RHealth - Our Reproductive Health: A Reproductive Health Routine and Lifestyle Tracker

Hannah Mace Yzabel B. Estrella[1], John Patrick C. Josue[2], Jeffrey Berrone D. Pedarios[3], Hans Joshua M. Vicenal[4]
https://orcid.org/0009-0009-9451-5948[1], https://orcid.org/0009-0009-3363-4978[2],
https://orcid.org/0009-0008-0739-8329[3], https://orcid.org/0009-0002-1955-4604[4]
hannahmace.estrella.cics@ust.edu.ph[1], johnpatrick.josue.cics@ust.edu.ph[2],
jeffreyberrone.pedarios.cics@ust.edu.ph[3], hansjoshua.vicenal.cics@ust.edu.ph[4]
College of Information and Computing Sciences
University of Santo Tomas
Espana Boulevard, Sampaloc, Manila, Philippines

Abstract

The Philippines faces a rising challenge in the prevalence of sexually transmitted diseases and unwanted pregnancies, exacerbated by limited accessibility to reproductive and sexual health information and services due to social, political, and legal barriers. To address this issue, the AHF Wellness Center - Athena by LoveYourself, our project client, initiated the development of RHealth - Our Reproductive Health: A Reproductive Health Routine and Lifestyle Tracker. This Progressive Web Application (PWA) aims to break the cycle of stigma, lack of knowledge, and limited access by providing a platform for raising awareness and facilitating accessibility to crucial information and health center locations. Following an Agile Software Development Life Cycle approach, the project underwent planning, designing, developing, testing (including Alpha and Beta testing), and deployment phases. Additionally, a web-based admin dashboard was created to enhance system management. RHealth seeks to promote reproductive and sexual responsibility, leveraging digital solutions to empower individuals and communities in safeguarding their health. The system's test result got a 98% success rate. Meanwhile, the User Acceptance Testing (UAT) yielded an acceptance rate of 96.13%. The RHealth Web and Mobile application development successfully enabled users to log emotions, create routine notifications, manage PrEP intake, view health center locations, and access reproductive and sexual health resources. Mobile app testing revealed initial challenges, but iterative versions improved success rates. The web app demonstrated high success and positive user feedback. A recommended enhancement is adding a Pre-exposure Prophylaxis (PrEP) pill counter on the routine screen for user supply monitoring and reminders.

Keywords: Software engineering, sexual health, reproductive health, health tracker, agile software development life cycle, progressive web application