

BAB V

KESIMPULAN DAN SARAN

5.1 Kesimpulan

Penelitian ini bertujuan untuk mengembangkan *front-end* sebagai salah satu bagian dalam tahap pengembangan IMS berbasis web yang membantu pengelolaan inventori dan penjualan. Front-end IMS dikembangkan dengan melalui tahap identifikasi masalah, prototyping yang mencakup tahap komunikasi, perencanaan dan pemodelan, pengembangan prototipe, serta implementasi dan evaluasi. Prototyping dijalankan sebanyak tiga iterasi yang masing – masing iterasi berhasil lolos pengujian dan diterima oleh pengguna akhir. Dengan demikian, *front-end* sebagai salah satu bagian dalam tahap pengembangan IMS berbasis web pada pengelolaan inventori dan penjualan telah berhasil dikembangkan.

5.2 Saran

Berdasarkan penelitian yang telah dijalankan, terdapat rekomendasi yang dapat dijadikan acuan dalam rangka pengembangan IMS Lori lebih jauh.

1. Terdapat pengembangan dengan fokus pada integrasi *back-end* dan migrasi data asli aktivitas Lori yang terlewatkan sebelum sistem dibangun.
2. Penelitian yang berfokus pada pengukuran efektivitas dan efisiensi penggunaan IMS Lori dalam membantu aktivitas inventori dan penjualan.
3. Aktivitas pelaporan IMS Lori saat ini masih hanya mendukung dalam fungsi bisnis penjualan. Diharapkan terdapat penelitian yang fokus dalam pengembangan beranda dan laporan untuk berbagai fungsi bisnis yang ada pada Lori.

DAFTAR PUSTAKA

- [1] Kementerian Koordinator Bidang Perekonomian Republik Indonesia, "Dorong UMKM Naik Kelas dan Go Export, Pemerintah Siapkan Ekosistem Pembiayaan yang Terintegrasi," Kementerian Koordinator Bidang Perekonomian Republik Indonesia. Accessed: Jan. 30, 2024. [Online]. Available: <https://ekon.go.id/publikasi/detail/5318/dorong-umkm-naik-kelas-dan-go-export-pemerintah-siapkan-ekosistem-pembiayaan-yang-terintegrasi>
- [2] M. Junaidi, "UMKM Hebat, Perekonomian Nasional Meningkatkan," Kementerian Keuangan RI. Accessed: Mar. 08, 2024. [Online]. Available: <https://djpb.kemenkeu.go.id/portal/id/berita/lainnya/opini/4133-umkm-hebat,-perekonomian-nasional-meningkat.html>
- [3] A. Anastasya, "Data UMKM, Jumlah dan Pertumbuhan Usaha Mikro, Kecil, dan Menengah di Indonesia," UKMIndonesia.id. Accessed: Mar. 08, 2024. [Online]. Available: <https://ukmindonesia.id/baca-deskripsi-posts/data-umkm-jumlah-dan-pertumbuhan-usaha-mikro-kecil-dan-menengah-di-indonesia>
- [4] Kementerian Koordinator Bidang Perekonomian Republik Indonesia, "Perkembangan UMKM sebagai Critical Engine Perekonomian Nasional Terus Mendapatkan Dukungan Pemerintah," 2022. Accessed: Mar. 08, 2024. [Online]. Available: <https://www.ekon.go.id/publikasi/detail/4593/perkembangan-umkm-sebagai-critical-engine-perekonomian-nasional-terus-mendapatkan-dukungan-pemerintah>
- [5] Iswanto *et al.*, "Manfaat Manajemen Teknologi Informasi Di UMKM," vol. 5, pp. 1–6, 2023, [Online]. Available: <https://www.semanticscholar.org/paper/b0d69ac3b43ad1297ba1b6d5d5522d0696de9246>
- [6] M. F. Infithor, "Analisis Adaptasi Pemanfaatan Teknologi Informasi Terhadap Kinerja Umkm Di Kota Malang," *J. Ilm. Mhs. FEB UB*, vol. 7, no. 2, p. 16, 2019, [Online]. Available: <https://jimfeb.ub.ac.id/index.php/jimfeb/article/view/6039>
- [7] E. Aswandy and T. Mariyanti, "Analisa Pengaruh Teknologi Informasi &

- Komunikasi terhadap Kewirausahaan dan Kinerja UMKM," *J. STEI Ekon.*, vol. 31, no. 01, pp. 76–89, 2022, doi: 10.36406/jemi.v31i01.624.
- [8] B. Berlilana, R. Utami, and W. M. Baihaqi, "Pengaruh Teknologi Informasi Revolusi Industri 4.0 terhadap Perkembangan UMKM Sektor Industri Pengolahan," *Matrix J. Manaj. Teknol. dan Inform.*, vol. 10, no. 3, pp. 87–93, 2020, doi: 10.31940/matrix.v10i3.1930.
- [9] K. A. Akhmad and S. Purnomo, "Pengaruh Penerapan Teknologi Informasi Pada Usaha Mikro Kecil Dan Menengah Di Kota Surakarta," *Sebatik*, vol. 25, no. 1, pp. 234–240, 2021, doi: 10.46984/sebatik.v25i1.1293.
- [10] H. A. Hasan, "Dampak Teknologi Dalam Transaksi Bisnis Umkm," *J. Kaji. Islam Kontemporer*, vol. 11, no. 2, pp. 52–63, 2020.
- [11] N. Syahrenny, I. Widiarma, and A. Fitria, "Penyusunan Sistem Akuntansi Persediaan Dan Teknik Perencanaan Strategi Bisnis Untuk Umkm," *JMM (Jurnal Masy. Mandiri)*, vol. 6, no. 5, pp. 3798–3808, 2022, doi: 10.31764/jmm.v6i5.10255.
- [12] I. N. D. Gunawan and P. Y. Setiawan, "Inventory Management with EOQ Method at 'Nitra Jaya' Fashion-Making Company in Badung," *Eur. J. Bus. Manag. Res.*, vol. 7, no. 3, pp. 347–351, 2022, doi: 10.24018/ejbmr.2022.7.3.1444.
- [13] L. Zhou, Q. Chen, and Q. Xu, "Joint Pricing and Inventory Control Decisions for Fashion Apparel with Considering Fashion Level and Partial Backlogging," *Math. Probl. Eng.*, vol. 2021, no. March 2018, 2021, doi: 10.1155/2021/7092981.
- [14] H.-J. Oh, "A Study of the Effects of the Internal Characteristics of Fashion Brand Salespeople on Core Sales Tasks," *Fam. Environ. Res.*, p. 311, 2021, doi: 10.1377/hlthaff.21.2.163.
- [15] M. McMaster, C. Nettleton, C. Tom, B. Xu, C. Cao, and P. Qiao, "Risk Management: Rethinking Fashion Supply Chain Management for Multinational Corporations in Light of the COVID-19 Outbreak," *J. Risk Financ. Manag.*, vol. 13, no. 8, 2020, doi: 10.3390/jrfm13080173.

- [16] G. Li, "Limitation of Excel on tablet devices," Microsoft Community. Accessed: Jul. 22, 2024. [Online]. Available: <https://answers.microsoft.com/en-us/msoffice/forum/all/limitation-of-excel-on-tablet-devices/1555f6d6-dbe5-4e36-ad05-a49cd307c0f3>
- [17] Zoho Inventory, "Zoho Inventory," Zoho Inventory. Accessed: Jul. 22, 2024. [Online]. Available: <https://www.zoho.com/us/inventory/pricing/>
- [18] PT Mid Solusi Nusantara, "Mekari Jurnal," jurnal.id. Accessed: Jul. 22, 2024. [Online]. Available: <https://www.jurnal.id/id/harga/>
- [19] H. Robertson, "Contemplating New Software: A Research Study on Custom Solutions versus Commercial off the Shelf Software," vol. 14, no. 5, pp. 1–23, 2017.
- [20] M. R. Fadli, "User Interface and User Experience of Indosport Mobile Applications Using a User Centered Design Approach," *Arty J. Seni Rupa*, vol. 9, no. 2, pp. 128–138, 2020, doi: 10.15294/arti.v9i2.40365.
- [21] F. Sihaloho and Normah, "Perancangan User Interface (UI) dan User Experience (UX) Aplikasi pendistribusi alat-alat kesehatan pada perusahaan PT. Rekamileniumindo Selaras Jakarta Barat," *Indones. J. Softw. Eng.*, vol. 9, no. 1, pp. 33–38, 2023, [Online]. Available: <https://ejournal.bsi.ac.id/ejurnal/index.php/ijse/article/view/15467>
- [22] R. Rizaldy and R. T. Dirgahayu, "Pengembangan Front-End Sistem Informasi Pendataan Pendar Foundation Yogyakarta," *Automata*, vol. 1, no. 2, pp. 190–194, 2020, [Online]. Available: <https://journal.uui.ac.id/AUTOMATA/article/view/15591/10252>
- [23] S. Bin Uzayr, *Frontend Development: The Ultimate Guide*, 1st ed. Deanta Global Publishing Services, 2022. doi: 10.52458/9789391842765.2022.eb.grf.asu.ch-14.
- [24] O. Filipova and R. Vilão, *Software Development From A to Z*. Apress, 2018. doi: 10.1007/978-1-4842-3945-2.
- [25] J. Ofoeda, R. Boateng, and J. Effah, "Application programming interface (API)

- research: A review of the past to inform the future,” *Int. J. Enterp. Inf. Syst.*, vol. 15, no. 3, pp. 76–95, 2019, doi: 10.4018/IJEIS.2019070105.
- [26] A. D. Mirza, S. A. Wicaksono, and A. Rachmadi, “Pengembangan Sistem Informasi Manajemen Akademik Sekolah menggunakan Metode Prototyping (Studi pada Sekolah SMA Negeri Mojoagung),” *J. Pengemb. Teknol. Inf. dan Ilmu Komput.*, vol. 7, no. 4, pp. 1670–1678, 2023, [Online]. Available: <http://j-ptiik.ub.ac.id>
- [27] F. F. Nursaid, A. Hendra Brata, and A. P. Kharisma, “Pengembangan Sistem Informasi Pengelolaan Persediaan Barang Dengan ReactJS Dan React Native Menggunakan Prototype (Studi Kasus : Toko Uda Fajri),” *J. Pengemb. Teknol. Inf. dan Ilmu Komput.*, vol. 4, no. 1, pp. 46–55, 2020.
- [28] H. N. Nouvadila *et al.*, “Pengembangan FrontEnd Pada Website CashLess : Top Up Game Berbasis Online,” vol. 10, no. 6, pp. 5490–5501, 2023.
- [29] Deny Ramdhany, Imas Sukaesih Sitanggang, Ikhsan Kurniawan, and W. Wulandari, “Modul Front-End Sistem Informasi Geospasial Patroli Terpadu Kebakaran Hutan dan Lahan,” *J. RESTI (Rekayasa Sist. dan Teknol. Informasi)*, vol. 5, no. 2, pp. 272–280, 2021, doi: 10.29207/resti.v5i2.3045.
- [30] A. Sadikin and N. Wiranda, *Sistem Informasi Manajemen*, vol. 1, no. 69. 2022.
- [31] W. Gede Endra Bratha, “Literature Review Komponen Sistem Informasi Manajemen: Software, Database Dan Brainware,” *J. Ekon. Manaj. Sist. Inf.*, vol. 3, no. 3, pp. 344–360, 2022, doi: 10.31933/jemsi.v3i3.824.
- [32] M. Richards and N. Ford, *Fundamentals of Software Architecture*, First Edit. O’Reilly Media, 2021. [Online]. Available: <https://www.geeksforgeeks.org/fundamentals-of-software-architecture/#:~:text=Software Architecture defines fundamental organization of a system,software application and development basis for developer team.>
- [33] I. G. Anugrah and M. A. R. I. Fakhruddin, “Development Authentication and Authorization Systems of Multi Information Systems Based REst API and Auth Token,” *Innov. Res. J.*, vol. 1, no. 2, p. 127, 2020, doi: 10.30587/innovation.v1i2.1927.

- [34] S. Ali, R. Alauldeen, and A. Ruaa, "What is Client-Server System: Architecture, Issues and Challenge of Client-Server System," *HBRP Publ.*, no. February, pp. 1–6, 2020, doi: 10.5281/zenodo.3673071.
- [35] S. Patni, *Pro RESTful APIs: Design, Build and Integrate with REST, JSON, XML and JAX-RS*. 2017. doi: 10.1007/978-1-4842-2665-0.
- [36] A. Ehsan, M. A. M. E. Abuhaliqa, C. Catal, and D. Mishra, "RESTful API Testing Methodologies: Rationale, Challenges, and Solution Directions," *Appl. Sci.*, vol. 12, no. 9, 2022, doi: 10.3390/app12094369.
- [37] A. A. Prayogi, M. Niswar, Indrabayu, and M. Rijal, "Design and Implementation of REST API for Academic Information System," *IOP Conf. Ser. Mater. Sci. Eng.*, vol. 875, no. 1, 2020, doi: 10.1088/1757-899X/875/1/012047.
- [38] A. Pamuji, "Naskah publikasi rancang bangun web service menggunakan representational state transfer untuk pengolahan data barang," 2020.
- [39] A. Triawan and W. Alipudin, "Penerapan Representational State Transfer (REST) Pada Push Notification Whatsapp Untuk Layanan Informasi Akademik," vol. 11, no. 1, pp. 59–66, 2021.
- [40] R. Ardiyanto and E. Ardianto, "Analisa Performasi Metode Client Side Rendering, Server Side Rendering, dan Incremental Static Regeneration dalam Proses Website Rendering," *Comput. Sci.*, vol. 4, no. 1, pp. 19–27, 2024, doi: 10.31294/coscience.v4i1.2427.
- [41] C. Nordström and A. Dixelius, "Comparisons of Server-side Rendering and Client-side Rendering for Web Pages Civilingenjörprogrammet i informationsteknologi," no. September, 2023.
- [42] N. Li and B. Zhang, "The Research on Single Page Application Front-end development Based on Vue The Research on Single Page Application Front-end development Based on Vue," *J. Phys. Conf. Ser.*, 2021, doi: 10.1088/1742-6596/1883/1/012030.
- [43] M. F. Santoso, "TEKNIK SINGLE PAGE APPLICATION (SPA) LAYOUT WEB DENGAN

MENGGUNAKAN REACT JS DAN BOOTSTRAP Miftah Faroq Santoso Diterima :
Diterbitkan :," *J. Khatulistiwa Inform.*, vol. 9, no. 2, pp. 107–114, 2021.

- [44] C. Rizal and B. Fachri, "Implementasi Model Prototyping Dalam Perancangan Sistem Informasi Desa," *Rekayasa Tek. Inform. dan Inf.*, vol. 3, no. 3, pp. 52–57, 2023.
- [45] V. A. Kurniyanti and D. Murdiani, "PERBANDINGAN MODEL WATERFALL DENGAN PROTOTYPE PADA PENGEMBANGAN SISTEM INFORMASI BERBASIS WEBSITE," *J. Syntax Fusion*, vol. 2, no. 08, 2022.
- [46] I. Artikel and A. Info, "PENERAPAN METODE PROTOTYPE PADA PERANCANGAN SISTEM INFORMASI PENJUALAN MEDIATAMA SOLUSINDO JAMBI," *J. Ilm. Tek. dan Ilmu Komput.*, vol. 1, no. 4, pp. 1–11, 2022.
- [47] A. Yudha, D. Program, S. Teknologi, I. Universitas, and D. Persada, "PERANCANGAN SISTEM INFORMASI PENJUALAN BARANG BERBASIS WEB PADA KOPERASI KARYAWAN," vol. XI, no. 2, pp. 9–19, 2021.
- [48] R. S. Pressman, *Software Quality Engineering: A Practitioner's Approach*, Seventh Ed., vol. 9781118592. McGraw-Hill, 2010.
- [49] A. LUPASC, "Use of Unified Modeling Language in the Development of Object-Oriented Information Systems," *Ann. Dunarea Jos Univ. Galati. Fascicle I. Econ. Appl. Informatics*, vol. 27, no. 3, pp. 51–56, 2021, doi: 10.35219/eai15840409223.
- [50] D. Hindarto and M. Hariadi, "Information System Design at FGH Stores with Unified Modelling Language," *J. Comput. Networks, Archit. High Perform. Comput.*, vol. 5, no. 2, pp. 623–633, 2023, doi: 10.47709/cnahpc.v5i2.2702.
- [51] Y. Y. D. Sula, A. A. Dace, M. H. Daffa, R. H. Dwiguna, and A. Saifudin, "Penerapan Pengujian Black Box Sistem Informasi Manajemen Dosen," *J. Ilmu Komput. dan Pendidik.*, vol. 1, no. 7, pp. 1960–1970, 2023, [Online]. Available: <https://journal.mediapublikasi.id/index.php/logic>
- [52] N. Muhammad Arofiq, R. Ferdo Erlangga, A. Irawan, and A. Saifudin, "OKTAL : Jurnal Ilmu Komputer dan Science Pengujian Fungsional Aplikasi Inventory

Barang Kedadatangan Dengan Metode Black Box Testing Bagi Pemula,” vol. 2, no. 5, pp. 1322–1330, 2023, [Online]. Available:

<https://journal.mediapublikasi.id/index.php/oktal>

- [53] B. A. Maulana, E. Mawarni, M. Y. Hidayattuloh, V. Suryawijaya, and A. Saifudin, “Pengujian Black Box pada Sistem Informasi Barang Berbasis Web Menggunakan Metode Boundary Value Analysis,” *OKTAL J. Ilmu Komput. dan Sci.*, vol. 2, no. 6, pp. 1747–1753, 2023.
- [54] A. A. Dace, M. H. Daffa, Y. Y. D. Sula, and F. Rahman, “Pengujian Sistem Aplikasi Seleksi Sales Menggunakan Metode Black Box Teknik Equivalence Partitions,” *J. Ilmu Komput. dan Pendidik.*, vol. 1, no. 3, pp. 438–443, 2023, [Online]. Available: <https://journal.mediapublikasi.id/index.php/logic>
- [55] M. Ozkaya and F. Erata, “A survey on the practical use of UML for different software architecture viewpoints,” *Inf. Softw. Technol.*, vol. 121, no. February, p. 106275, 2020, doi: 10.1016/j.infsof.2020.106275.
- [56] N. M. D. Febriyanti, A. A. K. O. Sudana, and I. N. Piarsa, “Implementasi Black Box Testing pada Sistem Informasi Manajemen Dosen,” *J. Ilm. Teknol. dan Komput.*, vol. 2, no. 3, pp. 1–10, 2021.
- [57] A. C. Praniffa, A. Syahri, F. Sandes, U. Fariha, Q. A. Giansyah, and M. L. Hamzah, “Pengujian Black Box Dan White Box Sistem Informasi Parkir Berbasis Web Black Box and White Box Testing of Web-Based Parking Information System,” *J. Test. dan Implementasi Sist. Inf.*, vol. 1, no. 1, pp. 1–16, 2023.
- [58] Lori, “Wear Lori: About Us,” wearlori.com. Accessed: Mar. 15, 2024. [Online]. Available: <https://wearlori.com/about/>
- [59] S. Wuryani, “Lurik Dan Fungsinya Di Masa Lalu,” *Ornamen*, vol. 10 No 1, pp. 81–100, 2013.
- [60] Vue.js, “Vue.js Documentation,” [Vue.js](https://vuejs.org). Accessed: Mar. 19, 2024. [Online]. Available: <https://vuejs.org/guide/introduction.html>
- [61] R. Ollila, N. Mäkitalo, and T. Mikkonen, “Modern Web Frameworks: A

Comparison of Rendering Performance," *J. Web Eng.*, vol. 21, no. 3, pp. 789–813, 2022, doi: 10.13052/jwe1540-9589.21311.

- [62] T. A. Kurniawan, "Pemodelan Use Case (UML): Evaluasi Terhadap beberapa Kesalahan dalam Praktik," *J. Teknol. Inf. dan Ilmu Komput.*, vol. 5, no. 1, pp. 77–86, 2018, doi: 10.25126/jtik.201851610.



LAMPIRAN

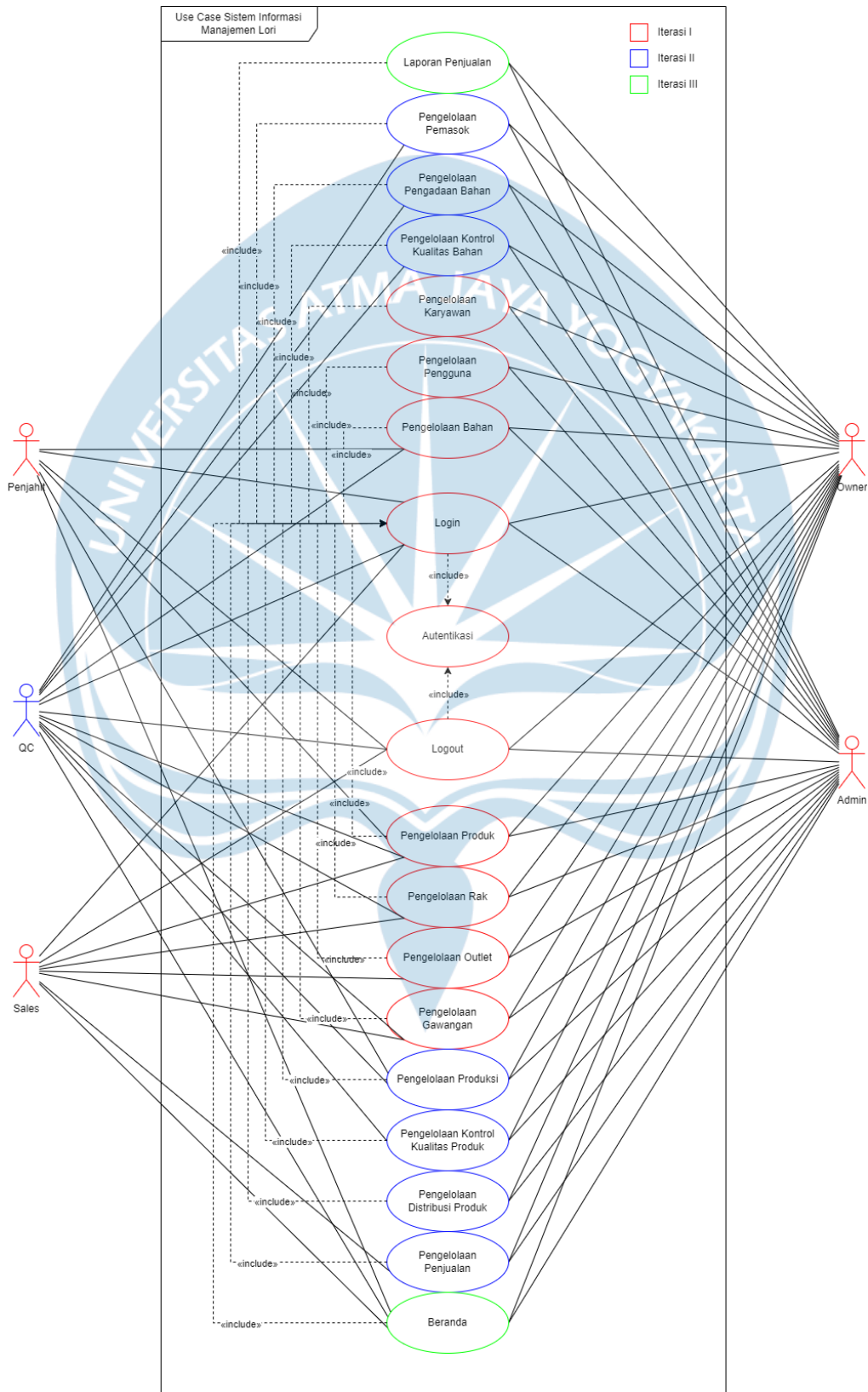
Hasil Tes Similaritas Turnitin

The screenshot shows a Turnitin Match Overview report. The document title is "PENGEMBANGAN FRONT-END SISTEM INFORMASI MANAJEMEN PADA WEAR LORI LURIK". The overall similarity score is 14%. The report lists 10 sources with their respective similarity percentages. The background of the document preview area features a large watermark of the Universitas Atma Jaya Yogyakarta logo.

Rank	Source	Similarity
2	docplayer.info (Internet Source)	2%
3	123dok.com (Internet Source)	2%
4	repository.uib.ac.id (Internet Source)	2%
5	core.ac.uk (Internet Source)	1%
6	text-id.123dok.com (Internet Source)	1%
7	Submitted to Universitas... (Student Paper)	1%
8	Submitted to Universitas... (Student Paper)	1%
9	vdocuments.net (Internet Source)	<1%
10	Dwi Janusrita, Wahyu... (Internet Source)	<1%

Page: 1 of 306 | Word Count: 34237 | Text-Only Report | High Resolution

Use Case Keseluruhan



Matrix Role – Akses

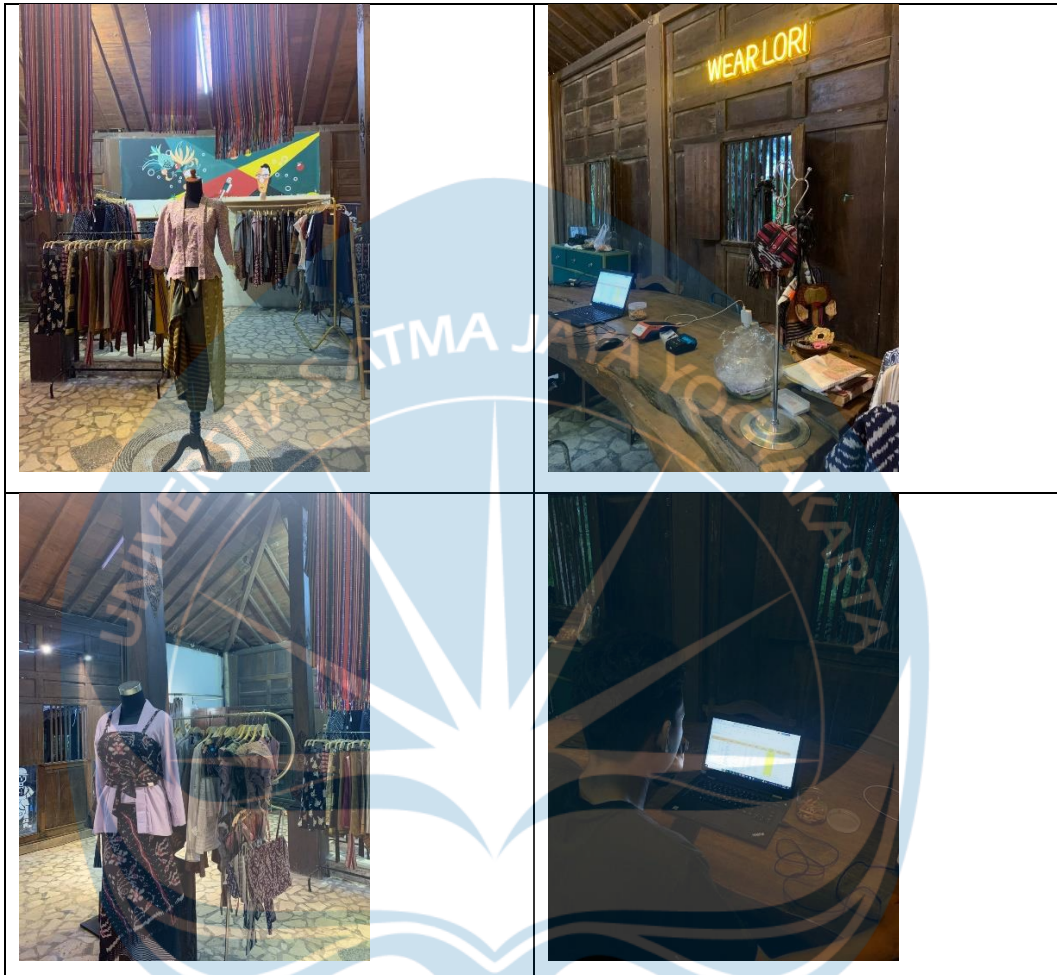
	<i>Owner</i>	<i>Admin</i>	<i>Sales</i>	Penjahit	QC
Pengelolaan Karyawan	CRUD	R	-	-	-
Pengelolaan Pengguna	CRUD	CRUD	-	-	-
Pengelolaan Bahan	CRUD	CRUD	-	R	R
Pengelolaan Produk	CRUD	CRUD	R	R	R
Pengelolaan Gawangan	CRUD	CRUD	R	-	R
Pengelolaan <i>Outlet</i>	CRUD	CRUD	R	-	-
Pengelolaan Rak	CRUD	CRUD	R	-	R
Pengelolaan Pemasok	CRUD	CRUD	-	-	-
Pengelolaan Pengadaan Bahan	CRUD	CRUD	-	-	RU
Pengelolaan Kontrol Kualitas Bahan	CRUD	CRUD	-	-	CRU
Pengelolaan Produksi	CRUD	CRUD	-	CRU	RU
Pengelolaan Kontrol Kualitas Produk	CRUD	CRUD	-	-	CRU
Pengelolaan Distribusi	CRD	CRD	-	-	-
Pengelolaan Penjualan	CR	CR	CR	-	-
Beranda	R	R	-	-	-

Laporan Penjualan	R	R	-	-	-
-------------------	---	---	---	---	---

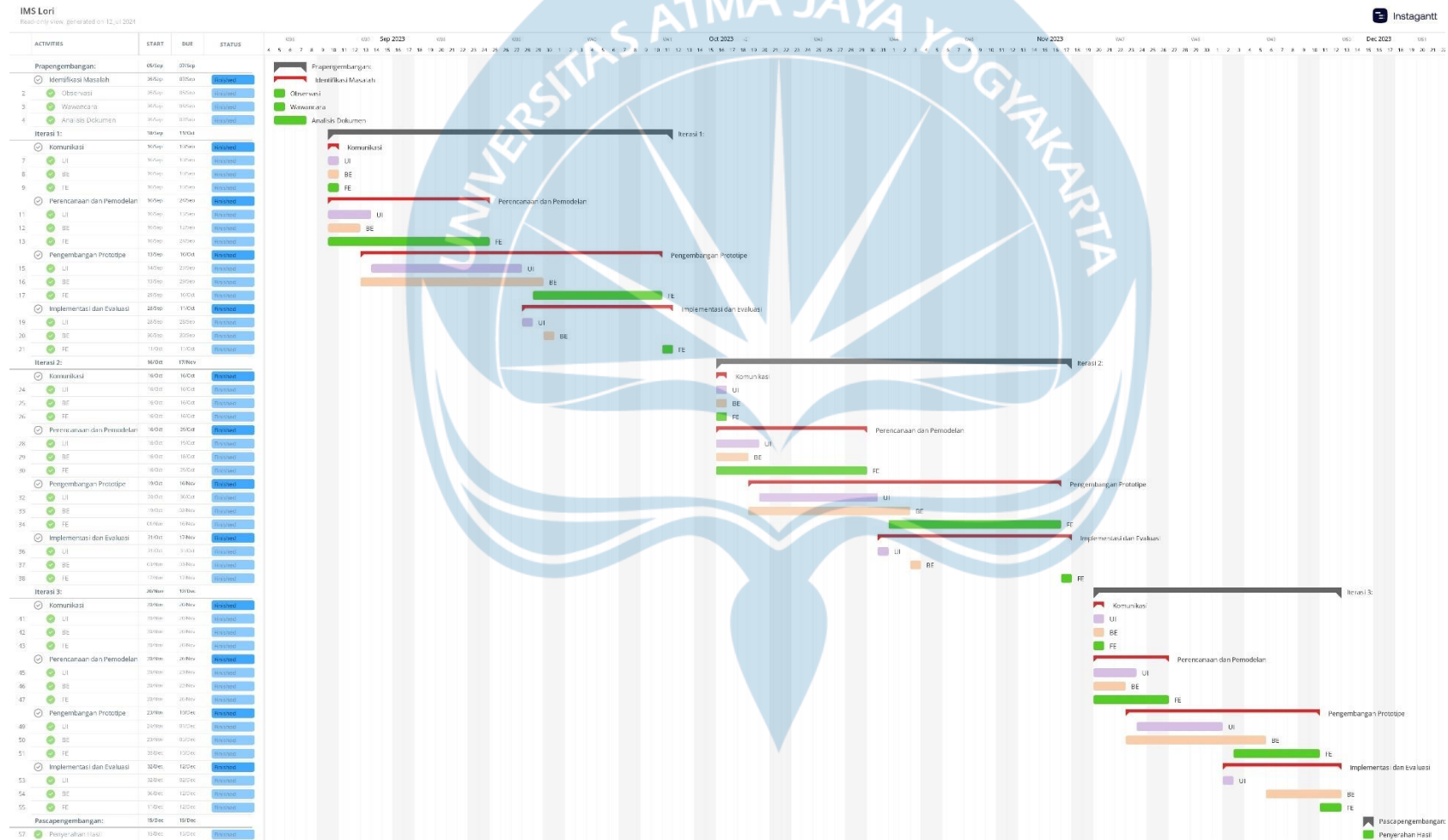
Observasi Workshop



Observasi Store



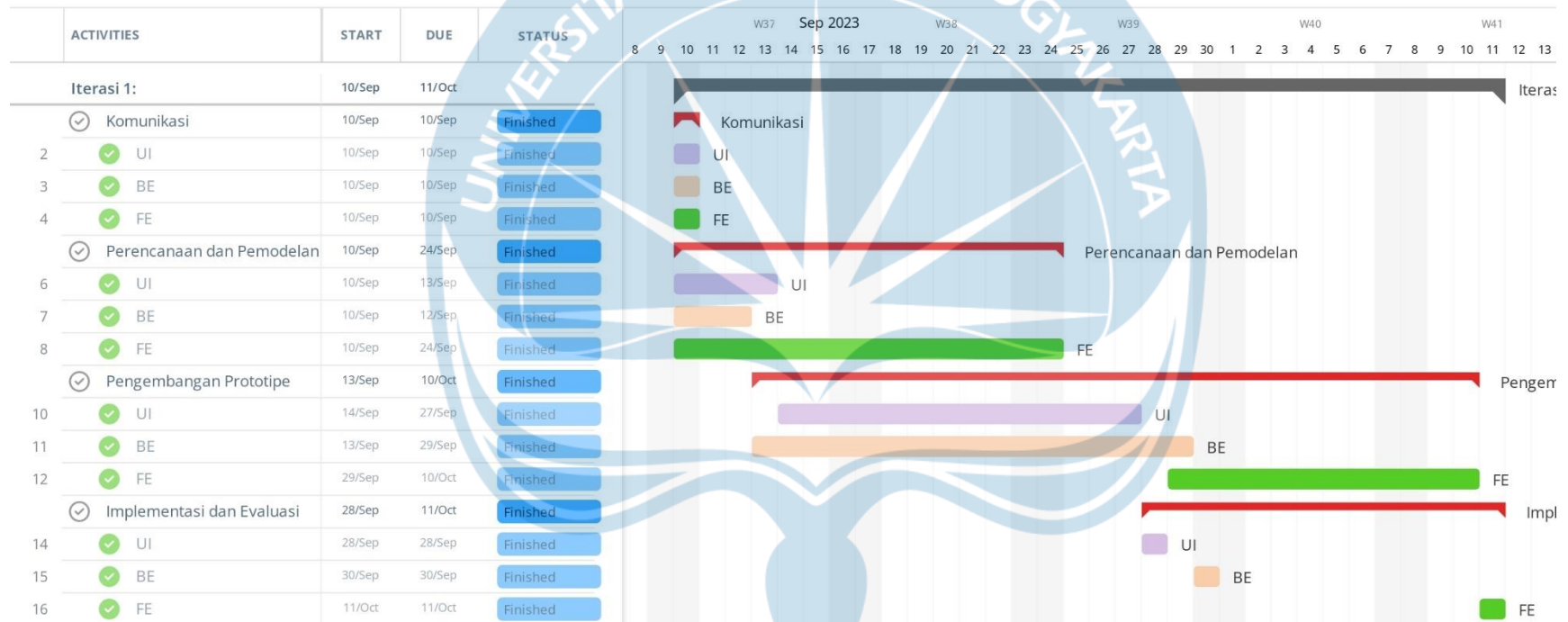
Timeline Proyek Keseluruhan



Timeline Iterasi I

IMS Lori

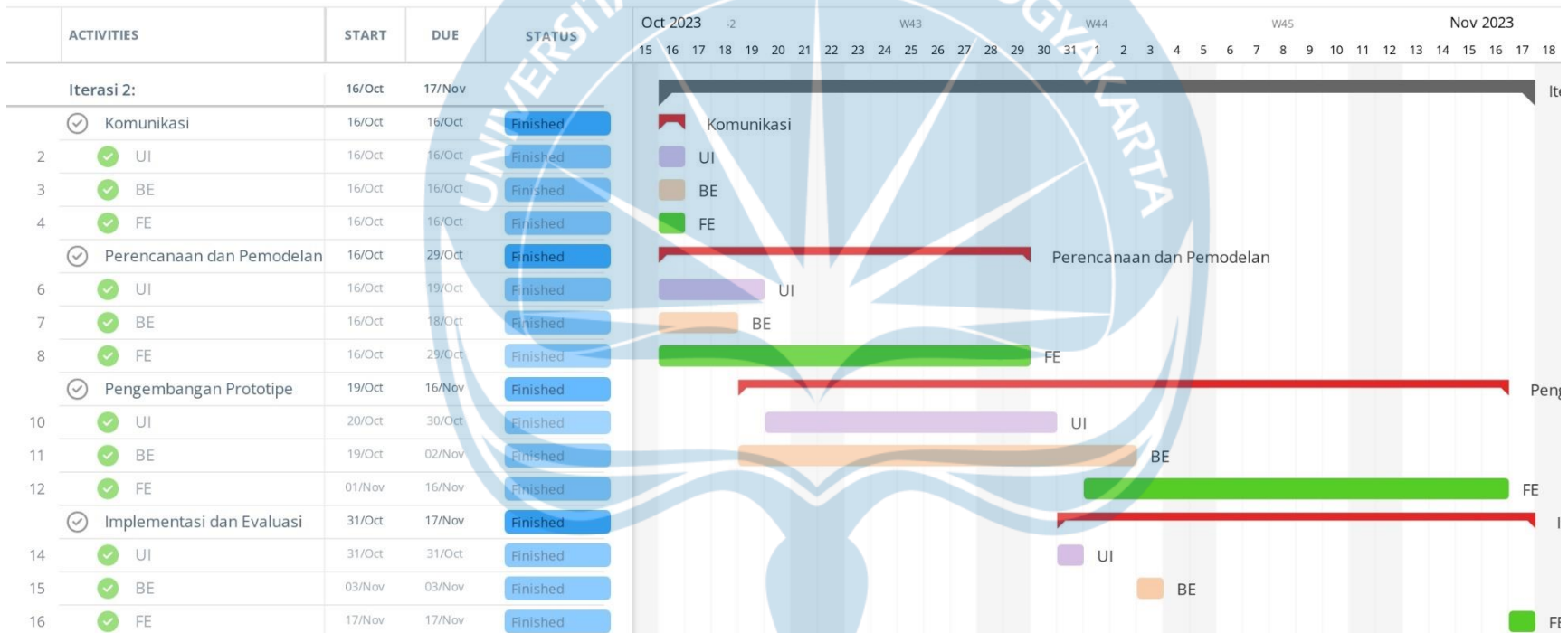
Read-only view, generated on 12 Jul 2024



Timeline Iterasi II

IMS Lori

Read-only view, generated on 12 Jul 2024



Timeline Iterasi III

IMS Lori

Read-only view, generated on 12 Jul 2024

