



Website-Based Petty Cash Management Accounting Information System Case Study PT.Haleyora Power Karawang

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ABSTRACT

A website-based information system is a technological tool that helps users manage data on a small and medium-to-large scale by providing precise and accurate information. PT. Haleyora Power is one of the companies engaged in the electricity supply industry, which currently processes petty cash funds still using written records in books and the Microsoft Excel application. The level of supervision of outgoing funds is relatively low, and the risk of losing report data or reporting data damage due to activity occurs every day and sometimes accidentally. To minimize this, petty cash management can be implemented in the form of a website-based application through a petty cash system that includes petty cash receipts, petty cash disbursement procedures, and petty cash reports. In this case, the waterfall method is very suitable for creating a petty cash system as needed. The petty cash system created can make the procedure for disbursing petty cash funds more structured and provide convenience in data processing so that the reporting process at PT becomes better. Haleyora Power.

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1. Introduction

In line with the development of information technology, every aspect of life requires changes. Information technology, such as computers, is needed to meet the needs of current economic developments. to make decision-making more convenient for the user. However, in reality, there are still many agencies or companies that have not fully implemented information technology, especially in financial management. as in PT. Haleyora Power has not optimally utilized information technology in recording the use of petty cash. PT. Haleyora Power Karawang is a solution provider company in electricity systems and other fields; in this case, the company is engaged in distribution, transmission, sales, and service, which act as managing assets, operating assets, and asset services. consumers in the middle and lower classes. The system for recording receipts and disbursements of petty cash that is used does not yet use a computerized program system, and the method used is a fluctuating system. So with this, an accounting system is needed for the financial management process so that it can prevent irregularities and can also be used as a tool for controlling computerized financial (cash) management. Problems that are often faced by companies or organizations in financial reporting are due to a lack of accurate data presentation.

Accounting data management and website-based implementation were implemented in research with the theme "Cash Management Application Program Using PHP at the Dyna Banjarmasin Clinic." The results of the study stated that the Cash Management Application Program Using PHP at the Dyna Banjarmasin Clinic was made according to the accounting cycle, namely from the input transaction documents into cash entry and disbursement, then output is made in the form of a recapitulation report, receipt report, and cash disbursement report [1] and [2].

Implementation of accounting information systems in applications is also implemented on a desktop-based basis, such as in research on the theme of petty cash management accounting information systems

using volatile methods at CV. Using Visual Basic, concentrate on Etania Zashika Karawang. With the waterfall software design method, net produces a sequence of program designs up to the implementation of the petty cash management application and the preparation of cash reports [3, 4].

Database design for website-based cash management accounting applications is applied to research with the theme "Development of a Web-Based Cash Receipt and Disbursement Information System" (Case Study at Widya Sakti Middle School) by implementing an Entity Relationship Diagram (ERD) so that it has a clear picture of the database implementation of the system [5].

PT. Haloyora Power has not implemented an adequate cash receipt and disbursement system in preparing reports because the company still uses Microsoft Office Excel. The system of receiving and disbursing cash in the company has not been running effectively and efficiently. [6] [7] According to previous research on cash management information systems with the theme "Web-Based Cash Management Information System at Masjid Al-Madinah Tangerang," website-based cash management makes it easy to manage finances (cashflow) in an agency so that it can monitor cash inflows and cash outflows.

The application, the design of the UML application model with the prototype method, was implemented through previous research, such as the Design of a Savings and Loans Information System at the Bagja Karawang Farmers Group Cooperative, with the results providing an overview of the system flow in the designed application [11].

Previous research with the theme "Design Of Web-Based Sleeping Sale (Sippat) In Fortun Barokah Karawang" resulted in a sequence of application designs, including needs analysis, design, implementation, and testing using BlackBox testing in evaluating system procedures [12] and [9].

The application of the waterfall method to information system design is also applied to research with the theme Rice Distribution Information System Design (Raskin) in Balonggandu Jatisari Village. minimize data and information errors that are entered into the system so that the report presentation becomes more structured [13].

The waterfall method and object-oriented software development model are used in the research on the Design Of Visual And Object-Oriented Petty Cash Accounting Information Systems At Alfamart Kiaracandong Bandung, which results in a petty cash management application capable of streamlining effective data management to the preparation of cash financial reports [14].

2. Research Method

A. Methods of Data Collection

In conducting research, the authors carry out the preparation and design of activities or activities that can be carried out in the implementation with methods that product information.

1. Observation Method The author makes direct observations of activities related to the topics to be discussed and to ensure the correctness of the information obtained from the interviews. In this case, the author collects data directly from the user.
2. Interview Method The author conducts interviews with his staff according to the problems being observed and will be discussed. Interviews were conducted several times to obtain the necessary data.
3. The Literature Study Method takes an approach with a literature review, namely by studying books that contain theories as considerations or references related to the issues to be discussed. [15][16][17]

B. Software Development Methods

In this study there are several stages of software development with the waterfall model, which has the following stages:

1. Analysis of System Requirements

This step is the stage of data collection, and interface analysis to determine the required software solution which will later be used in the process of making a cash management information system at PT. Haloyora Power.

2. Design

The design process is divided into several parts, namely database design, system design, and interface design. In this study, the method used to design the database is Entity Relationship Diagram (ERD) while the tools used to design the interface of the system to be created are Visual Studio Code Software.

3. Code Generation

The coding process that will be implemented in the system that will be created in this study uses the PHP, HTML programming language using the Laravel 7.0 framework.

4. Testing

To find out and find errors in systems that have been implemented into software, this research will carry out Blackbox Testing techniques.

5. Support

The system can be said to be finished if it has gone through the stages of analysis, design, coding, and testing which will then be accessed and used by users via a browser, therefore support from the developer still needs to be carried out for periodic checks.[15][18][4][19].

waterfall method can be described as follows:

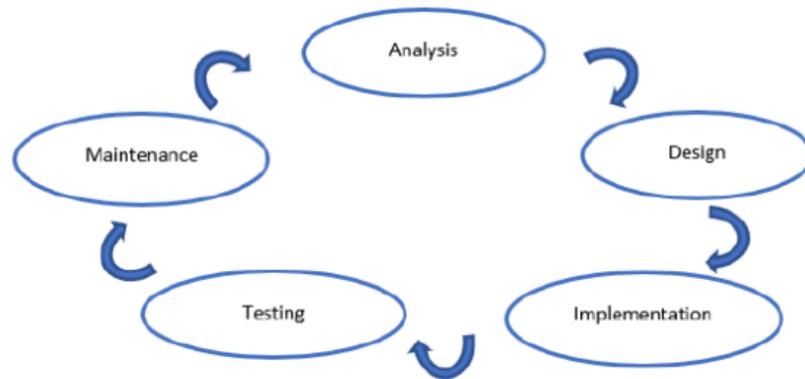


Figure 2.1 SDLC Waterfall Model[10][20]

3. Result and Discussion

A. Requirement Analysis

Based on the results of the needs analysis, the design of an accounting information system for cash receipts and disbursements has 2 types of users who interact with each other in the system environment, namely the admin and the finance department.

1. Admin

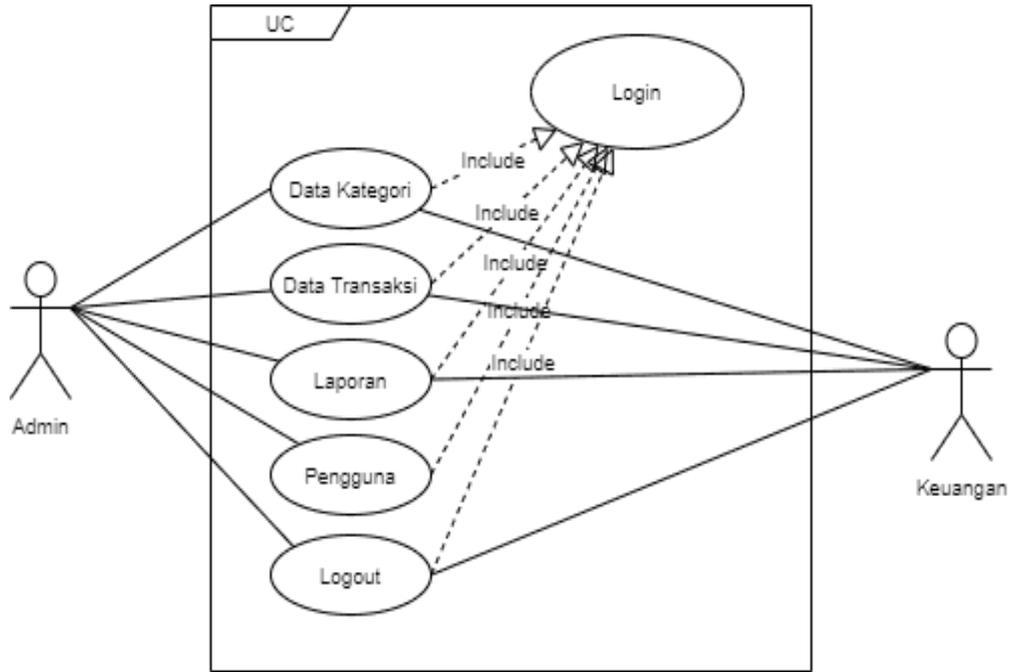
- a. Admin section login to the system
- b. Admin section can manage transactions
- c. Admin section can manage reports
- d. Admin section logout

2. Finance Section

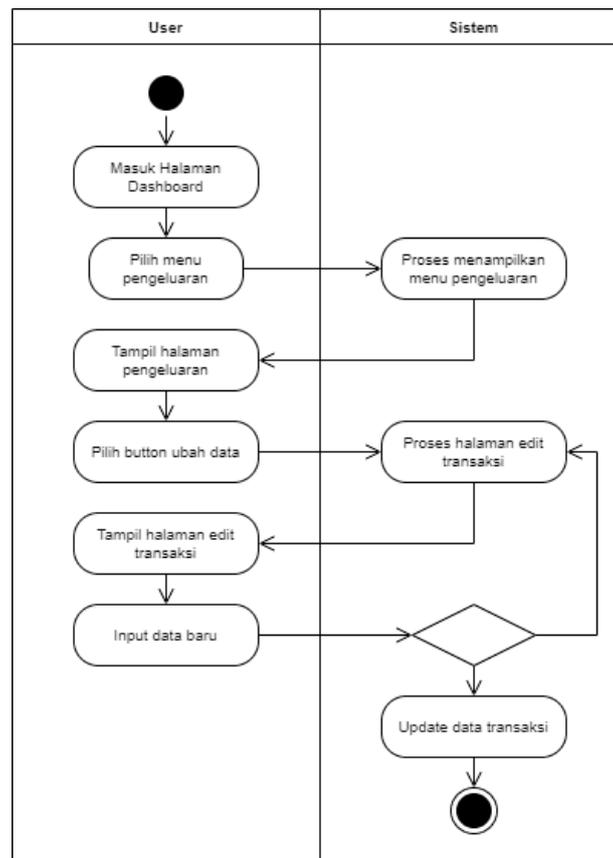
1. The Finance Section logs into the system
2. Section Finance can manage transactions
3. Section Finance can manage reports
4. Section Finance to log out.

B. Design

In implementing the results of the needs analysis the author uses UML tools, namely Use Case Diagrams, and Activity Diagrams to understand the scope flow of cash management in the system.

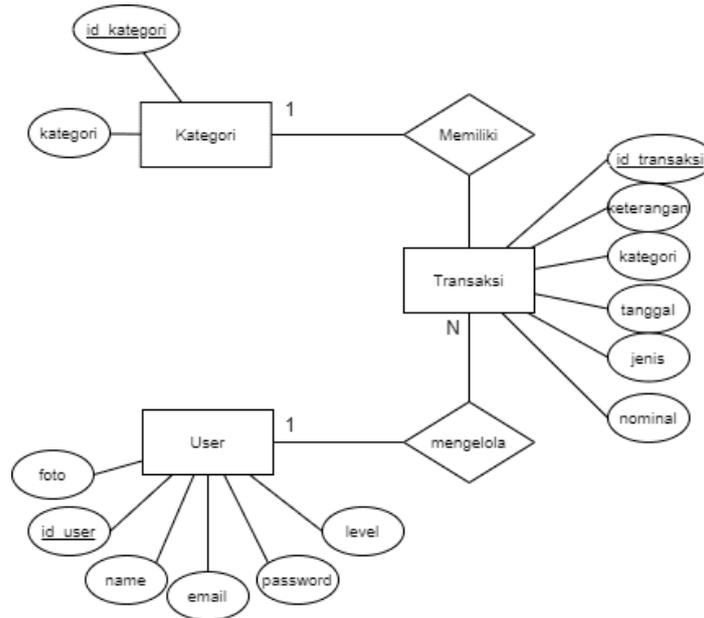


Pictures 2.1 Use case Diagram System



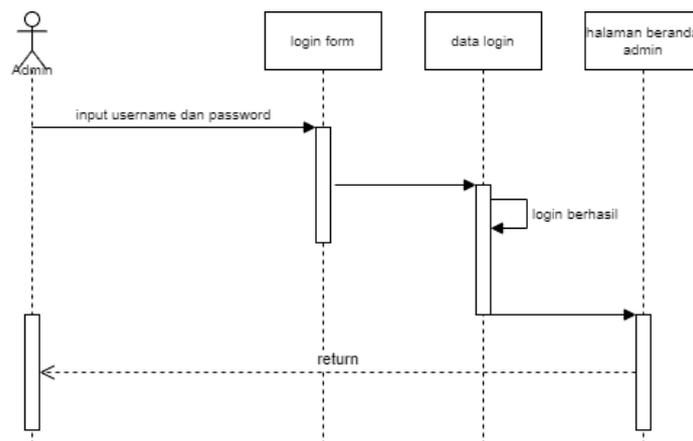
Pictures 2.2 Activity Diagram System

The database design is applied to describe the entities and relationships in managing cash data using the Entity Relationship Diagram method so that the database structure can be described in detail.



Picture 2.3 Entity Relationship Diagram

To understand the flow of the system and the interaction between the user and the system in cash management at PT. Haleyora Power, the author uses the UML method, namely Sequence Diagram.



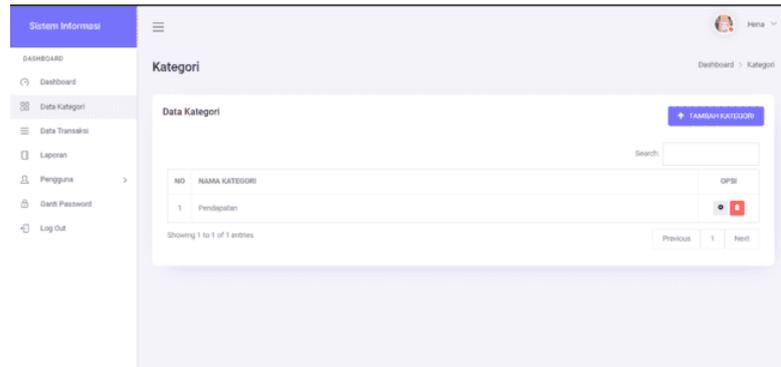
Picture. 2.4 Sequence Diagram

User Interface In managing cash at PT.Haleyora Power based on the results of the needs analysis has several functions including the following:



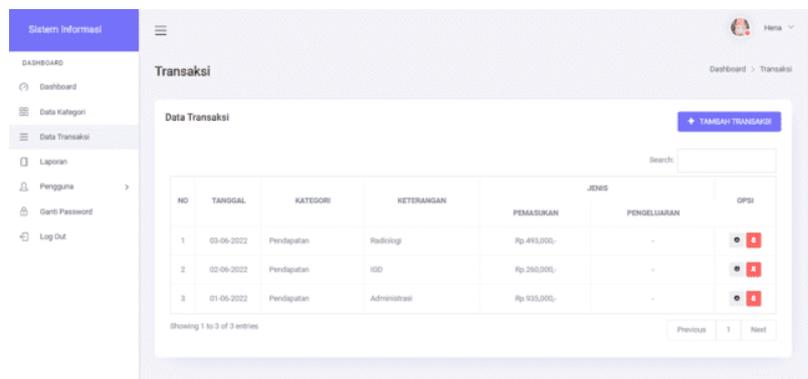
Pictures.1.5 Dashboard

Serves as user navigation in managing cash.



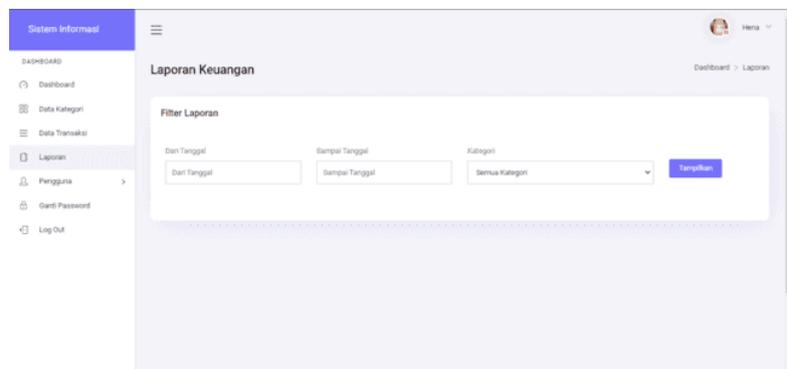
Pictures 2.6 Form Kategori

The category form has a function to determine the transaction category and can be determined by the admin user section.



Picture 2.7 Transaction

This form functions as the core management of incoming and outgoing cash transactions that can be carried out by the admin user section and the finance section.



Pictures 1.8 Report

The report form functions as cash report management and can be adjusted for the reporting period by selecting the date of the reporting period and the type of cash report to be presented. Reports can be exported in pdf or excel format making it easier for users to manage subsequent reports.

C. Code Generation

The results at the next design stage are the selection of programming languages, in this study the authors apply object-oriented programming methods in the Laravel framework package with HTML, CSS and PHP programming languages with visual studio code program tools.

D. Testing

To ensure that the system runs as needed, the author uses the Blackbox testing method in conducting experiments on system procedures that have been designed and implemented in tabular form.

Tabel 1.1 *Blackbox Testing*

No	Skenario Pengujian	Test Case	Hal yang Diinginkan	Hasil Pengujian	Kesimpulan
1	<i>Username</i> dan <i>Password</i> tidak diisi kemudian klik tombol <i>Login</i> .	<i>Username</i> : Kosong <i>Password</i> : Kosong	Sistem akan menolak dan <i>textbox Username</i> akan menampilkan pesan " <i>Username wajib diisi</i> " sebagai tanda <i>textbox</i> harus diisi.	Sesuai Harapan	Valid
2	Mengetikan <i>Username</i> diisi dan <i>Password</i> tidak diisi atau kosong kemudian klik tombol <i>Login</i> .	<i>Username</i> : Yayu Rahayu <i>Password</i> : Kosong	Sistem akan menolak dan <i>textbox password</i> menampilkan pesan " <i>Username wajib diisi</i> " sebagai tanda <i>textbox</i> harus diisi.	Sesuai Harapan	Valid
3	<i>Username</i> tidak diisi dan <i>Password</i> diisi kemudian klik tombol <i>Login</i> .	<i>Username</i> : Kosong <i>Password</i> : admin	Sistem akan menolak dan <i>textbox Username</i> menampilkan pesan " <i>Username wajib diisi</i> " sebagai tanda <i>textbox</i> harus diisi.	Sesuai Harapan	Valid
4	Mengetikan salah satu kondisi salah pada <i>Username</i> atau <i>Password</i> kemudian klik tombol <i>Login</i> .	<i>Username</i> :Yayu Rahayu (Benar) <i>Password</i> :admin07 (Salah)	Sistem akan menolak akses <i>User</i> dan menampilkan pesan " PERINGATAN <i>Username</i> atau password salah".	Sesuai Harapan	Valid
5	Mengetikan <i>Username</i> dan <i>Password</i> dengan data yang benar kemudian klik tombol <i>Login</i> .	<i>Username</i> : admin@admin.com <i>Password</i> : admin	Sistem menerima akses <i>Login</i> dan menampilkan halaman beranda	Sesuai Harapan	Valid

4. Conclusion

Based on the results of research conducted by the author regarding the Design and Build of the Petty Cash System, the authors draw the following conclusions:

1. PT. Haleyora Power still uses book media to record reports on petty cash funds before entering them into Microsoft Excel, there is no clear procedure for recording petty cash funds, and requests for disbursements of petty cash funds are still made verbally (not using filing documents) so that discrepancies or error in reporting.
2. From the problems that exist in PT. Haleyora Power, the author provides a solution, namely by proposing a website-based petty cash system that includes petty cash receipts, petty cash disbursements procedures, to petty cash reports.
3. With a website-based petty cash system created, it is hoped that the petty cash receipts system will be recorded (stored) neatly, have a structured procedure for submitting petty cash disbursements so that the petty cash report can be made more effectively, and efficiently

Based on research conducted by the author at PT. Haleyora Power, the author will provide suggestions that may be useful as a material for consideration and as input for companies in the future, such as:

1. With a website-based petty cash system that the author created, it can simplify the work of the branch admin in managing petty cash funds, making it easier for companies to understand and then consider implementing the application proposed by the author.
2. To keep data safe, it is recommended to back up data to keep data safe.
3. Perform system maintenance and updates to maintain system consistency.

References:

- [1] M. Syahid Pebriadi, Ahsanul Haq, and Fuji Melania, "Program Aplikasi Pengelolaan Kas Menggunakan Php Pada Klinik Dyna Banjarmasin," *Kompak J. Ilm. Komputisasi Akunt.*, vol. 14, no. 1, pp. 1–13, 2021, doi: 10.51903/kompak.v14i1.343.
- [2] F. Agustini, "Sistem Informasi Penyewaan Kamar Menggunakan Metode Waterfall Dengan Konsep Pemrograman Berbasis Objek (Studi Kasus : Hotel Bonita Cisarua Bogor)," *J. Tek. Komput.*, vol. 3, no. 1, pp. 114–123, 2017, [Online]. Available: <https://ejournal.bsi.ac.id/ejurnal/index.php/jtk/article/view/1441>
- [3] I. Indaryono, A. M. Yusuf, and C. Pebrianti, "Sistem Informasi Akuntansi Pengelolaan Kas Kecil dengan Metode Fluktuatif Pada CV Focus Etania Zashika Karawang Menggunakan Visual Basic. Net," *Pros. Semin. Nas. ...*, no. September, pp. 45–54, 2021, [Online]. Available: <https://alumni.rosma.ac.id/index.php/inotek/article/view/113%0Ahttps://alumni.rosma.ac.id/index.php/inotek/article/download/113/118>
- [4] A. D. Rachmatsyah, N. L. Nafisha, and F. P. H., "Penerapan Metode Waterfall dalam Rancang Bangun Aplikasi Penyewaan Alat Perkemahan pada Selamat Outdoor Tambun," *Teknomatika*, vol. 09, no. 01, pp. 91–102, 2019.
- [5] N. K. M. D. Sari, N. M. Estiyanti, and A. A. P. Ardyanti, "Pengembangan Sistem Informasi Penerimaan dan Pengeluaran Kas Berbasis WEB (Studi Kasus Pada SMP Widya Sakti)," *J. Ilm. Inform. Glob.*, vol. 11, no. 1, pp. 33–40, 2020, doi: 10.36982/jig.v11i1.1070.
- [6] T. Ambo and K. Hati, "Sistem Informasi Pengelolaan Kas Berbasis Web di Masjid Al.Madinah Tangerang," *PIKSEL Penelit. Ilmu Komput. Sist. Embed. Log.*, vol. 7, no. 1, pp. 55–68, 2019, doi: 10.33558/piksel.v7i1.1652.
- [7] N. Nurmalarani and W. WAHYU, "Rancang Bangun Sistem Informasi Pendapatan Dan Pengeluaran Kas Pada Cv. Berkat Usaha Kabupaten Natuna," *EVOLUSI - J. Sains dan Manaj.*, vol. 7, no. 1, 2019, doi: 10.31294/evolusi.v7i1.4793.
- [8] S. Supriyono and E. Muslimah, "Perancangan Sistem Informasi Manajemen Kas Berbasis Web Studi Kasus: RS dr. Etty Asharto Batu," *Matics*, vol. 10, no. 1, p. 21, 2018, doi: 10.18860/mat.v10i1.4302.
- [9] W. Apriliah, "Metode Waterfall Pada Sistem Informasi Penjualan Truliving PT Duta Laserindo Metal Cikarang," *Inf. Syst. Educ. Prof.*, vol. 3, no. 2, pp. 153–162, 2019.
- [10] D. F. Saefudin, W. Apriliah, L. Kurniawan, Y. Komalasari, M. F. Akbar, and R. -, "Waterfall Methods for Application of Accounting Information Systems in Hotel Income Management Case Study: Citra Grand Hotel Karawang," *J. Teknol. Dan Open Source*, vol. 4, no. 1, pp. 56–64, 2021, doi: 10.36378/jtos.v4i1.1369.
- [11] H. Dukungan, K. Terhadap, M. Pasien, and P. Stroke, "Perancangan Sistem Informasi Simpan Pinjam Pada Koperasi Kelompok Tani Bagja Karawang," vol. 4, pp. 1707–1715, 2022.
- [12] E. F. Dian Ardiansyah, Walim, Deni Gunawan, "Rancang Bangun Sistem Informasi Penjualan Perlengkapan Tidur (SIPPAT) Berbasis Web Pada Fortun Barokah Karawang," *J. Inkofar*, vol. 1, no.

- 1, pp. 68–79, 2019, [Online]. Available: <http://www.politeknikmeta.ac.id/meta/ojs/index.php/inkofar/article/view/87>
- [13] Y. Komalasari, D. Firmansyah, R. R. Agatha, and D. Wijayanti, “Perancangan Sistem Informasi Penyaluran Beras (Raskin) Pada Desa Balonggandu Jatisari,” *J. Teknol. Dan Open Source*, vol. 3, no. 1, pp. 114–130, 2020, doi: 10.36378/jtos.v3i1.549.
- [14] S. Sukamto, Ariani, *Rekayasa Perangkat Lunak Terstruktur dan Berorientasi Objek*. Bandung: Informatika Bandung, 2018.
- [15] H. Kurniawan, W. Apriliah, I. Kurniawan, and D. Firmansyah, “Penerapan Metode Waterfall Dalam Perancangan Sistem Informasi Penggajian Pada SMK Bina Karya Karawang,” *J. Interkom J. Publ. Ilm. Bid. Teknol. Inf. dan Komun.*, vol. 14, no. 4, pp. 13–23, 2020, doi: 10.35969/interkom.v14i4.58.
- [16] H. Sugiarito and R. Sibarani, “Rancang Bangun Aplikasi Persediaan Obat Pada Klinik Umum Grace Medika Cikarang,” *IJCIT (Indonesian J. Comput. Inf. Technol.)*, vol. 4, no. 1, pp. 80–88, 2019.
- [17] E. Fitriani *et al.*, “IMPLEMENTASI MODEL WATERFALL PADA SISTEM INFORMASI AKADEMIK BERBASIS WEB PADA SMK PERTANIAN KARAWANG,” vol. 15, no. 2, pp. 137–144, 2018.
- [18] D. Nurrahman, A. Asep, and F. Aziz, “Rancang Bangun Sistem Informasi Akuntansi Penjualan Kredit Pada Pd. Lajuar Motor Karawang,” *Community Dev. J. J. Pengabd. Masy.*, vol. 1, no. 2, pp. 41–47, 2020, doi: 10.31004/cdj.v1i2.700.
- [19] M. A. Lestari, M. Tabrani, and S. Ayumida, “Sistem Informasi Pengolahan Data Administrasi Kependudukan Pada Kantor Desa Pucung Karawang,” *J. Interkom Vol. 13 No. 3*, vol. 13, no. 3, pp. 14–21, 2018.
- [20] A. Hardiyanto and E. H. R. S. Asep, “PENERAPAN MODEL WATERFALL DAN UML DALAM RANCANG BANGUN PROGRAM PEMBELIAN BARANGBERORIENTASI OBJEK PADA PT. FUJITA INDONESIA,” *J. Interkom*, vol. 13, no. 4, 2019.
- [21] Aprilia, P. (2022). *INFORMASI AKUNTANSI PENGOLAHAN KAS KECIL PADA PT GRAHA SENTRAMULYA*. 2(4), 1–14.
- [22] Fransisca, N., Djulaeha, & Sri, K. (2020). Perancangan Sistem Informasi Akuntansi Arus Kas Kecil Pada CV. Asahi Family Cikampek. *Journal Speed – Sentra Penelitian Engineering Dan Edukasi*, 10(3), 57–62.
- [23] Regina, V. S., David, P. E. S., & Hendrik, G. (2021). ANALISIS SISTEM KAS KECIL (PETTY CASH) PADA PERUSAHAAN LISTRIK NEGARA (PERSERO) UNIT INDUK PEMBANGUNAN SULAWESI BAGIAN UTARA. *Jurnal EMBA*, Vol 9, 904–912.
- [24] Rizki, N. (2022). *Sistem Informasi Pengelolaan Kas Kecil pada Klinik Rawat Inap Ridho Husada*. 2(2), 1–10.
- [25] Utami, L. D., Tofan, A., Ayu, K. D., & Miharja, K. (2020). Rancang Bangun Sistem Informasi Kas Kecil Pada Perusahaan Jasa. *Inti Nusa Mandiri*, 15(2), 43–50.