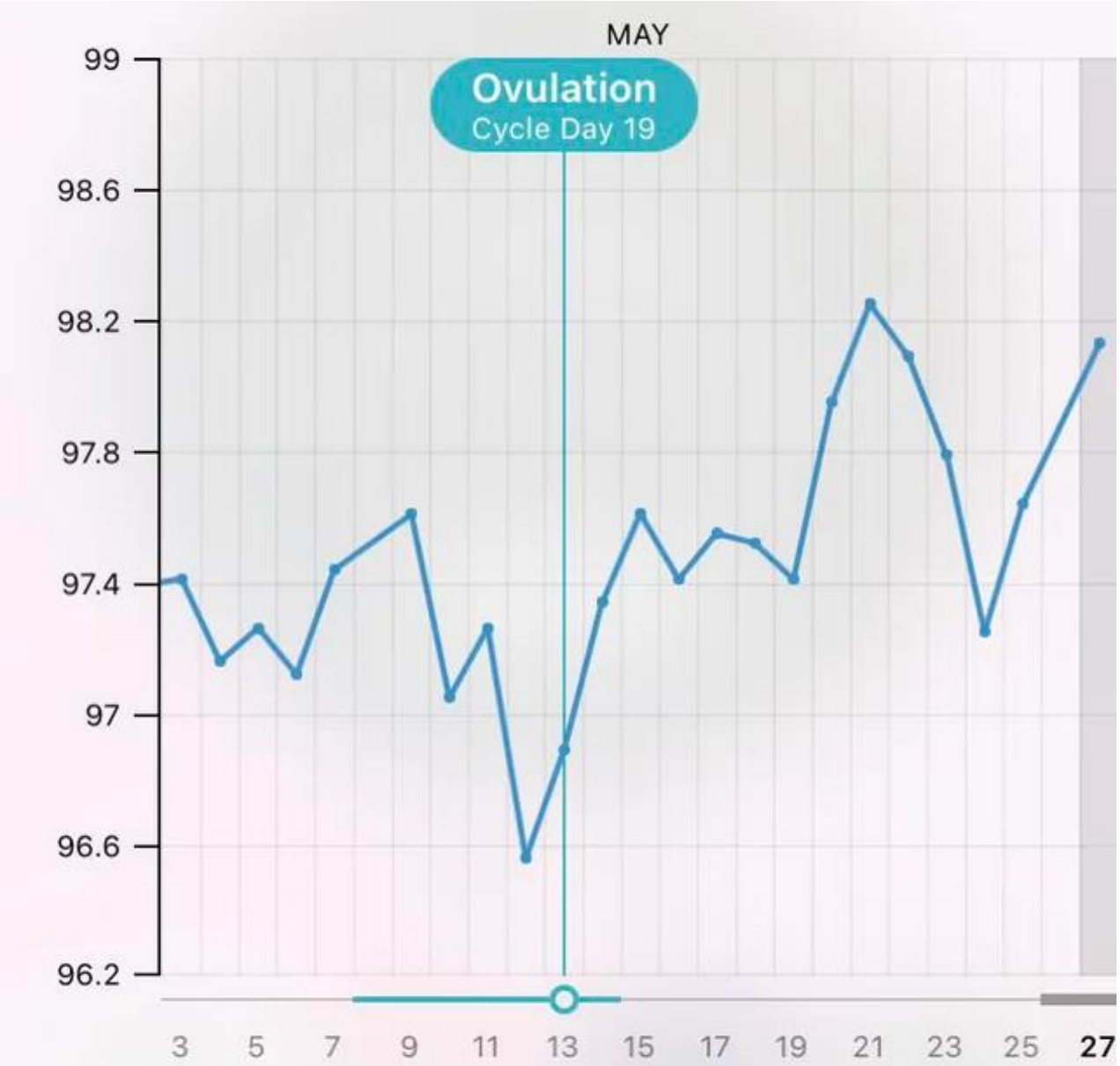
Technical Stack

- **Programming Language:** C
- **Graphics Library:** Raylib
- **Database:** File-based storage
- **Development Tools:** GCC Compiler, VS Code, Figma (for UI design)

User Interface Design

Design Process:

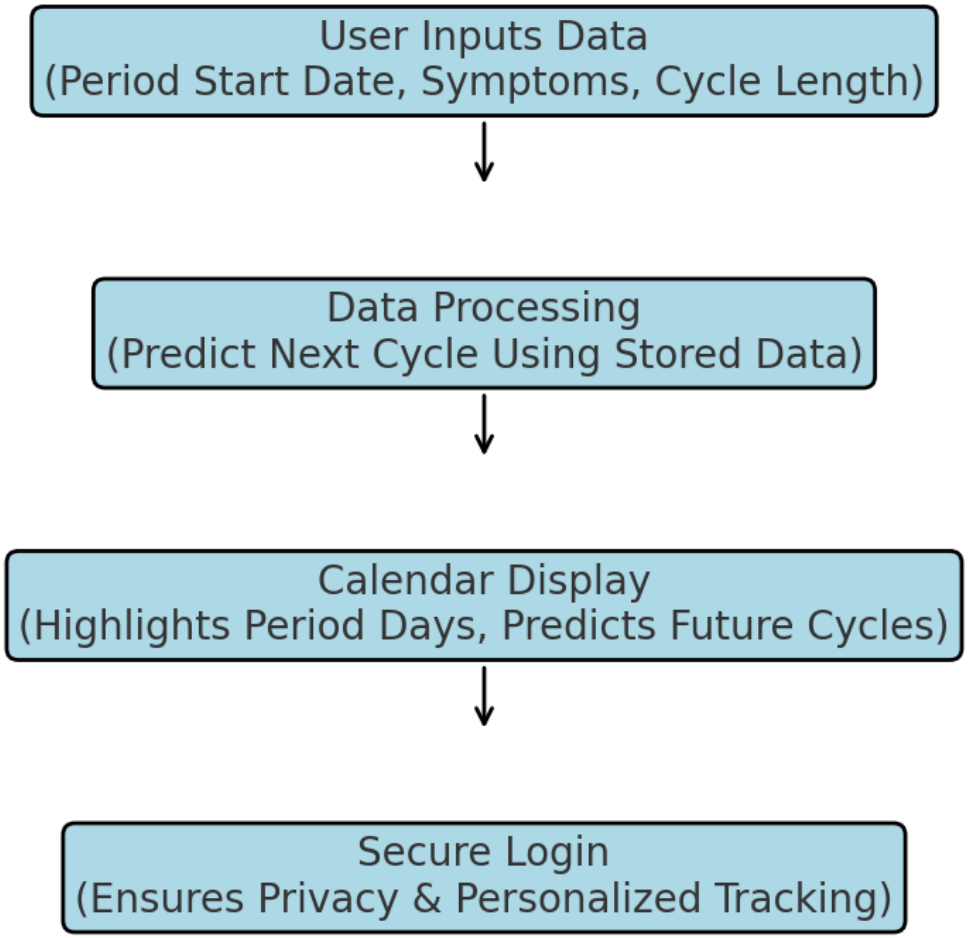
- **Figma as Inspiration** – Designed a clean, user-friendly interface.
- **Raylib for UI Implementation** – Created an interactive UI using C and Raylib.

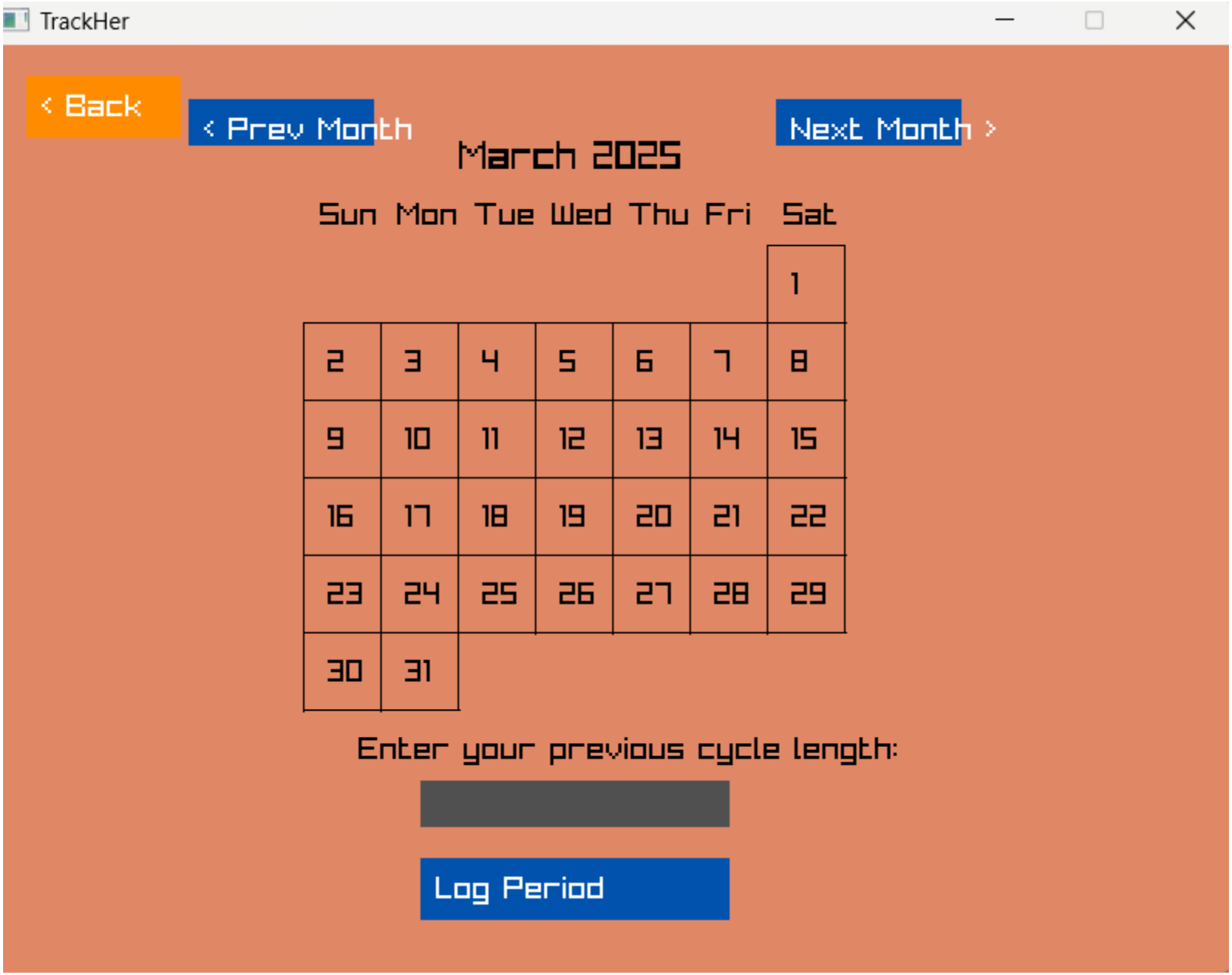

MAY
Ovulation
Cycle Day 19
99
98.6
98.2
97.8
97.4
97
96.6
96.2
3
5
7
9
11
13
15
17
19
21
23
25
27

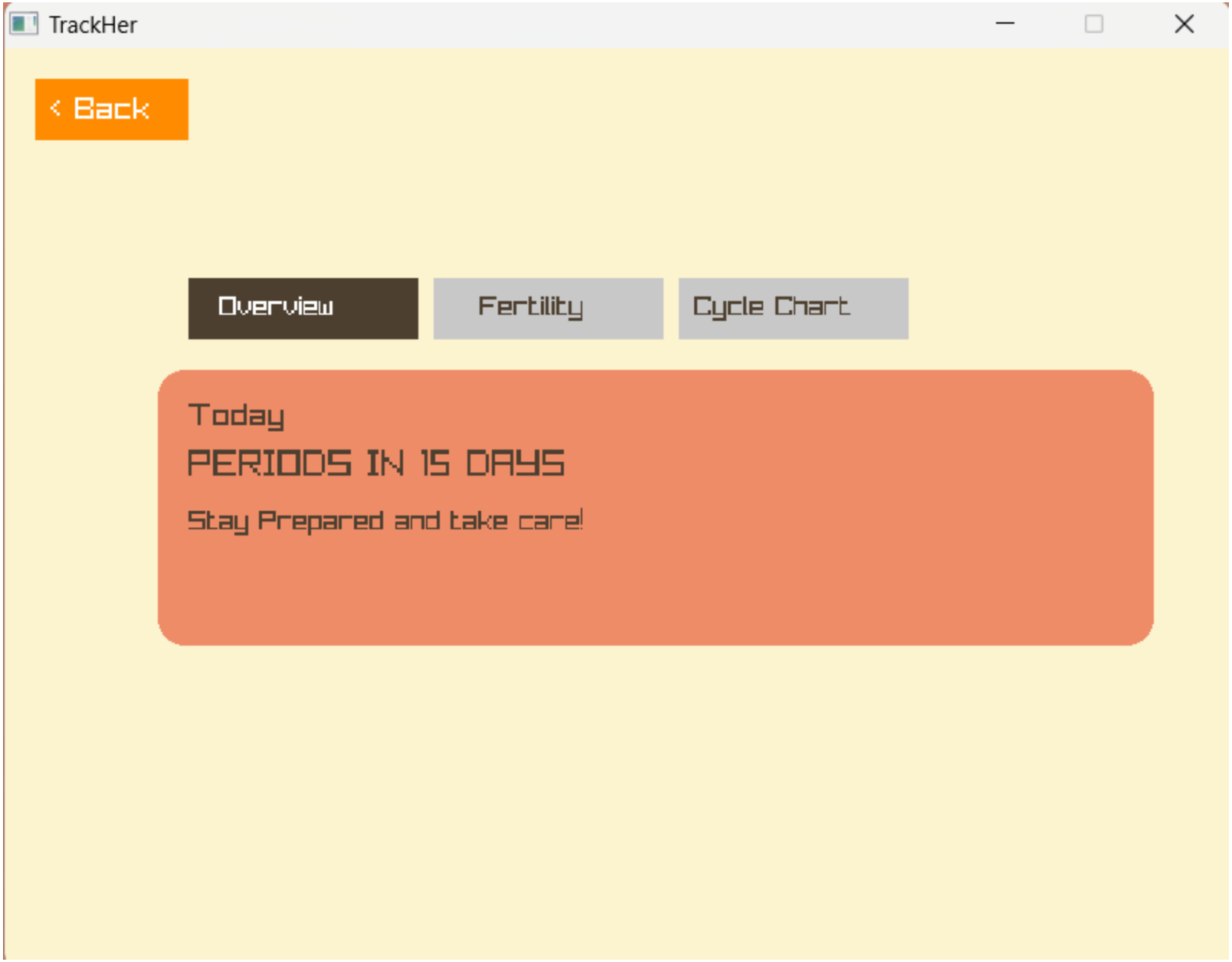
Workflow

1. **Secure Login:** Ensures privacy and personalized tracking.
2. **User Inputs Data:** Period start date, cycle length.
3. **Data Processing:** The system predicts the next cycle using stored data, fertility chances and
4. **Insight Display:** Highlights period days, predicts future cycles.

Flowchart Diagram




TrackHer
‹ Back
‹ Prev Month
Next Month ›
March 2025
Sun Mon Tue Wed Thu Fri Sat
1
2 3 4 5 6 7 8
9 10 11 12 13 14 15
16 17 18 19 20 21 22
23 24 25 26 27 28 29
30 31
Enter your previous cycle length:
Log Period


TrackHer
< Back
Overview
Fertility
Cycle Chart
Today
PERIODS IN 15 DAYS
Stay Prepared and take care!

TrackHer

< Back

Overview | Fertility | Cycle Chart

You have HIGH chances of getting pregnant

You're in your OVULATION phase

Info :

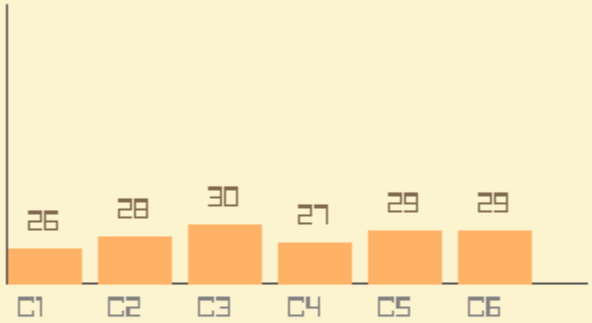
Next Period: 2025-03-30
Last Period: 2025-03-01
Average Cycle Length: 29
Today: 2025-03-15

Fertile Start: 2025-03-16
Fertile End: 2025-03-22
Days Left: 15
Fertility: 80%, Label: High

TrackHer

‹ Back

Overview | Fertility | Cycle Chart



Last 6 Cycle Length (Days)

Extract Data

Challenges faces and Their Solutions

UI Implementation in C – Raylib helped us create a smooth graphical interface.

Data Storage & Retrieval – Used file handling techniques for efficient data storage.

Predicting Irregular Cycles – Basic algorithm currently; future updates will improve predictions.

Scopes for Improvement

Push Notifications – Reminders for upcoming periods.

AI-based Symptom Analysis – Smart insights based on user input.

Cloud Sync – Secure backup of period tracking data.

Custom Themes – Enhanced UI/UX.

Conclusion

- TrackHer offers a secure, offline solution for menstrual health tracking, combining user-friendly design with robust data privacy measures.

END OF PRESENTATION