

ICT Equipment Maintenance System for IPK Selangor

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Abstract

The ICT Equipment Maintenance System for IPK Selangor is a web-based information system developed to improve the management and maintenance of ICT equipment in Selangor's police departments, including IPK, IPD, and Balai Polis. The current manual system, depend on Microsoft Excel and traditional communication methods via phone calls or letters, suffers from inefficiencies such as limited data accessibility, manual data entry errors, and delays in repair status updates, which impact operational performance. This project aims to design, develop, and test a structured system with modules like user management, real-time data entry, status tracking, automated notifications, report generation and manage logs. The agile methodology guided the systematic development process. The system is expected to enhance communication, streamline workflows, reduce errors, and improve resource allocation and decision-making. By centralizing ICT maintenance processes, the system will improve operational efficiency and ensure quick repairs.

1. Introduction

The ICT Equipment Maintenance System for IPK Selangor was developed to improve the management and tracking of ICT equipment across police departments in Selangor, including IPK, IPD, and Balai Polis. Previously, the maintenance process relied heavily on Microsoft Excel, which allowed only one user to access the data at a time. This caused delays, communication gaps, and human error. The proposed web-based system resolves these issues by enabling multiple users to input, update, and monitor equipment information simultaneously in real time.

This system introduces several key modules, including User Management, Manage ICT Equipment, Status Tracking, Report Generation, Notification, and Log Management. These modules help ensure a smooth and structured process by allowing users to submit and track repair requests, while administrators can monitor user activity and manage dropdown options and password resets. Notifications are displayed directly on the login page, and police users no longer need to call or send letters to check the status of their ICT equipment. They can now simply enter the No. Resit, No. Kew PA, No. Report, or No. Siri into the search bar on the login page to instantly view the current status of their equipment.

With its user-friendly interface, real-time updates, and automated notification features, this system aims to improve operational efficiency and communication between the TSM (IT) department and the police offices. The expected outcome is faster response times, reduced workload for IT staff, fewer manual errors, and improved service delivery. This system replaces the previous manual method and sets the foundation for future enhancements such as mobile support and multilingual capabilities.

2. Related Work

In this section, the related work of the proposed system will be discussed. Information and communications technology (ICT) equipment, such as computers, servers, networking devices, and communication tools, requires regular maintenance to ensure optimal performance and extend its lifespan [1]. Preventive measures, regular checks, repairs, and updates are essential to avoid hardware failures, minimize downtime, and maintain operational efficiency. Effective maintenance involves planned preventive schedules, efficient repair tracking, and real-time status updates, ensuring systems run smoothly and reducing unexpected [2]. By implementing routine maintenance processes, organizations can enhance performance and increase the lifetime of their ICT resources.

2.1 IBM Maximo

IBM Maximo is a complete asset management system that is used frequently by major organizations for activities such as asset tracking, maintenance scheduling, and real-time status updates, making it an excellent fit for IPK Selangor's Equipment Maintenance System. Maximo's capabilities for tracking asset status, scheduling repairs, and providing instant updates are well-suited to IPK Selangor's need to efficiently monitor and manage ICT equipment. Furthermore, Maximo provides powerful reporting features and can interact easily with other corporate systems, allowing for more comprehensive asset management. However, to better fit smaller departments, such as those at IPK Selangor, the system's interface may be streamlined, making it more accessible to non-technical users and allowing staff to easily explore and manage assets[3].

2.2 Service Management by Freshservice

Freshservice is an IT service management (ITSM) platform that provides features like as incident management, asset tracking, and automated service requests, making it applicable to the proposed Equipment Maintenance System for IPK Selangor. Freshservice's incident management capability might be extended to log and handle ICT equipment repair requests, offering a structured method to track repair requirements and statuses. Its cloud-based capabilities and user-friendly interface allow for quick access and real-time updates, which is useful for improving communication and ensuring timely maintenance activities. While successful, the platform might be enhanced by expanding its automated service request capability to include a notification system, which would allow users to receive alerts on changes in equipment state and increase operational efficiency[4].

2.3 UpKeep Maintenance Management

UpKeep is an asset management platform that includes work order management and real-time reporting tools, making it a perfect match for IPK Selangor's ICT Equipment Maintenance System. Its work order management tools and mobile-friendly interface are ideal for field technicians who need fast access to repair requests and status updates while on the go. UpKeep's real-time reporting and mobile access features can considerably improve communication and operational efficiency for TSM (IT) experts who manage ICT equipment maintenance. To further improve procedures, UpKeep might integrate automatic field worker updates, allowing for faster and more seamless reporting on equipment status [5].

2.4 Comparison between related systems

Table 1 shows the module and system comparison between the existing system and the system that will be developed for ICT Equipment Maintenance System For IPK Selangor

Table 1 Comparison between the proposed system and the existing systems

Features/System	IBM Maximo System	Fresh Service System	UPKeep System	ICT Equipment Maintenance System For IPK Selangor
User Management	√	√	√	√
ICT Maintenance Equipment	√	√	√	√
Asset Tracking	√	√	√	√

Table 1: (Cont.)

Features/System	IBM Maximo System	Fresh Service System	UPKeep System	ICT Equipment Maintenance System For IPK Selangor
Automated Notification	√	√	X	√
Generate Report	√	√	√	√
System Log	X	X	X	√
System Type	Web-based	Web-based	Web-based	Web-based

3. Methodology

The Agile methodology was chosen for this project because it provides for flexible development, continuous user feedback, and regular changes to meet changing requirements. The main goal of this is creating a system requirements document for knowledge sharing, while Agile Development methods focus on face-to-face communication between customers and agile teams to reach a similar goal[6]. Because the solution aims to address a continually changing demand inside the IPK Selangor IT department, Agile ensures that stakeholder needs are met at all stages of the development process.

The Agile model used in this project is divided into many phases: requirement gathering, design, development, testing, deployment, and review. Each phase requires constant interaction with stakeholders and the intake of feedback, ensuring that the system grows gradually. This iterative method improves and improves the system in real time, with each step building on the one before it to ensure that it satisfies user needs and remains functional throughout development. This strategy promotes flexibility, adaptability, and responsiveness to change, ensuring that the system meets the expectations of those who use it. Table 3 shows requirements. Furthermore, the production was completed within the time frame specified. The Gantt chart is shown in Appendix A. Figure 1 shows the agile methodology.

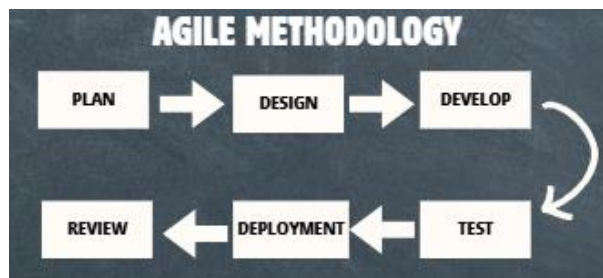


Fig. 1 Agile methodology

Table 2 Software Development Activities

Phase	Task	Output
Requirement	i. Choose suitable title	i. Project proposal
	ii. Plan future steps and its duration	ii. Gantt chart
	iii. Analysis the feedback of the requirements needed	iii. Modules (DFD, ERD, Flowchart)
Design	i. Sketch design of the system for the ICT Equipment Maintenance System for IPK Selangor	i. System architecture, database schema and data dictionary, UI design
	ii. Make a visual image of the sketch	
Development	i. Code the main functionalities	i. Create system code
Testing	i. Test to check the individual components	i. Test cases
	ii. Solve all the bugs found	
Deployment	i. Deploy the system to the market	i. System can be used for everyone
	ii. Make future improvement	

Table 2: (Cont.)

Phase	Task	Output
Review	i. Ask users opinion ii. Make future improvement for ICT Equipment Maintenance System for IPK Selangor	i. Finalized system functionality and usability

4. Analysis and Design

This section presents the results of the analysis and design phases for the ICT Equipment Maintenance System For IPK Selangor. It covers key activities including requirement analysis, system and database design, and interface development. The discussion includes functional and non-functional requirements, software and hardware needs, user roles, and diagrams such as data flow diagram, ERD, and flowchart.

4.1 System Requirements

System requirements analysis is an essential phase in the development process because it guarantees that the finished system meets all of its users' and stakeholders' requirements. There are two categories of requirements in system requirements analysis: functional and non-functional.

Functional requirements describe what the system must accomplish in terms of its properties and the specific activities and tasks that the system must carry out. Table 3 depicts the functional requirements of the proposed system. Non-functional requirements specify how the system should work, perform, and behave rather than what it should do. Table 4 depicts the proposed system's non-functional requirements. The research and analysis of user requirements includes how a user will interact with the system and what users anticipate. Understanding user requirements is critical to the success of interactive systems and information system design. The user requirements are shown in Table 5.

Table 3 Functional Requirements

No	Module	Description
1.	User Management Module	<ul style="list-style-type: none"> Allow the administrators to create new user accounts for TSM (IT) users. Allow the new users to register new account password before login. Allow the existing TSM (IT) users to log in with the gmail and password. Allows administrators to manage user roles and access permissions, including activating and deactivating TSM (IT) users accounts. Allows redirect the valid users to the dashboard when successful login.
2.	ICT Maintenance Equipment Module	<ul style="list-style-type: none"> Allow the TSM (IT) users to input details of damaged ICT equipment into the system. Allows the system continuously support data entry from multiple users simultaneously. Allow the TSM (IT) users to update and delete existing equipment records with additional information. Allow TSM (IT) users to search for specific equipment records by no resit, no siri or name. Allows administrators to manage the system's dropdown options, including creating or deleting entries that will appear in the ICT Maintenance Equipment Module when adding new damaged ICT equipment. .
3.	Status Tracking Module	<ul style="list-style-type: none"> Allow the IPK, IPD, and Balai Polis users to view the repair status of their equipment. Allow the administrators and TSM (IT) users to update the repair status in real-time.

Table 3: (cont.)

No	Module	Description
4.	Generate Report Module	<ul style="list-style-type: none"> Allow the administrator and TSM(IT) user to generate detailed repair and maintenance reports. Allow administrators and TSM (IT) users to export reports in two formats: Excel tables and selected PDFs.
5.	Notification Module	<ul style="list-style-type: none"> Allow the system to IPK, IPD, and Balai Polis notify about new announcements or updates from Administrator and TSM (IT) users.
6.	System Logs Module	<ul style="list-style-type: none"> Allow the administrators to view user actions, specifically tracking all create, update, and delete activities performed throughout the system.

Table 4 *Non-Functional Requirements*

No	Requirement	Description
1.	Performance	<ul style="list-style-type: none"> The system should be always usable. The system should allow multiple users to access it continuously while minimizing lag.
2.	Security	<ul style="list-style-type: none"> Only the administrator should be able to manage the database
3.	Compatibility	<ul style="list-style-type: none"> The web system should be able to work on any web browser
4.	Usability	<ul style="list-style-type: none"> The system should be user friendly.

Table 5 *User Requirements*

No	Requirement
1.	Administrators and TSM (IT) users should be required to have a registered account with a valid gmail and password to access the system.
2.	IPK, IPD, and Balai Polis users should be able to access website and check their equipment's repair status online.
3.	TSM (IT) users should be able to input information about damaged equipment into the system efficiently.
4.	Administrators should be able to manage TSM (IT) user accounts, including adding, editing, or activating and deactivating users.
5.	Administrators and TSM (IT) users should be able to generate detailed reports, including repair status and maintenance records.
6.	Administrators are able to monitor user actions by tracking all create, update, and delete activities performed throughout the system.
7.	IPK, IPD, and Balai Polis users should receive system announcements or news from the TSM (IT) department via the system's notification module.
8.	TSM (IT) users should be able to update the repair status of equipment in real time so users can track it.
9.	The system should provide a user-friendly web interface, ensuring easy navigation for all users, including non-technical personnel.
10.	The system should allow administrators and TSM (IT) users to customize reports and export them in formats such as PDF and excel.

4.2 System Analysis

Context diagrams present the overview of the interaction between the system and its user. Context diagrams also show the input and output to and from its user and system. On the other hand, a DFD focuses on the data flow between the system's network of activities or processes. Figure 2 shows the context diagram of the proposed ICT Equipment Maintenance System For IPK Selangor, and Figure 3 demonstrates the Level 0 Data Flow Diagram (DFD 0) for ICT Equipment Maintenance System For IPK Selangor.

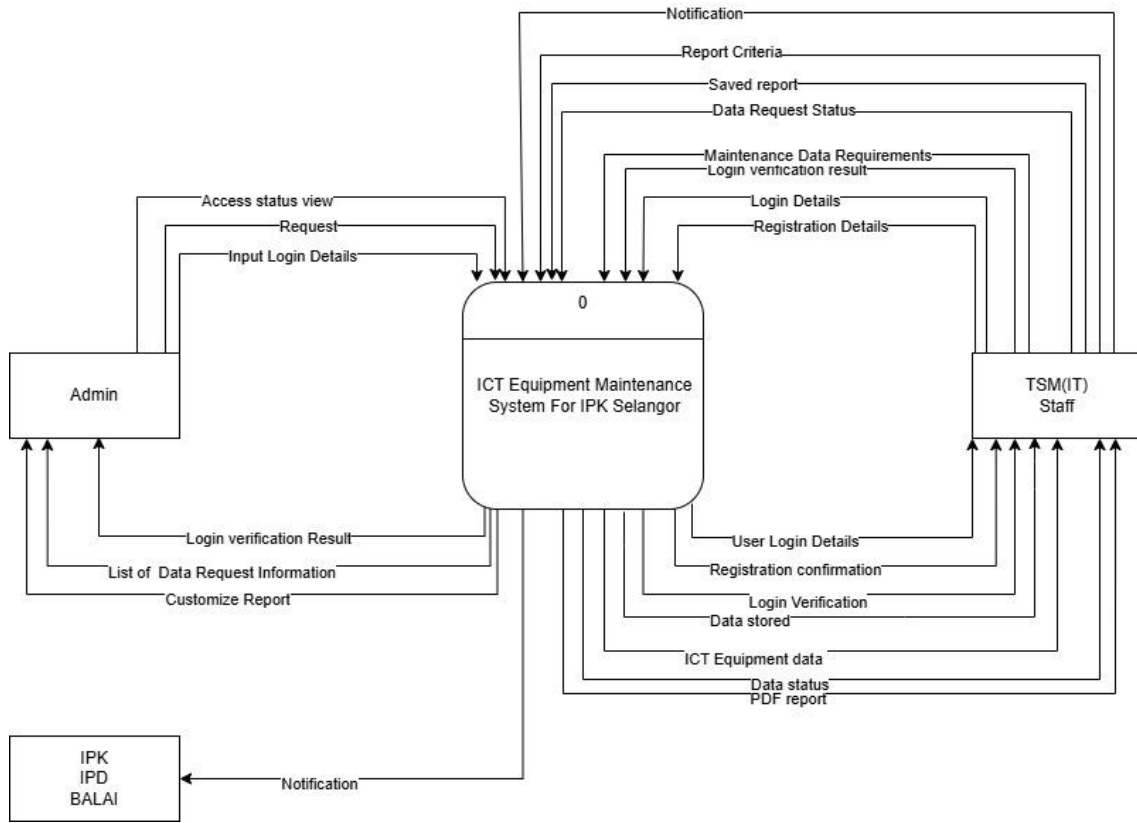


Fig. 2 Context Diagram

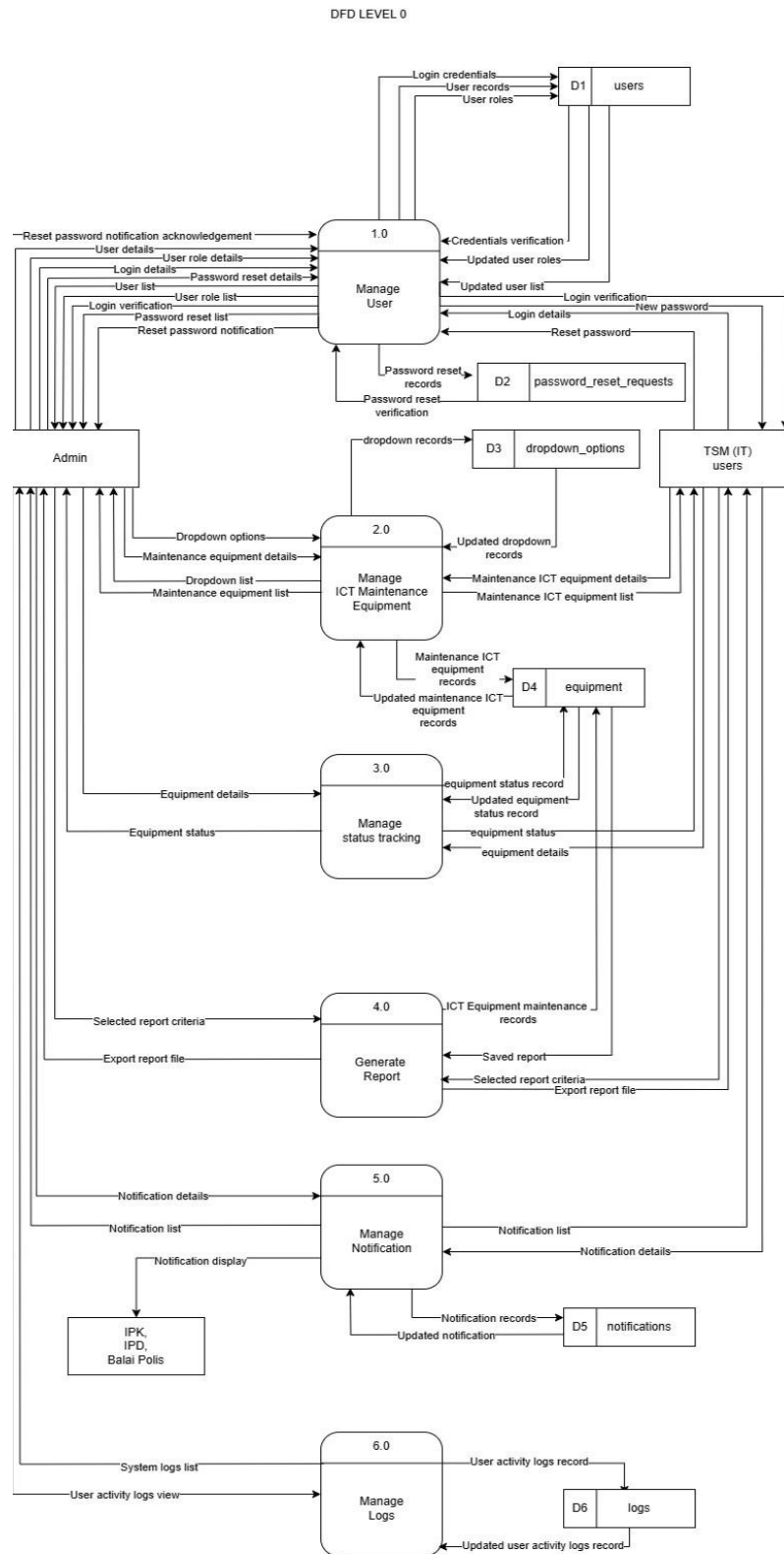


Fig. 3 Data Flow Diagram Level 0

An Entity Relationship Diagram (ERD) is a visual representation of how different entities (objects or concepts) relate to each other in a system [7]. ERDs are commonly used in database design to model the structure of a database and ensure data integrity. **Appendix B** illustrates the ERD of ICT Equipment Maintenance System For IPK Selangor

A flowchart is a diagram that shows the steps in a process. It's used to visualize, analyse, and communicate

processes. A flowchart is a visual representation of a diagrammatic representation of an algorithm's steps. Different boxes are used to represent various kinds of operations in a flowchart. Then, lines with arrows connecting these boxes indicate the direction or flow one should follow to determine the following step. The connecting lines are flow lines [8]. **Appendix C** illustrate the flowchart of the ICT Equipment Maintenance System For IPK Selangor.

4.3 System Design

This section outlines the system design for the ICT Equipment Maintenance system for IPK Selangor, focusing on its architecture, class diagram, and interface design

4.3.1 System Architecture

During the design phase, the system's desired functionalities and modules were identified. In this section, the system architecture defines the overall structure of the ICT Equipment Maintenance System For IPK Selangor, detailing how the system's components interact and function together. The system architecture for the ICT Equipment Maintenance System For IPK Selangor is designed using a Modular Layered Architecture. This design approach organises the system into distinct and functional layers, where each of them is responsible for specific tasks. Figure 4 shows the system architecture design of the proposed system. In addition, the user interface of the system is shown in Figures 5 to 12

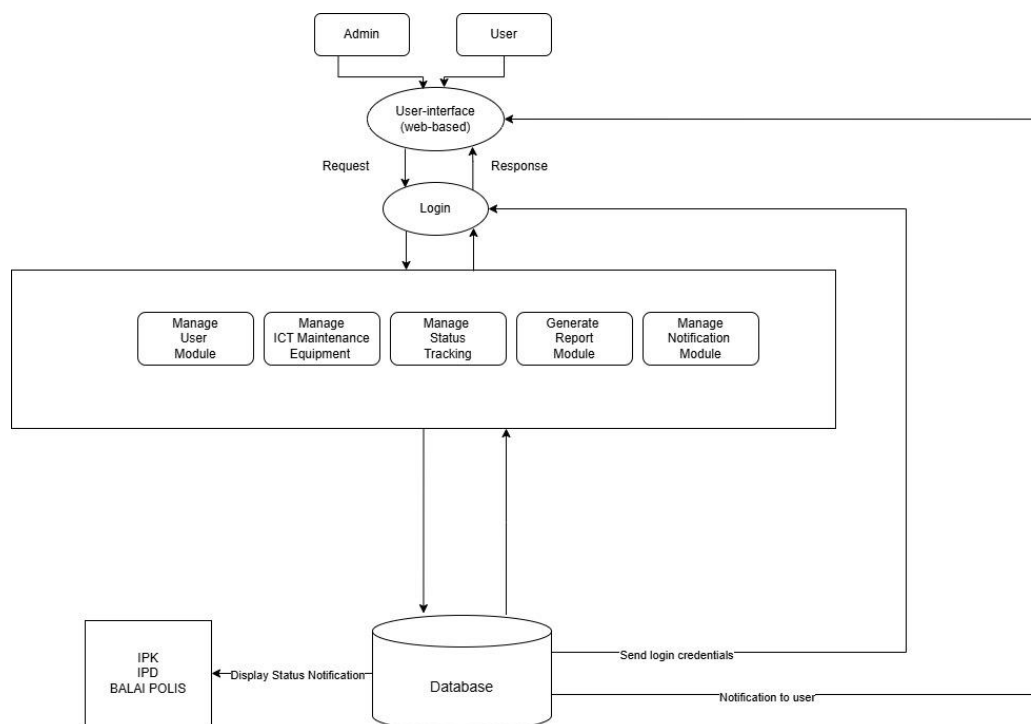


Fig. 4 System Architecture for ICT Equipment Maintenance System For IPK Selangor

4.3.2 Schema Table

The following are the relational schema from the database for each table that has been designed and extracted from the Entity Relationship Diagram (ERD) diagram available for ICT Equipment Maintenance System For IPK Selangor:

- i. Administrator (admin_id, admin_name, admin_email, admin_phone_no, admin_password,)
- ii. User (user_id, user_name, user_no_badan, user_position, user_email, user_phone_no, user_password)
- iii. ICT equipment maintenance (equipment_receipt_id, equipment_sender_name, equipment_location, equipment_name, equipment_no_siri, equipment_no_kew_pa, equipment_problem, equipment_no_report, equipment_warranty, equipment_action_taken, equipment_status, equipment_technician_repair, equipment_year_receive, equipment_repaired_date, equipment_submit_date)
- iv. Report (report_id, report_description, equipment_receipt_id, equipment_sender_name, equipment_location, equipment_name, equipment_problem, equipment_warranty, equipment_action_taken, equipment_status,

- equipment_technician_repair, equipment_year_receive, equipment_repaired_date, equipment_submit_date, date_generate_report)
- v. Notification (notification_id, number_id, notification_description)

5. Results and Discussion

This section presents the results obtained from implementing the ICT Equipment Maintenance System For IPK Selangor, supported by the relevant system interfaces. Each module’s performance is discussed based on testing outcomes and its effectiveness in solving the problems identified during the analysis phase.

5.1 Interface Design

The interface design for the ICT Equipment Maintenance System For IPK Selangor emphasises clarity, usability, and functionality for Admin, TSM (IT) users, and IPK,IPD and Balai Polis users. The design follows standard web-based UI/UX principles to ensure a seamless and intuitive user experience.

Fig 5 shows the login interface allows TSM (IT) users to access the system using credentials created by the administrator, with password reset functionality available. Additionally, users from IPK, IPD, and Balai Polis can check their ICT equipment status using the search bar, while the "TSM (IT) Updates" section displays the latest announcements.

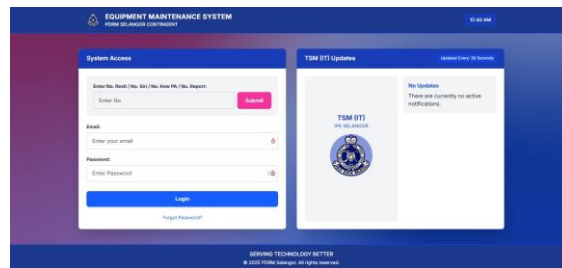


Fig 5 Login Page

Fig 6 shows the overview of ICT equipment status categories and device types. Users can click "View" to access detailed lists of equipment under maintenance, organized by status and device type for efficient tracking.

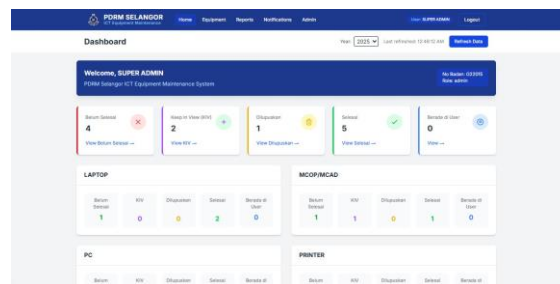


Fig 6 Dashboard Page

Fig 7 shows the ICT Equipment Maintenance page allows administrators and TSM (IT) users to input, manage, and filter maintenance records by year, status, or equipment identifiers such as No. Resit and No. Kew PA. Users can also view, update, delete, and change the status of each record for efficient equipment tracking.

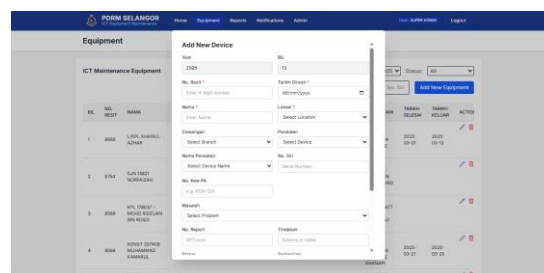


Fig 7 Equipment page

Fig 8 shows the report page allows administrators and TSM (IT) users to generate equipment maintenance reports in Excel or PDF format, with filters for year and status. To create a PDF, users must select specific

records to include in the report.

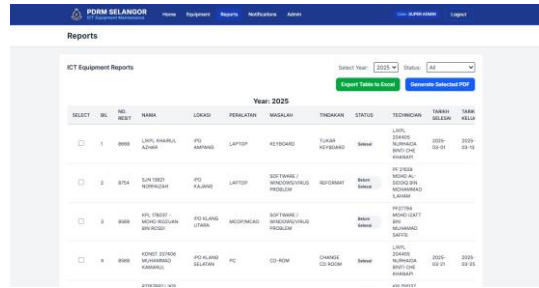


Fig 8 Report Page

Fig 9 shows the notification page allows administrators and TSM (IT) users to add, update, or delete announcements, which are then shown under the TSM (IT) Updates section on the login page for IPK, IPD, and Balai Polis users to view.

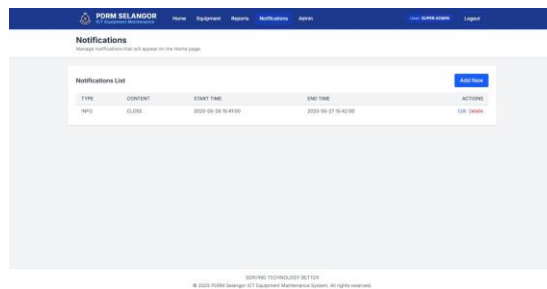


Fig 9 Notification page

Fig 10 shows the administrator can manage user accounts by creating new users, updating details, and activating or deactivating users based on their roles and access level.

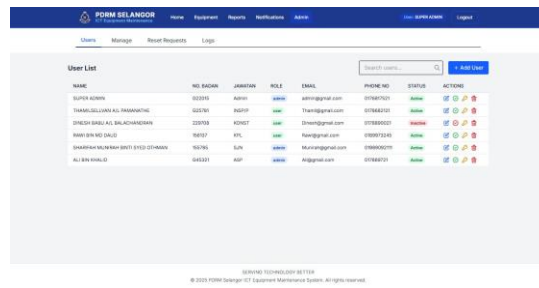


Fig 10 Admin (user list) Page

Fig 11 shows the admin can control form dropdown values by adding or deleting options to maintain consistency across system input fields.

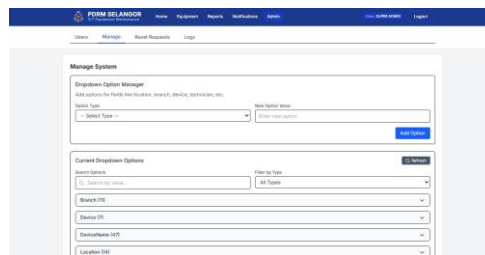


Fig 11 Admin (manage system dropdown) page

Fig 12 shows the system logs page provides the admin with a detailed record of all user actions, including create, update, and delete activities throughout the system.

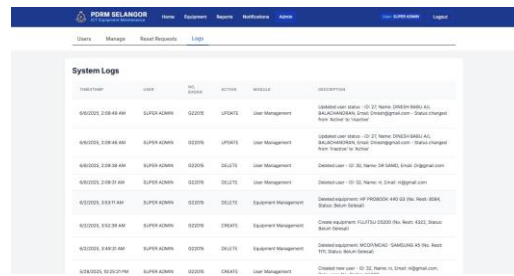


Fig 12 Admin (system logs) page

5.2 System Testing

System testing is a type of testing where an entire newly developed system is tested against its specifications [9]. It plays an important role in ensuring the system has been developed according to what was planned in the previous chapter without any errors. Both test cases and User Acceptance Testing (UAT) were conducted for system testing to validate the functionality, reliability, and usability of the system.

5.2.1 Test Cases

Test cases play an important role in the testing process, since it verifies the implementation of the system whether meets the required specifications and functions as expected [10]. During the testing phase, test cases were executed to ensure that each module functions correctly. Table 5 shows the results of the test cases conducted for the proposed system.

Table 6 Test case for Login Function

No	Test Cases	Expected Outcome	Actual Output
1.	Admin and TSM (IT) users logs in with valid email and password	Successfully logged into the system	As expected outcome
2.	Admin and TSM (IT) users logs in with incorrect email or password	Login fails with error message	As expected outcome
3.	Inactive user tries to log in	Access denied with "Your account is inactive" message	As expected outcome
4.	IPK, IPD and Balai Polis users search equipment via search column	Correct ICT equipment data is shown	As expected outcome
5.	IPK, IPD and Balai Polis views the TSM (IT) department's current updates on login page	Notification updates are displayed in the notification section	As expected outcome
6.	Admin and TSM (IT) users clicks on forgot password and enters their email	Admin receives reset request and resets password	As expected outcome
7.	Admin and TSM (IT) users logs in with default password and creates a new password	Password successfully changed and login proceeds	As expected outcome

Table 7 Test case for Dashboard Function

No	Test Cases	Expected Outcome	Actual Output
1.	Admin and TSM (IT) users' views equipment status counts (Belum Selesai, Selesai, Kiv, Dilupakan dan Berada di user)	Successfully logged into the system	As expected outcome
2.	Admin and TSM (IT) user clicks on view link under status count	Login fails with error message	As expected outcome
3.	Equipment types are displayed by device name	Access denied with "Your account is inactive" message	As expected outcome

Table 8 Test case for Equipment Function

No	Test Cases	Expected Outcome	Actual Output
1.	Admin and TSM (IT) adds new equipment with all valid data	Equipment record is successfully created	As expected outcome
2.	Search by No Resit/No Siri/No Kew PA/No Report	Correct search results returned	As expected outcome
3.	Update existing equipment record	The record is updated and saved	As expected outcome
4.	Delete equipment record	The record is deleted from the database	As expected outcome
5.	Change status of equipment	Status is updated accordingly	As expected outcome

Table 9 Test case for Report Function

No	Test Cases	Expected Outcome	Actual Output
1.	Generate Excel report by year	Excel report downloaded with correct data	As expected outcome
2.	Generate PDF report after selecting equipment	PDF report downloaded with selected equipment data	As expected outcome
3.	Search report by status/year	Results filtered correctly	As expected outcome

Table 10 Test case for Notification Function

No	Test Cases	Expected Outcome	Actual Output
1.	Admin and TSM (IT) users adds new notification	Notification is displayed in login updates section	As expected outcome
2.	Update existing notification	Changes reflected in login updates	As expected outcome
3.	Delete notification	Notification removed from updates section	As expected outcome

Table 11 Test case for Admin Function

No	Test Cases	Expected Outcome	Actual Output
1.	Admin creates a new user account	User is added to the system	As expected outcome
2.	Admin resets password for user	User receives default password	As expected outcome
3.	Admin activates/deactivates a user	Status updated and enforced at login	As expected outcome
4.	Admin adds/deletes dropdown values	Dropdown options updated in system	As expected outcome
5.	Admin views system logs	Logs display user actions (create, update, delete)	As expected outcome

5.2.2 User Acceptance Test

User acceptance testing for the ICT Equipment Maintenance System for IPK Selangor was conducted using an online Google Form to gather feedback on user satisfaction and identify potential improvements. Respondents included users from TSM (IT), system administrators, and public users from IPK, IPD, and Balai Polis who interacted with the system interfaces. The questionnaire was divided into three sections based on user roles: Admin Interface, TSM (IT) User Interface, and IPK/IPD/Balai Polis Public Search Interface. The form evaluated several key modules of the system, including login, dashboard, equipment maintenance input, report generation, notification updates, and user account management. The User Acceptance Testing Form is shown in Appendix D

Fig 13 shows the admin user acceptance test, feedback was collected from 10 administrators. Out of these, 8 selected Very Satisfied and 2 selected Satisfied for various system functions.

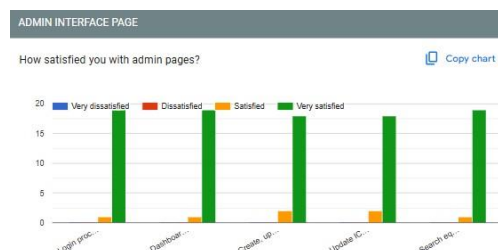


Fig 13 User Acceptance for Admin Interface

Fig 14 shows the TSM (IT) users acceptance test, feedback was collected from 25 TSM (IT) users. Out of these, 23 selected Very Satisfied and 2 selected Satisfied for various system functions.

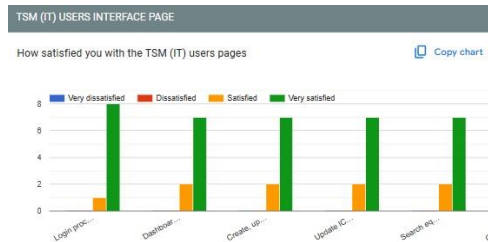


Fig 14 User Acceptance for TSM (IT) users Interface

Fig 15 shows the IPK, IPD and Balai Polis users acceptance test, feedback was collected from 40 users. Out of these, 35 selected Very Satisfied and 5 selected Satisfied for various system functions.

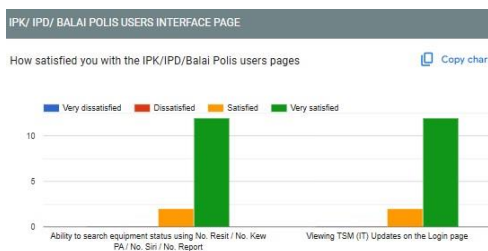


Fig 15 User Acceptance for IPK, IPD and Balai Polis Interface

5.3 Conclusion

In conclusion, the ICT Equipment Maintenance System for IPK Selangor aims to modify the current ICT equipment repair and maintenance procedure in Selangor police departments. By replacing the old, manual Excel-based system with a web-based platform, the new system will allow for simultaneous data entry, real-time status tracking, and improved communication between TSM (IT) and police users. This will eliminate delays, lower human mistake rates, and increase overall efficiency. The system also improves collaboration by allowing IPK, IPD, and Balai Polis users to readily verify equipment statuses online, with automatic updates to ensure continuous communication. The desired result is a more efficient, responsive, and transparent maintenance management procedure for ICT equipment.

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Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of the paper.

Author Contribution

The author confirms sole responsibility for the following: **study conception and design:** Thamilsellvan Pamanathe, Abd Samad Hasan Basari; **data collection:** Thamilsellvan Pamanathe, Abd Samad Hasan Basari; **analysis and interpretation of results:** Thamilsellvan Pamanathe, Abd Samad Hasan Basari; **draft manuscript preparation:** Thamilsellvan Pamanathe, Abd Samad Hasan Basari. All authors reviewed the results and approved the final version of the manuscript.

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Appendix A: Project Gantt chart

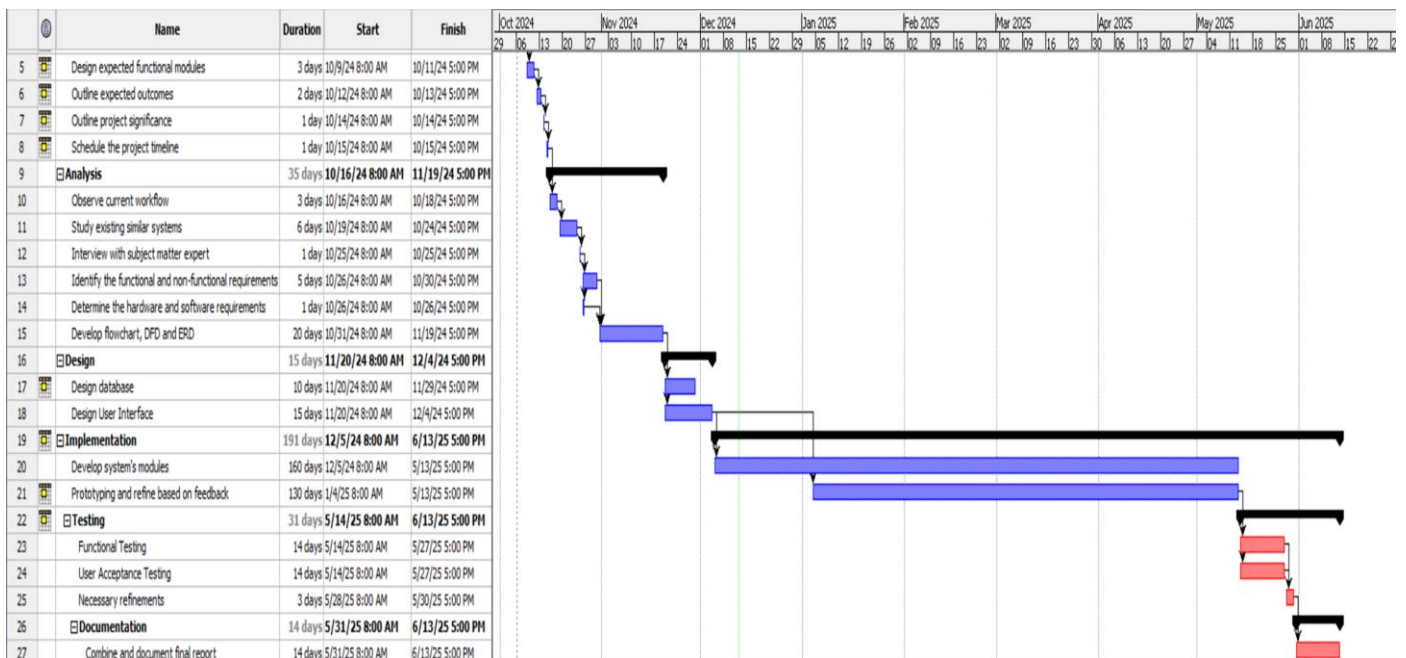


Fig. 16 Project Gantt Chart

Appendix B: Entity Relationship Diagram (ERD)

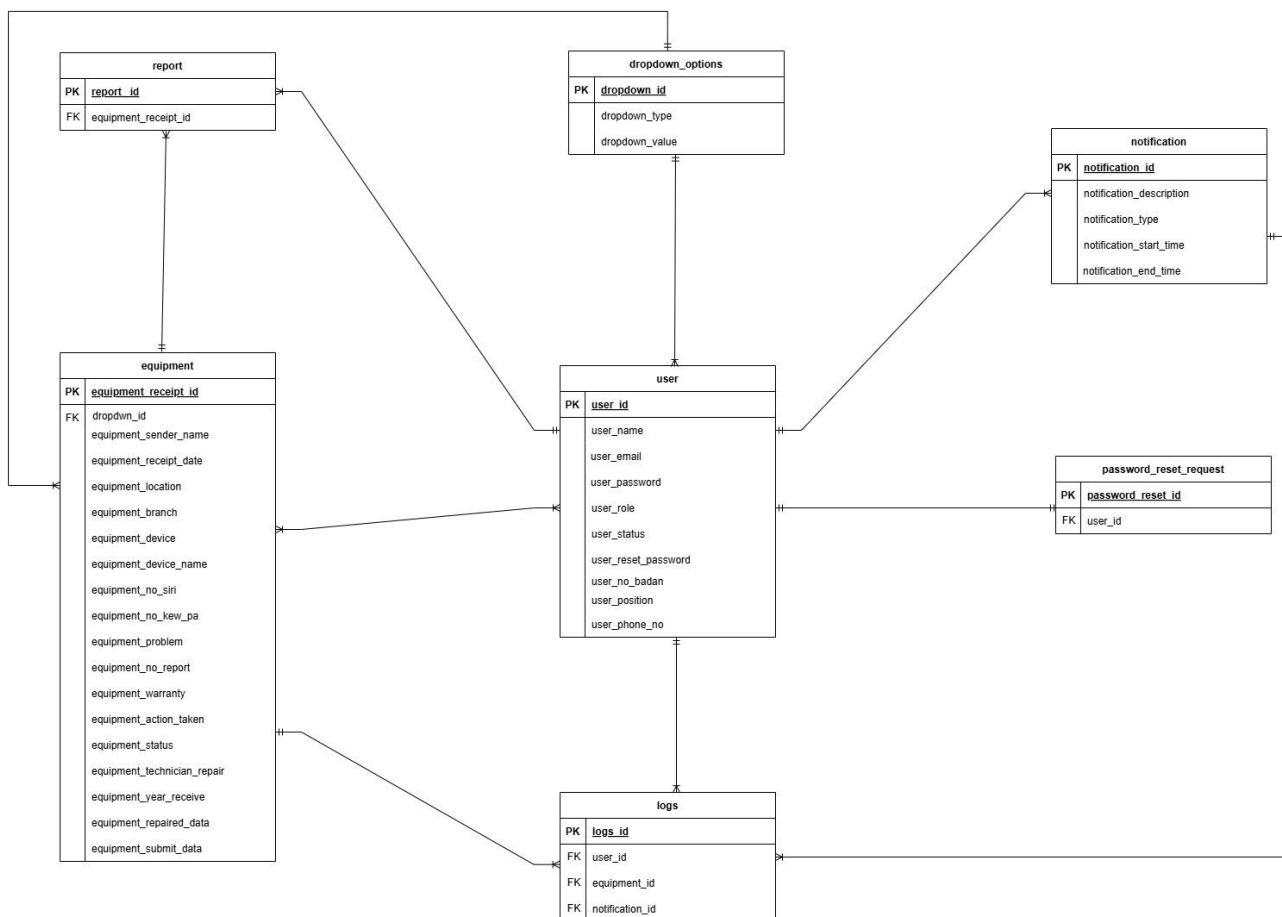


Fig. 17 Entity Relationship Diagram (ERD)

Appendix C: Flowchart

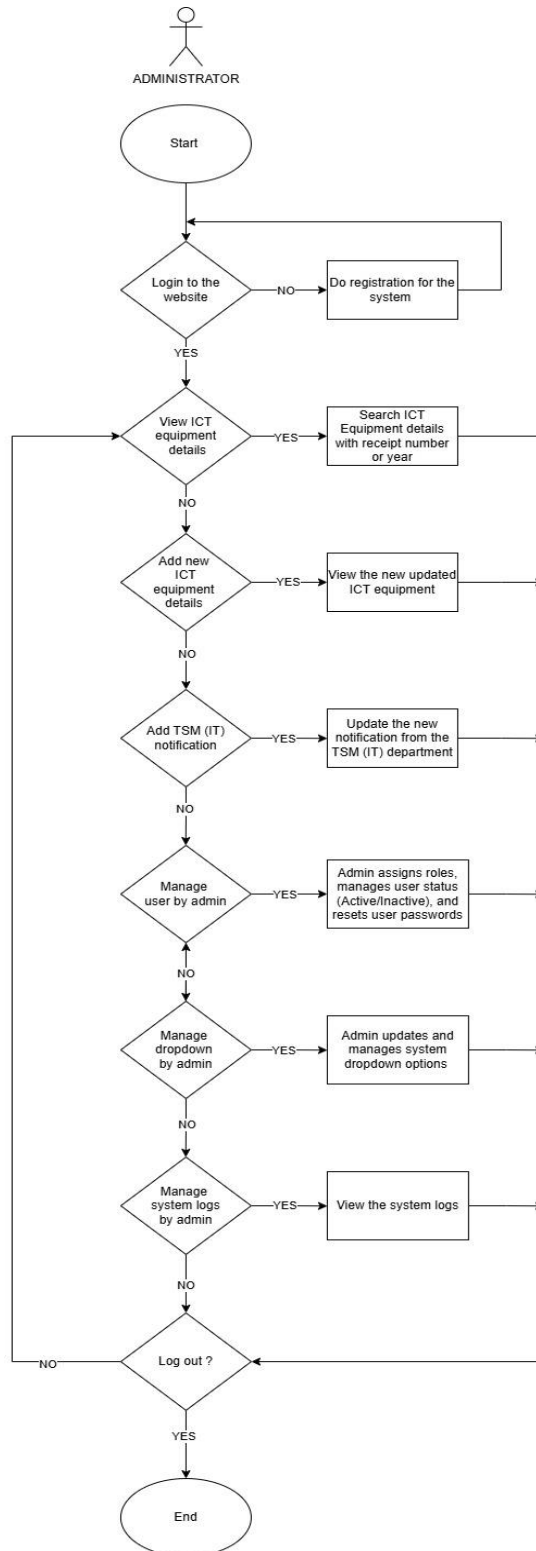


Fig. 18 Admin Flowchart

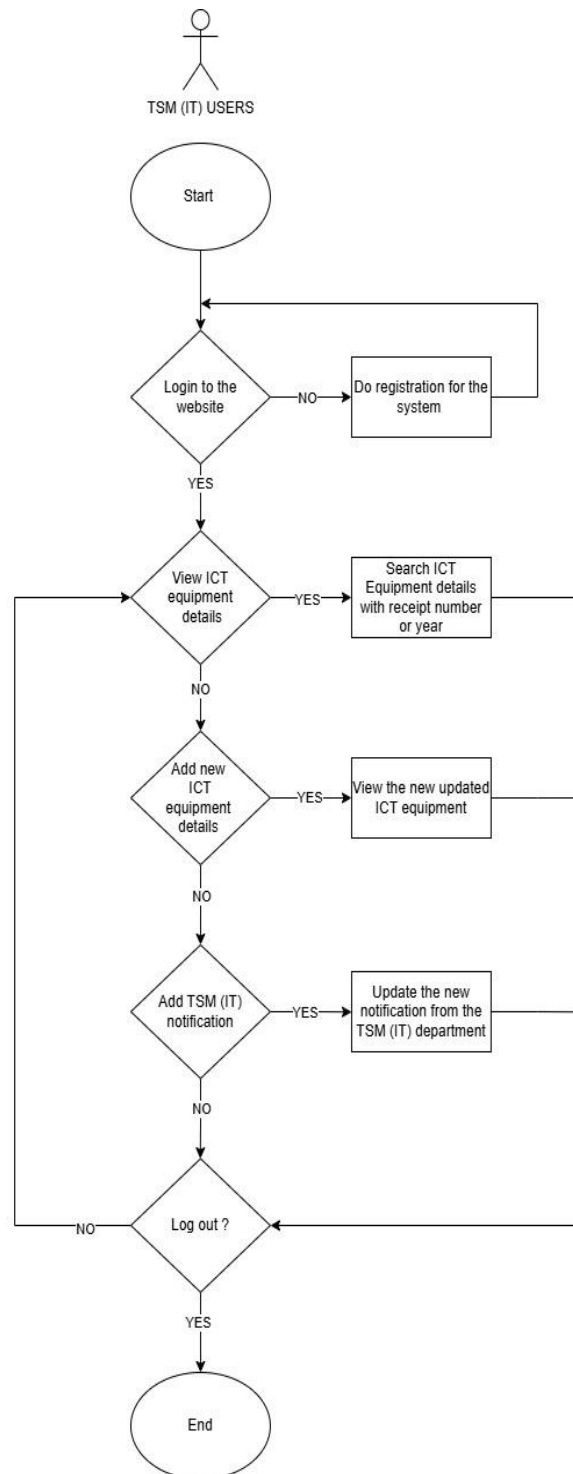


Fig. 19 TSM (IT) users Flowchart

Appendix D: User Acceptance Testing Form

ADMIN INTERFACE PAGE				
How satisfied you with admin pages?				
	Very dissatisfied	Dissatisfied	Satisfied	Very satisfied
Login process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dashboard view	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Create, update, delete ICT equipment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Update ICT equipment status	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Search equipment by No. Resit / No. Kew PA / No. Sin / No. Report	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Generate reports (Excel/PDF)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Notification management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Manage users	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Manage system dropdown options	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Manage password reset request	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
System logs view	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Any additional suggestion on the admin interface

Your answer

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Fig. 20 User Acceptance for Admin Interface

TSM (IT) USERS INTERFACE PAGE				
How satisfied you with the TSM (IT) users pages?				
	Very dissatisfied	Dissatisfied	Satisfied	Very satisfied
Login process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dashboard view	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Create, update, delete ICT equipment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Update ICT equipment status	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Search equipment by No. Resit / No. Kew PA / No. Sin / No. Report	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Generate reports (Excel/PDF)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Notification management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Any additional suggestion on the TSM (IT) users interface

Your answer

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Fig. 21 User Acceptance for TSM (IT) users Interface

IPK/ IPD/ BALAI POLIS USERS INTERFACE PAGE

How satisfied you with the IPK/IPD/Balai Polis users pages

	Very dissatisfied	Dissatisfied	Satisfied	Very satisfied
Ability to search equipment status using No. Resit / No. Kew PA / No. Sir / No. Report	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Viewing TSM (IT) Updates on the Login page	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Any additional suggestion on the IPK/IPD/Balai Polis users interface

Your answer: _____

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Fig. 22 User Acceptance for Admin Interface

OVERALL FEEDBACK

How satisfied you with the overall features?

	Very dissatisfied	Dissatisfied	Satisfied	Very satisfied
Theme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Font	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Font size	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Any other opinion or feedback to add?

Your answer: _____

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Fig. 23 Overall user Acceptance