

**RHEINA SUKMA ANGGINI, 20.240.0067**

**SISTEM PEMANTAUAN PERTUMBUHAN BALITA DAN KESEHATAN IBU SERTA KESEHATAN LANSIA PADA POSYANDU MELATI I DI BANGUNSARI BARAT PROYONANGGAN TENGAH BATANG SECARA *REAL-TIME*, di bawah bimbingan M. Faizal Kurniawan, M. Kom, dan M. Reza Maulana, M. Kom.**

138 + xvii halaman / 104 gambar / 33 tabel / 4 lampiran / 18 pustaka (2010-2022)

## **ABSTRAK**

*Proses pemantauan pertumbuhan dan kesehatan di Posyandu Melati I, Bangunsari Barat, saat ini mengandalkan metode pencatatan manual pada buku besar Posyandu. Sayangnya, metode ini dianggap kurang efektif dan efisien karena memerlukan kehati-hatian agar terhindar dari kesalahan penulisan data. Beberapa kendala mencakup tidak tercatatnya data kesehatan lansia, menyebabkan ketidaktersediaan riwayat kesehatan lansia dalam beberapa bulan terakhir. Pencatatan manual dalam administrasi Posyandu juga menimbulkan keterlambatan dalam penyusunan dan pengiriman laporan kegiatan Posyandu. Proses perancangan sistem untuk meningkatkan efisiensi menggunakan metode waterfall dengan 5 tahap yaitu analisis kebutuhan, desain, implementasi, verifikasi, dan pemeliharaan. Data dikumpulkan melalui observasi, wawancara, dan kuesioner. Pemodelan sistem menggunakan Unified Modeling Language (UML) dan Lembar Kerja Tampilan (LKT). Pengujian sistem dilakukan dengan metode black box, white box, dan User Acceptance Test (UAT), hasilnya menunjukkan sistem dapat berjalan dengan baik dan sesuai kebutuhan pengguna. Hasil dari sistem ini mampu mengelola data user, data master (ayah, ibu, lansia, dan balita), pertumbuhan balita, kesehatan ibu dan lansia, pengumuman, serta menyediakan fitur cetak laporan. Sistem bertujuan menciptakan pengelolaan kegiatan pelaporan terkomputerisasi yang mempermudah Posyandu dalam memantau pertumbuhan balita, kesehatan ibu dan kesehatan lansia. saran penelitian selanjutnya mencakup pengembangan sistem menggunakan bahasa pemrograman Dart dengan framework Flutter, memungkinkan penggunaan aplikasi berbasis mobile melalui Play Store, dan memungkinkan akun ibu mengakses data balita dan lansia dalam satu akun. Penambahan fitur notifikasi diharapkan dapat memberikan pemberitahuan cepat kepada warga.*

**Kata Kunci : Posyandu, Sistem, Waterfall, Pemantauan, Kesehatan**

**RHEINA SUKMA ANGGINI, 20.240.0067**

**MONITORING SYSTEM FOR TODDLER GROWTH AND MOTHER'S HEALTH AND ELDERLY HEALTH AT POSYANDU MELATI I IN BANGUNSARI BARAT PROYONANGGAN TENGAH BATANG IN REAL-TIME**, under the guidance of M. Faizal Kurniawan, M. Kom, and M. Reza Maulana, M. Kom.

138 + xvii pages / 102 figures / 29 tables / 4 appendices / 18 libraries (2010-2022)

## **ABSTRACT**

*The growth and health monitoring process at Posyandu Melati I, West Bangunsari, currently relies on manual recording methods in the Posyandu ledger. Unfortunately, this method is considered less effective and efficient because it requires caution to avoid data writing errors. Some obstacles include not recording elderly health data, resulting in the unavailability of elderly health history in recent months. Manual recording in Posyandu administration also causes delays in preparing and sending Posyandu activity reports. The system design process to increase efficiency uses the waterfall method with 5 stages, namely needs analysis, design, implementation, verification and maintenance. Data was collected through observation, interviews and questionnaires. System modeling uses Unified Modeling Language (UML) and Display Worksheet (LKT). System testing was carried out using black box, white box and User Acceptance Test (UAT) methods, the results showed that the system could run well and according to user needs. The results of this system are able to manage user data, master data (father, mother, elderly and toddlers), toddler growth, maternal and elderly health, announcements, as well as providing a print report feature. The system aims to create computerized reporting activity management that makes it easier for Posyandu to monitor the growth of toddlers, maternal health and the health of the elderly. Further research suggestions include developing a system using the Dart programming language with the Flutter framework, enabling the use of mobile-based applications via the Play Store, and allowing maternal accounts to access toddler and elderly data in one account. It is hoped that the addition of the notification feature can provide quick notification to residents.*

**Keywords:** *Posyandu, System, Waterfall, Monitoring, Health*