

Aplikasi Manajemen Layanan Teknis dan IT Persero Batam

Versi: 2.0.0

Halaman: 81

Status: Finish

Confidentiality: Publik

JUNI29
■

INFORMATICS ENGINEERING BATAM STATE POLYTECHNIC

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Project Title	:	Persero Batam Technical and IT Services Management Application
Outer	:	Reports, Logbooks, Documentation, Applications, Manual Books, Posters, Demo Videos, Presentation Videos
Clients/Customers	:	Persero Batam
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Document History

Table 1. Document History

Version	Date	Writer	Description
1.0	02/17/24	Satria Mangasi Junior, Kristina Napitu, Caesareandos Nababan, Farhan Rizaldy Asnawi, Hamas Akif Sanie, Novia Al Gofur Zein, Feni Febriani	Draft outline created
1.2	02/27/24	Farhan Rizaldy Asnawi	Sprint documentation 1 (Project Description and Project Overview)
1.4	09/03/24	Farhan Rizaldy Asnawi	Sprint 2 documentation (User Stories FR, and NFR)
1.6	03/19/24	Farhan Rizaldy Asnawi	Wireframes
1.7	03/25/24	Farhan Rizaldy Asnawi	Mock Up
2.0	04/20/24	Hamas Akif Sanie, Satria Mangasi Junior, Caesareandos Nababan, Farhan Rizaldy Asnawi, Kristina Napitu, Novia Al Gofur Zein, Feni Febriani	Entity Relationship Diagram, Use case Scenario, UML Diagram, Use Case Diagram, Scenario Diagram, Activity Diagram, Class Diagram, Sequence Diagram
2.1	05/25/24	Hamas Akif Sanie, Satria Mangasi Junior, Caesareandos Nababan, Farhan Rizaldy Asnawi	Application Implementation, Database Implementation
2.2	06/28/24	Farhan Rizaldy Asnawi	Finalization

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Project Work History

Exterior Work History

Table 2. Work History

Tasks	Completion Date	The resulting output
Planning	02/27/2024	Job Desk Division
Analysis	09/03/2024	Project Description, FR, and NFR
Design	04/21/2024	Use Case Diagrams, Use Case Scenarios, Activity Diagrams, Class diagrams, ER Diagrams, Relational Models, Wireframes, Mock Ups
Implementation	05/20/2024	Application Front End, Back End Application
Testing	05/28/2024	Application Report Testing

Application Version History

Table 3. Application Version History

Version	Release Date	Version Details
1.01	March 09, 2024	Frontend Mock Up
1.02	March 25, 2024	Frontend Landing Page, Dashboard
1.1	May 15, 2024	Frontend Table Solve, Inventory, Maintenance
1.11	June 5, 2024	Frontend Improvisation, Port to Laravel
2.0	June 12, 2024	Frontend Improvisation, Initial Log in
2.01	June 20, 2024	Finalization of Front end, CRUD System, Login System, Connection to database

Member Contributions

Table 4. Contribution of group members

Member's name	Contribution	The resulting output
Hamas Akif Sanie	Monitoring, Programmer Backend	Laravel Configuration, Create ERD design Create Class Diagrams Databases
Satria Mangasi Junior	Frontend Programmer & Backend	Laravel Configuration, Use case Diagrams, Activity Diagrams, frontend code, Databases
Kristina Napitu	Frontend Programmer	Interface Design, Reports
Caesareandos Nababan	Backend Programmer	Laravel Configuration, Table Entities, Use case scenarios, Databases Report
Farhan Rizaldy Asnawi	Frontend Programmer	Wireframes, Figma, Frontend code, Laravel Configuration, Reports, Project Description, FR and NFR, Sequence Diagram
Novia Al Gofur Zein	Frontend Programmer	Frontend code, Figma, Laravel Configuration, Databases, Reports
Feni Febriani	Frontend Programmer	Frontend code, Figma, Laravel Configuration, Databases, Reports

Communication History with Client/Proposer

Table 5. Communication with Clients / Project Proposers

Date	Client Name	Media	Discussion
02/16/2024	Sir. Muhammad Ali	Online, Zoom	Specification discussion start of application
03/13/2024	Sir. Muhammad Ali	Offline, Office Persero Batam	Confirmation application specifications
05/17/2024	Mrs. Dini Pratiwi	Offline, Office Persero Batam	More explanation Continue to Front End Website
05/29/2024	Mrs. Dini Pratiwi	Offline, Office Persero Batam	Front Finalization End and CRUD explanation and System login
05/06/2024	Mrs. Dini Pratiwi	Online, Google Meet	System Explanation Backend and Connection to Databases

Documentation of Communication with Clients

First meeting (Online)



Picture of First Meeting

Second Meeting (Offline)



Picture of the Second Meeting

Third Meeting (Offline)



Picture of the Third Meeting

Fourth Meeting (Offline)



Image of the fourth meeting

System Specifications

General Description



PERSERO BATAM

Persero Batam logo image

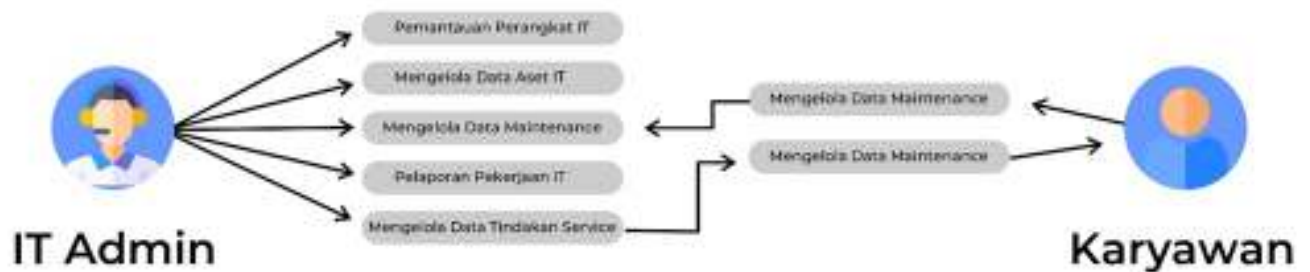
Persero Batam, as a large company operating in various fields, has a need for reliable and efficient technical and IT services.

This project will create a web-based technical and IT service management application that Persero Batam can use to monitor health, monitor IT assets, maintain IT software and hardware and report IT work.

Based on the docs [Technical & IT Service Management Application PBL Design.pdf](#) , here are some key points from the system overview:

1. The IT Inventory Module contains modules for inputting and monitoring IT sector assets.

2. The preventive maintenance module is a module used to carry out IT software and hardware maintenance.
3. The IT work report module is a module used by IT staff to report their work every day.



General description of the system to be created

Plan to Create Batam Persero IT and Technical Service Management Applications

1. The application is created using a website platform and requires PHP.
2. The application's user interface (UI) is designed to be intuitive and easy to use, allowing the Company's IT staff to easily access technical and IT services.

Application Module:

1. The system health monitoring module contains input from IT staff through daily routine forms.
2. IT Inventory Module to input and monitor IT assets.
3. Maintenance Module to carry out maintenance of IT software and hardware.
4. The IT work report module is used by IT staff to report work every day.

User Stories

Persero Batam IT staff need an integrated system to monitor system health, inventory IT assets, carry out preventive maintenance, and report on their work. This system should help them:

- Increase efficiency and effectiveness in managing IT assets.
- Reduce system downtime and increase uptime.
- Improve visibility and control over IT assets.
- Ensure compliance with IT standards and regulations.
- Improve communication and collaboration between IT staff.

General FR and NFR Systems:

System Functional Requirements

1. The system will store historical system health data for analysis and reporting.
2. Input data includes IT assets, including hardware, software, and licenses.
3. The system will display detailed IT asset information.
4. The system can search for IT assets.
5. The system stores historical data on IT assets for analysis and reporting.
6. The system stores historical data on preventive maintenance activities.
7. The system has a daily work report input function by IT staff.
8. Displays a list of IT job reports.
9. Store historical data on IT work reports.
10. Filter and search IT job reports.

Non-Functional Requirements System

1. The system must have strong security mechanisms to protect IT asset data.
2. Access to the system must be limited to admins and employees only.
3. The system must be available 24/7 with minimal downtime.
4. The system must be easy to use and understand by IT staff.

-
5. The system will be scalable to meet Persero Batam's needs in the future.
 6. The system must have complete documentation and be easy to understand.
 7. The system must be compatible with other systems and applications used by Persero Batam.
 8. The system should be easy to maintain and update.

FR and NFR User IT Technician:

Functional Requirements for IT Technicians

1. IT technicians can view historical system health data for analysis and reporting.
2. IT technicians can view detailed IT asset information.
3. View historical IT asset data for analysis and reporting.
4. View historical data on preventive maintenance activities.
5. View the list of IT job reports.
6. View historical data on IT jobs reports.

Non-Functional Requirements for IT Technicians:

1. Access to admin must be restricted to authorized IT Technicians only.
2. Easy to use and responsive interface

FR and NFR Employee Users:

Employee Functional Requirements:

1. Employees can input IT asset data, including hardware, software and licenses.
2. Employees can view detailed asset information.
3. View and store historical asset data for analysis and reporting.
4. View and save historical data on preventive maintenance activities.
5. View and create a list of work reports.
6. Input daily work reports by employees.

Employee Non-Functional Requirements:

1. Access to Employee login must be restricted to authorized users only.
2. Ability to upload files or attachments related to work
3. Easy to use and responsive interface

System Modeling

System modeling is the process of creating a representation or model of a real system for the purposes of analysis, design, simulation, or testing.

The main functions of system modeling are:

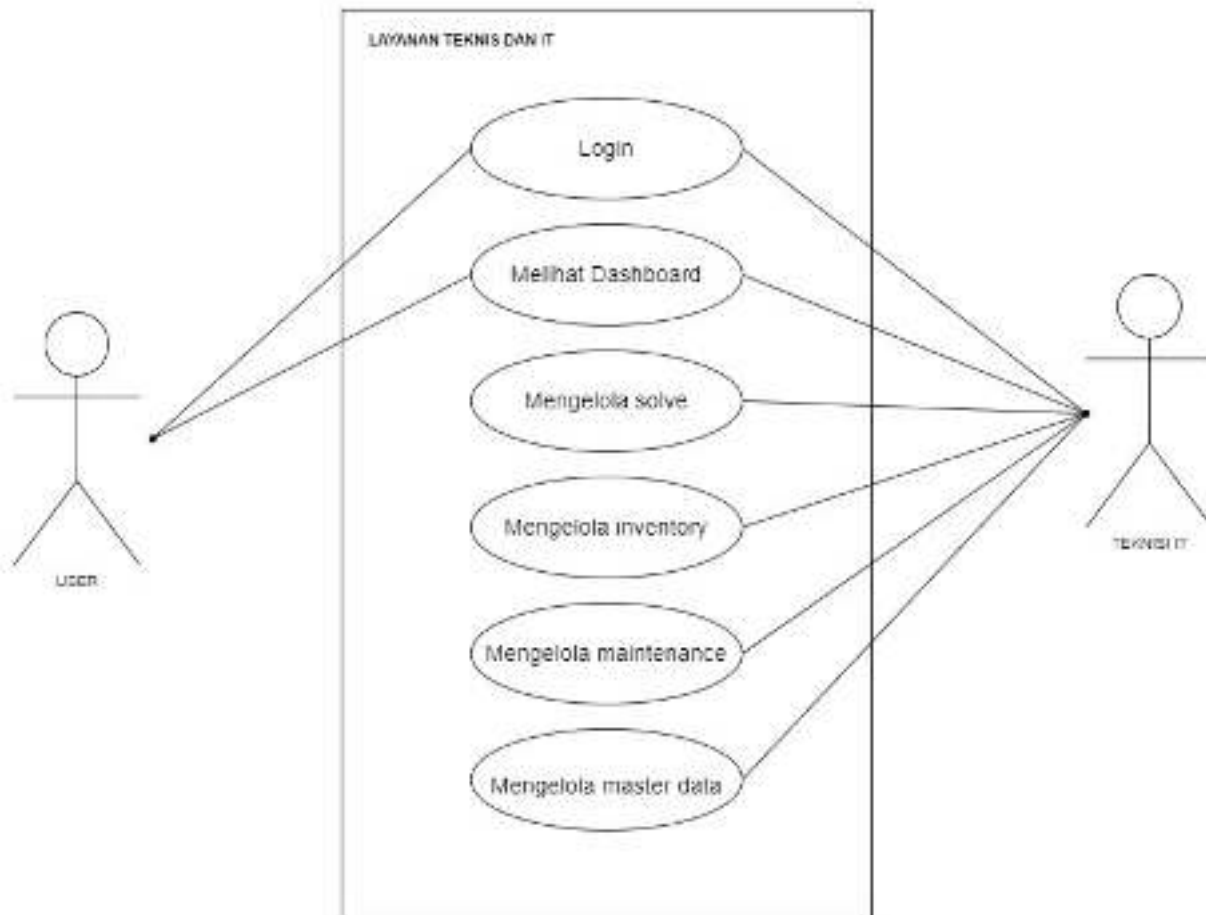
1. Understand complex systems by simplifying and abstracting them.
2. Communicate system design and behavior to stakeholders.
3. Analyze and evaluate the system before implementation.
4. Carry out simulations to predict system behavior.
5. System testing and verification.
6. Actual system design and development.
7. Maintain standardization and consistency in the system development process.

With system modeling, system complexity can be better managed, thereby facilitating effective and efficient system understanding, design, analysis and development.

UML Diagrams

Use Case Diagrams

The following is a Use Case Diagram, consisting of 2 users (User and IT Technician), and 6 Interactions.



Use Case Diagram Image

Scenario Diagram

Name Use Case	Managing solve
Primary Actor	<ul style="list-style-type: none">• TECHNICION
Description	Technicians can manage user-submitted problems
Pre-Condition	<ul style="list-style-type: none">• The user has sent a problem form to the technician• The form has been entered into the technician's dashboard and the technician can manage it
Success Scenario	users can submit forms and technicians can manage the problem
Main Success Scenario	<ul style="list-style-type: none">• The user has sent a problem form to the technician• The form has been entered into the technician's dashboard and the technician can manage it• problems can be resolved
Alternate	<ul style="list-style-type: none">• The file was not sent to the technician or there was an error (an error notification appears

Draw Scenario Diagram

Activity Diagrams

The following is the Login Activity Diagram

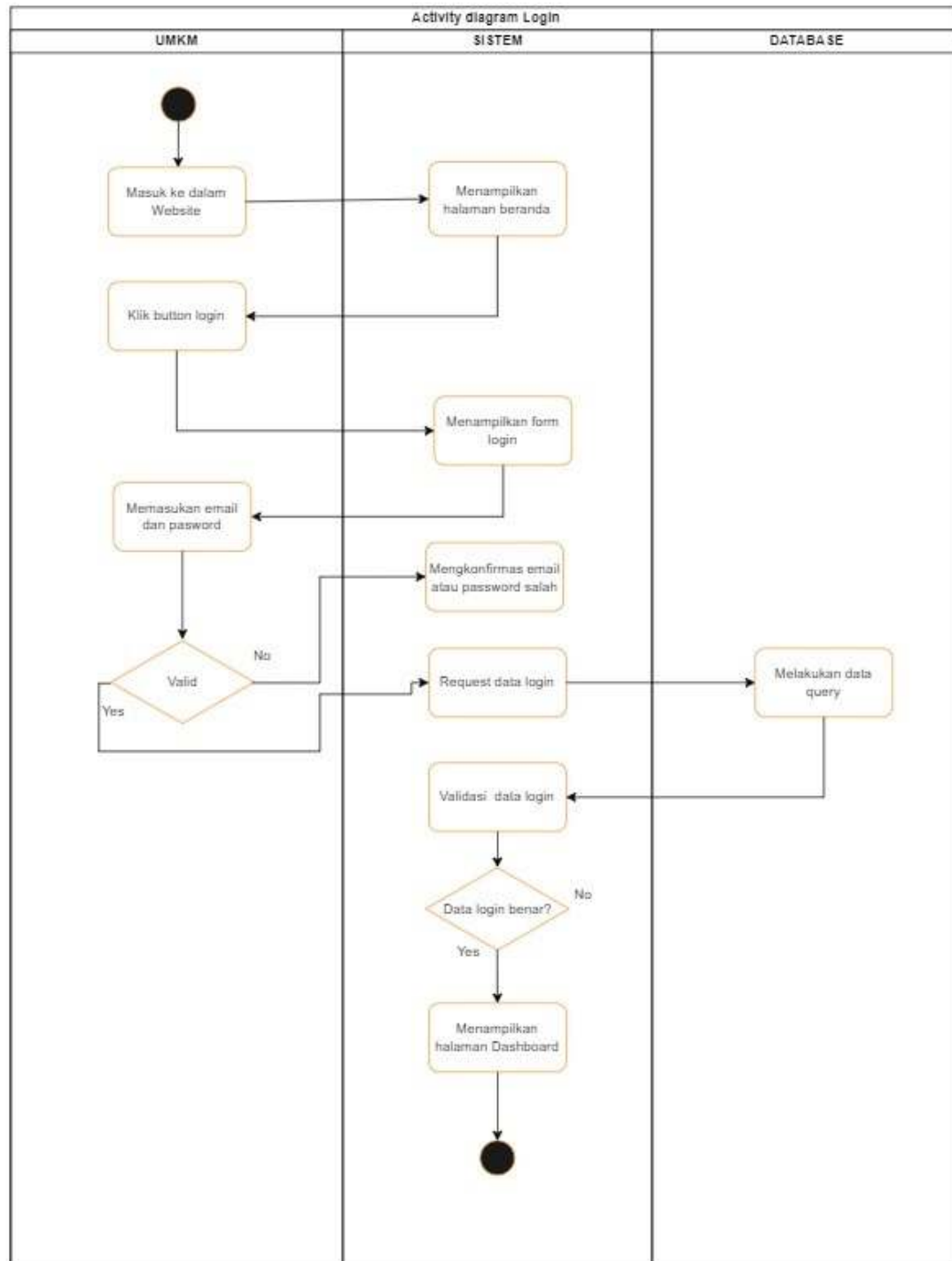
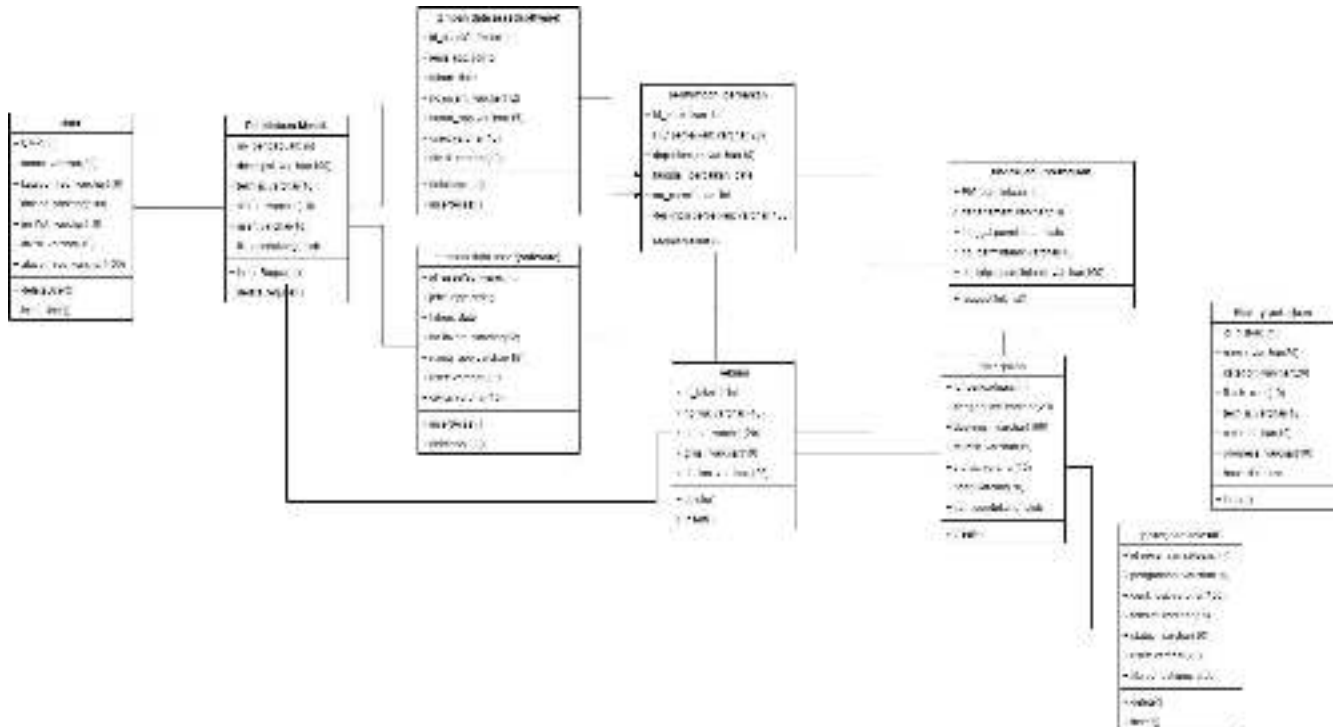


Image Activity Diagram

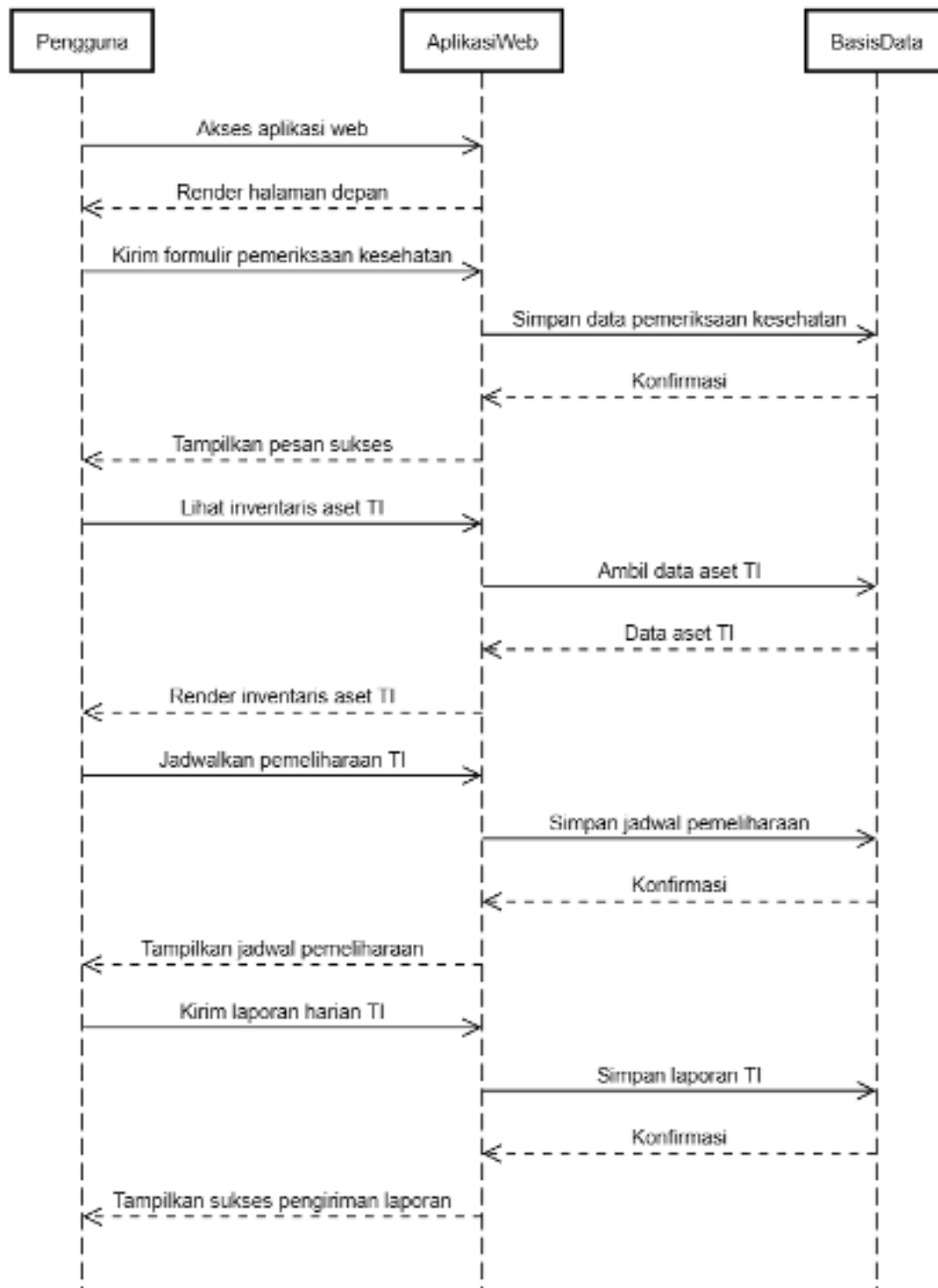
Class Diagrams

The following is a Class Diagram consisting of User, Incoming Request, Technician, Add Asset Data, and Repair Request tables.



Draw a Class Diagram

Sequence Diagrams



Database Design

Entity Relationship Diagrams

Below is the ER diagram for the User and Troubleshooting Request Table

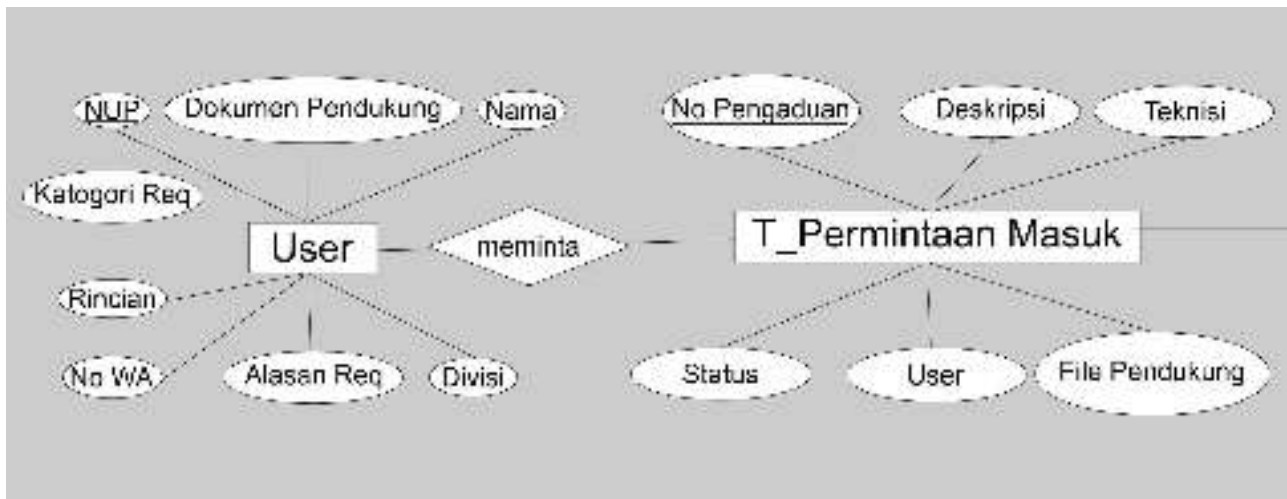


Figure ER Diagram 1

Following is the ER diagram for the IT Inventory module

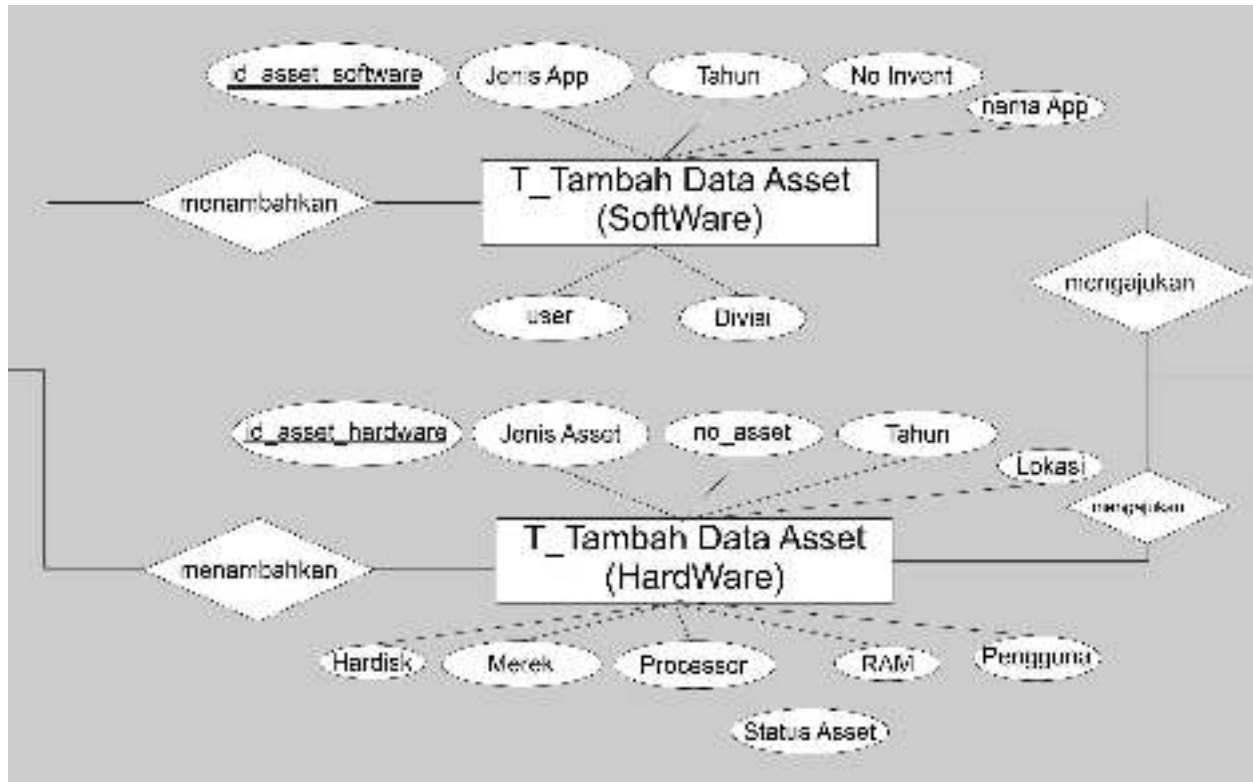


Figure ER Diagram 2

Following is the ER diagram for the Preventive Maintenance Module

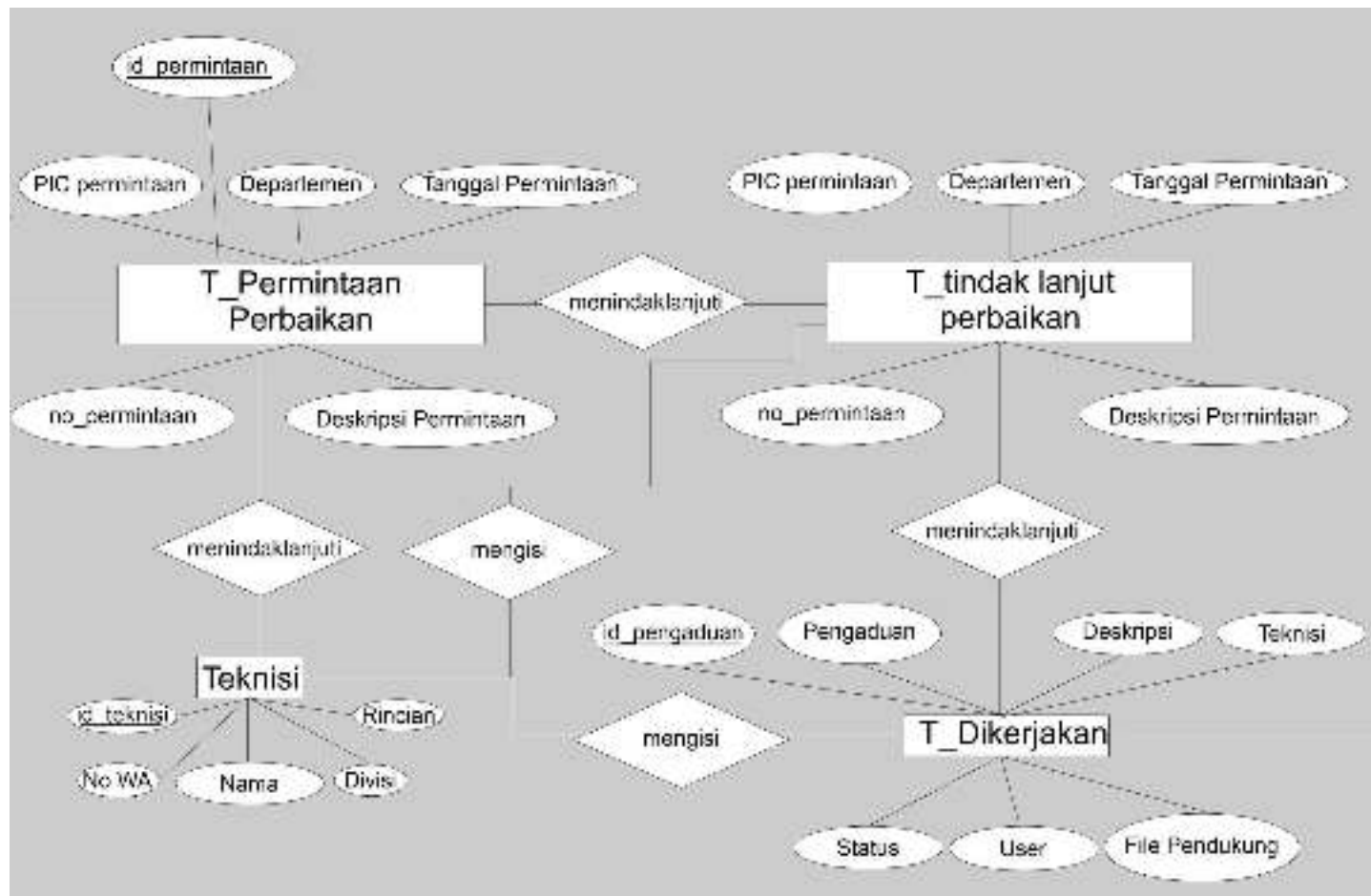


Figure ER Diagram 3

Following is the ER diagram for the Daily Work Report Module

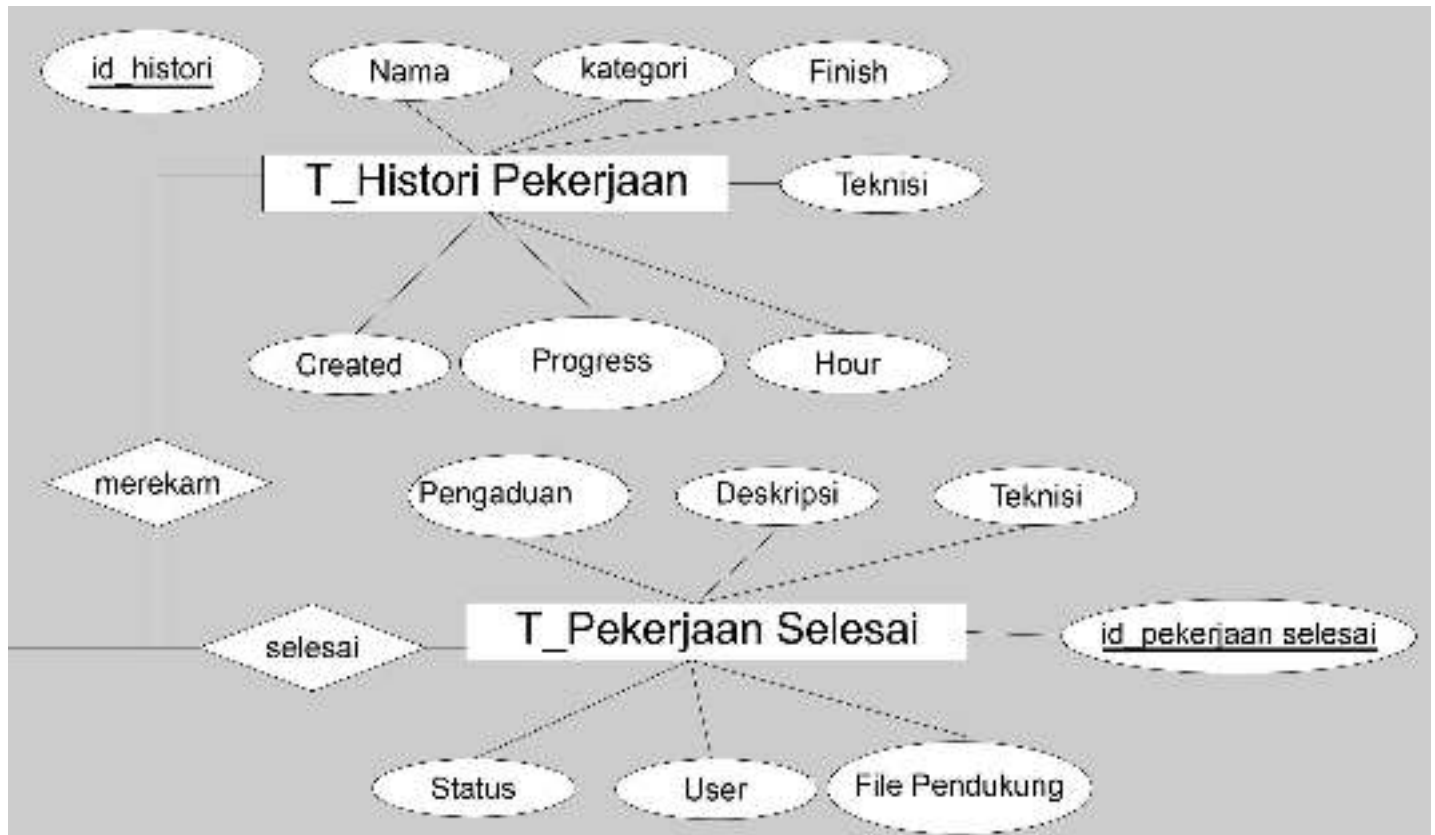
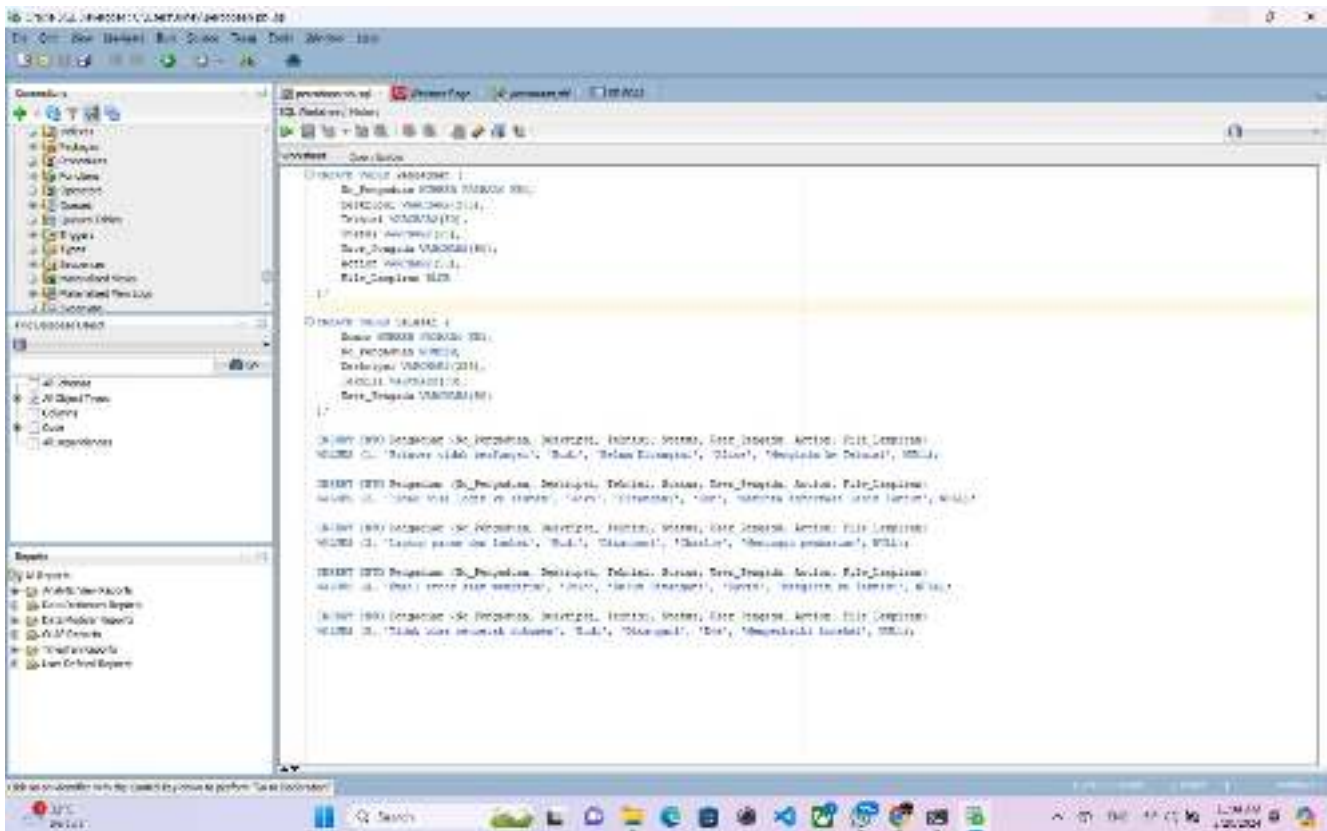


Figure ER Diagram 4

Relational Model



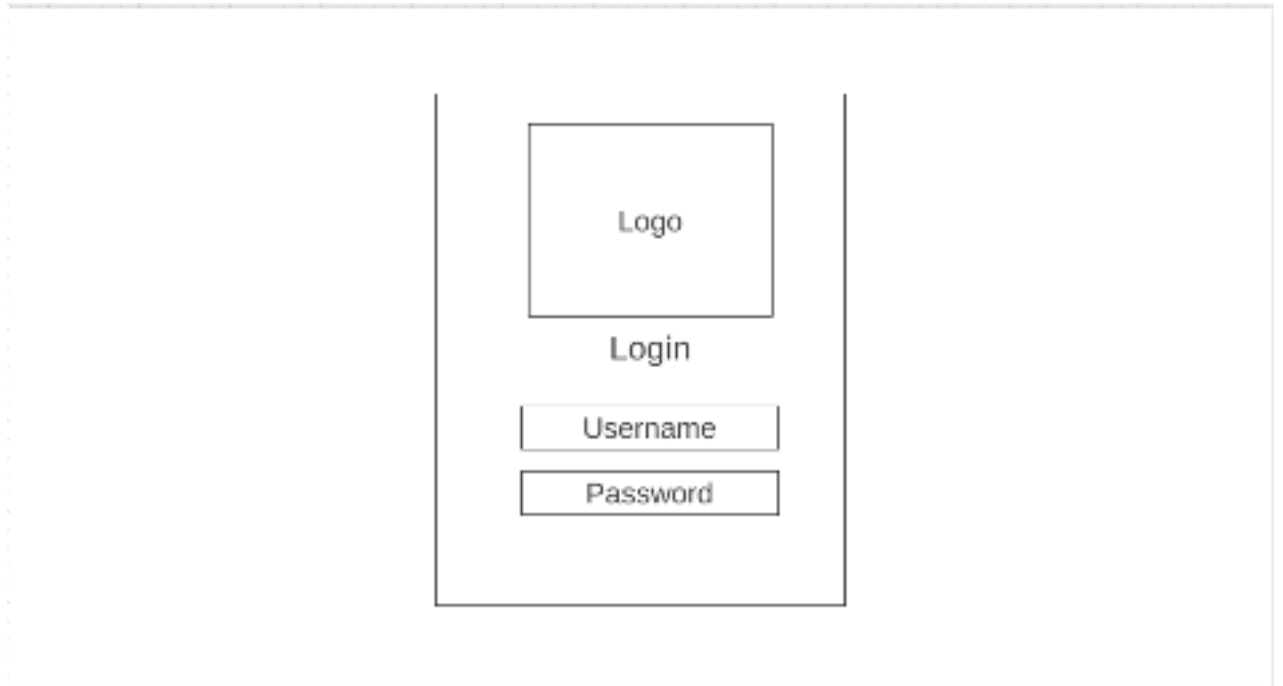
Relational Model Image 1



Relational Model Figure 2

Landing Page Wireframe Image

Wireframe Login



A wireframe diagram of a login form. The form is centered within a large rectangular container. Inside the container, there is a smaller rectangle representing the login area. Within this area, the elements are stacked vertically: a square box labeled "Logo", a text label "Login", a rectangular input field labeled "Username", and another rectangular input field labeled "Password".

Login Wireframe Image

Wireframe Dashboard Form



Wireframe Dashboard Form Image

Wireframe Dashboard List Data

Logo	Tab	Tab	Tab	Tab
------	-----	-----	-----	-----

No.	Name	Status	Desc	Date	Done

Wireframe Dashboard List Data Image

2. Mock up

Mockups aim to illustrate the structure, layout, and key visual elements of a product or application without necessarily including implementation details or actual functionality. Mockups can be created using the Figma design tool.

Full design mockup link in Figma:

[Figma Technical and IT Service Management Application – Figma](#)

Landing Pages





**PERSERO
BATAM**

**Selamat Datang di Aplikasi
Manajemen Layanan
Teknis Dan IT Persero Batam**


Username

Password

Login

Kembali

Landing Page - User Request



FORM KENDALIAN UCR

1. Nama Lengkap :

2. NIK :

3. NPM :

4. NIM :

5. NISN :

6. NIS :

7. NISN :

8. NIS :

9. NISN :

10. NIS :

11. NISN :

12. NIS :

13. NISN :

14. NIS :

15. NISN :

16. NIS :

17. NISN :

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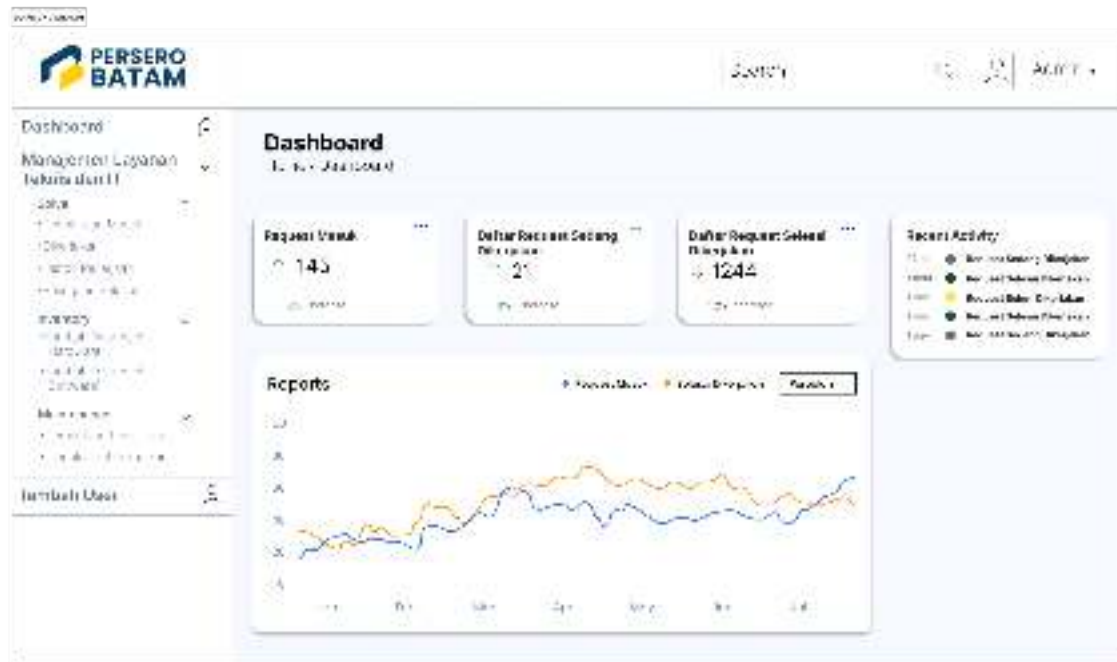
173. NISN :

174. NIS :

175. NISN :

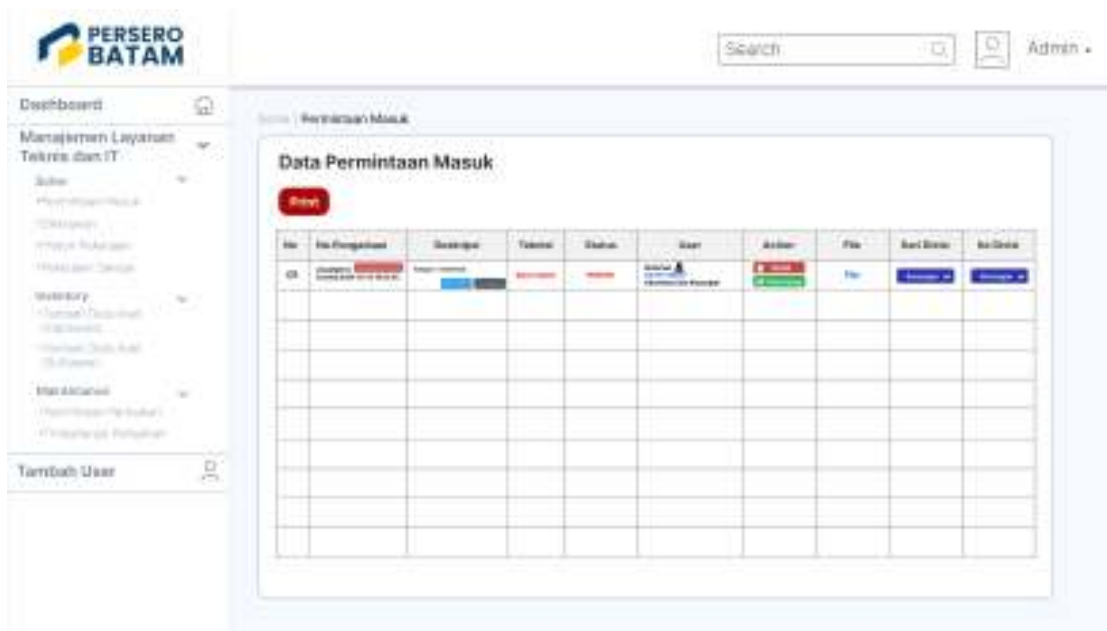
176. NIS : <

Landing Page Image - User Request



Dashboard Image

Solve Dashboard - Request Data entry table



Solve Dashboard Image - Data Incoming Request Table

Dashboard Solve - Table Solve

[illegible]

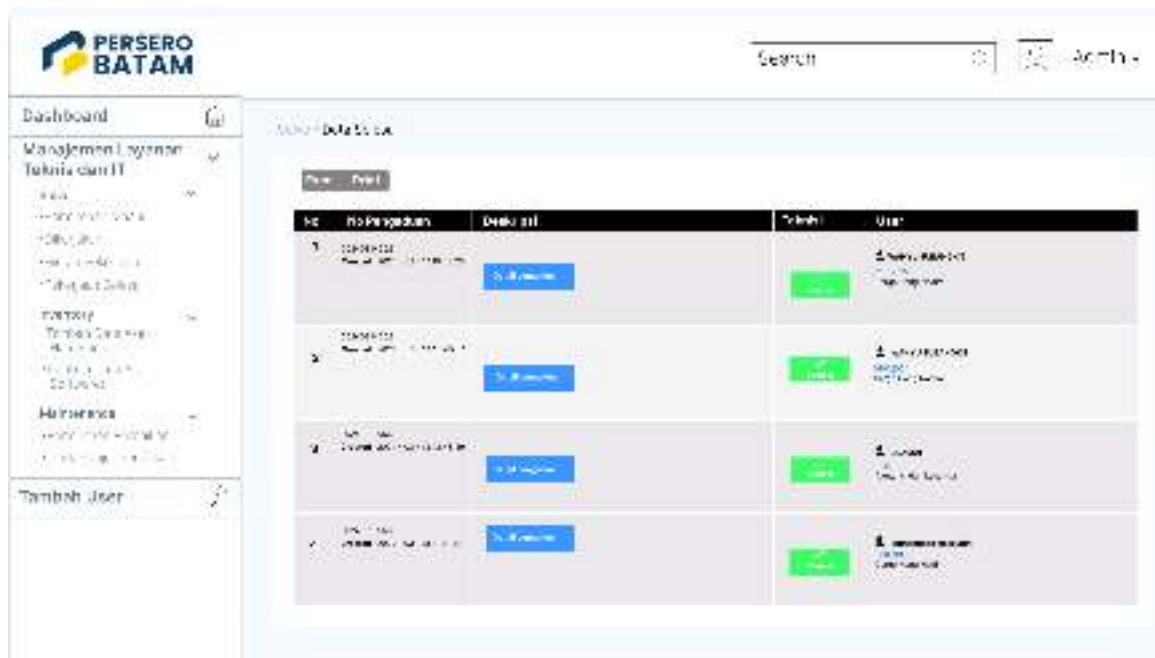
Solve Dashboard Image - Solve Table

Solve Dashboard - Job History Table

[illegible]

Solve Dashboard Image - Job History Table

Solve Dashboard - Completed Work Table

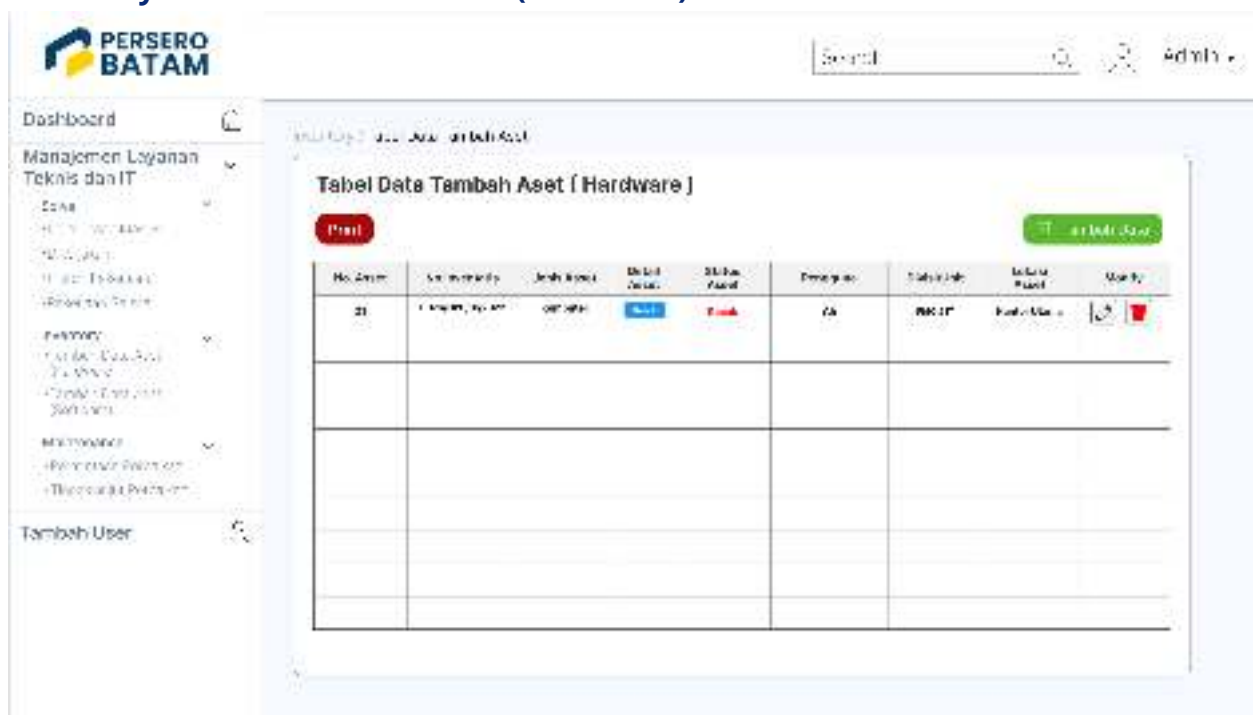


The screenshot shows the PERSERO BATAM dashboard with a sidebar menu on the left and a main content area. The sidebar menu includes 'Dashboard', 'Manajemen Layanan Teknis dan IT', and 'Tambah User'. The main content area displays a table titled 'Selesai Data Kerja' with columns: No, No Pengaduan, Deskripsi, Tindakan, and User. The table contains four rows of data, each with a 'Selesai' button and a 'Tindakan' button.

No	No Pengaduan	Deskripsi	Tindakan	User
1	00000001	Penyakit IT - ...	Selesai	Tindakan
2	00000002	Penyakit IT - ...	Selesai	Tindakan
3	00000003	Penyakit IT - ...	Selesai	Tindakan
4	00000004	Penyakit IT - ...	Selesai	Tindakan

Solve Dashboard Image - Completed Work Table

Inventory Dashboard - Add Asset (Hardware)



The screenshot shows the PERSERO BATAM dashboard with a sidebar menu on the left and a main content area. The sidebar menu includes 'Dashboard', 'Manajemen Layanan Teknis dan IT', and 'Tambah User'. The main content area displays a table titled 'Tambah Aset (Hardware)' with columns: No Aset, Nama Aset, Jenis Aset, Detail Aset, Status Aset, Pengadaan, Tahun Aset, Lokasi Aset, and Monev. The table contains one row of data, each with a 'Tambah Aset' button and a 'Monev' button.

No Aset	Nama Aset	Jenis Aset	Detail Aset	Status Aset	Pengadaan	Tahun Aset	Lokasi Aset	Monev
01	Computer, Laptop	Desktop	Detail Aset	Status Aset	DA	2021	Indra, Medan	Monev



Inventory Dashboard Image - Add Asset (Hardware)

Inventory Dashboard - Add Asset (Software)

[illegible]

Inventory Dashboard Image - Add Asset (Software)

Maintenance Dashboard - Repair Request Table

[illegible]

Maintenance Dashboard Image - Repair Request Table

Maintenance Dashboard - Repair Follow-up Table



Dashboard

Manajemen Layanan Teknis dan IT

Home

Manajemen Service

Manajemen User

Manajemen Request

Manajemen Ticket

Manajemen Log

Manajemen Audit

Manajemen Report

Manajemen Setting

Manajemen Profile

Manajemen Role

Manajemen Permission

Manajemen Group

Manajemen Account

Manajemen Password

Manajemen Email

Manajemen SMS

Manajemen Push

Manajemen Notification

Manajemen Alert

Manajemen Log

Manajemen Audit

Manajemen Report

Manajemen Setting

Manajemen Profile

Manajemen Role

Manajemen Permission

Manajemen Group

Manajemen Account

Manajemen Password

Manajemen Email

Manajemen SMS

Manajemen Push

Manajemen Notification

Manajemen Alert

Tambah User

Dashboard

Manajemen Layanan Teknis dan IT

Home

Manajemen Service

Manajemen User

Manajemen Request

Manajemen Ticket

Manajemen Log

Manajemen Audit

Manajemen Report

Manajemen Setting

Manajemen Profile

Manajemen Role

Manajemen Permission

Manajemen Group

Manajemen Account

Manajemen Password

Manajemen Email

Manajemen SMS

Manajemen Push

Manajemen Notification

Manajemen Alert

Tambah User

Dashboard

Manajemen Layanan Teknis dan IT

Home

Manajemen Service

Manajemen User

Manajemen Request

Manajemen Ticket

Manajemen Log

Manajemen Audit

Manajemen Report

Manajemen Setting

Manajemen Profile

Manajemen Role

Manajemen Permission

Manajemen Group

Manajemen Account

Manajemen Password

Manajemen Email

Manajemen SMS

Manajemen Push

Manajemen Notification

Manajemen Alert

Tambah User

No	Request ID	Request Title	Status	Priority	Requester Name	Action
1	REQ-0000001	Request for new server	Pending	High	John Doe	<div><div></div><div></div></div>
2	REQ-0000002	Request for new server	Pending	High	John Doe	<div><div></div><div></div></div>

Maintenance Dashboard Image - Repair Follow-up Table

Implementation Results

A. Application Implementation

The Persero Batam Technical and IT Services Management Application will have the main output in the form of a web version. Access will be limited to administrators responsible for application management. The implementation method that will be applied in developing this application is the Waterfall method, which allows continuous development and is responsive to changing needs.

The programming languages that will be used include PHP and JavaScript. The frameworks that will be used include Laravel for PHP, and Bootstrap CSS for display framing. As a database management system (DBMS), MySQL will be used to store this application data.

1. Laravel Implementation

Following are the contents of the `composer.json` file for configuring Laravel dependencies and related packages:

```
{
  "name": "laravel/laravel",
  "type": "project",
  "description": "The skeleton application for the Laravel framework.",
  "keywords": ["laravel", "framework"],
  "license": "MIT",
  "require": {
    "php": "^8.2",
    "laravel/frameworks": "^11.9",
    "laravel/sanctum": "^4.0",
    "laravel/tinker": "^2.9"
  },
  "require-dev": {
    "fakerphp/faker": "^1.23",
    "laravel/pint": "^1.13",
    "laravel/sail": "^1.26",
    "mockery/mockery": "^1.6",
    "nunomaduro/collision": "^8.0",
    "phpunit/phpunit": "^11.0.1"
  },
  "autoload": {
    "psr-4": {
      "App\\": "app/",
      "Database\\Factories\\": "databases/factories/",
      "Database\\Seeders\\": "database/seeders/"
    }
  }
}
```

```

"autoload-dev":{
  "psr-4":{
    "Tests\\": "tests/"
  }
},
"scripts":{
  "post-autoload-dump":[
    "Illuminate\\Foundation\\ComposerScripts::postAutoloadDump",
    "@php artisan package:discover --ansi"
  ],
  "post-update-cmd":[
    "@php artisan vendor:publish --tag=laravel-assets --ansi --force"
  ],
  "post-root-package-install":[
    "@php -r \"file_exists('.env') || copy('.env.example','.env');\""
  ],
  "post-create-project-cmd":[
    "@php artisan key:generate --ansi",
    "@php -r \"file_exists('database/database.sqlite') || touch('database/database.sqlite');\"",
    "@php artisan migrate --graceful --ansi"
  ]
},
"extra":{
  "laravel":{
    "dont-discover":[
      "laravel/dusk"
    ]
  }
},
"config":{
  "optimize-autoloader": true,
  "preferred-install": "dist",
  "sort-packages": true,
  "allow-plugins":{
    "pestphp/pest-plugin": true,
    "php-http/discovery": true
  }
},
"minimum-stability": "stable",
"prefer-stable": true
}
...

```

This application will use the Laravel framework version 11.9 with PHP version 8.2. Some additional packages to use include:

- laravel/sanctum: for API authentication
- laravel/tinker: for REPL (Read-Eval-Print-Loop) in the Laravel environment

For development, several packages that will be used include:

- fakerphp/faker: to create fake data
- laravel/pint: for analyzing PHP code
- laravel/sail: to facilitate development using Docker
- mockery/mockery: to create mock objects in testing
- nunomaduro/collision: to provide a better view when something goes wrong
- phpunit/phpunit: to run unit tests

This application will use the SQLite database management system for the development environment.

a. Routers

```
<?php

use App\Http\Controllers\MasterController; use
Illuminate\Support\Facades\Route;

//Route::get('/', function () { //
    returnsview('welcome'); //});

Route::get('/', [MasterController::classes,'index']);
Route::get('/auth-login-basic', [MasterController::classes,'login']); Route::get('/
dashboard', [MasterController::classes,'dashboards']);
Route::get('/data-done', [MasterController::classes,'data-done']); Route::get('/done',
[MasterController::classes,'done']);
Route::get('/form-hardware', [MasterController::classes,'form-hardware']);
Route::get('/request-form', [MasterController::classes,'request form']); Route::get('/form-risk',
[MasterController::classes,'form-risk']);
Route::get('/form-software', [MasterController::classes,'form-software']);
Route::get('/follow-up-form', [MasterController::classes,'form-follow-up']); Route::get('/hardware',
[MasterController::classes,'hardware']);
Route::get('/job_history', [MasterController::classes,'job_history']); Route::get('/landing',
[MasterController::classes,'landing']);
Route::get('/completed work', [MasterController::classes,'completed work']); Route::get('/
login_request', [MasterController::classes,'incoming_request']);
Route::get('/repair_request', [MasterController::classes,'repair_request']); Route::get('/request_user',
[MasterController::classes,'request_user']); Route::get('/software', [MasterController::classes,'software']);

Route::get('/follow-up_repair', [MasterController::classes,'follow-up_repair']);
```

2. Front End Implementation

As mentioned above, we use the Bootstrap Framework for the front end of the system

a. Landing Pages

```
<!DOCTYPEhtml>
<htmlang="en">

<head>
    <metacharset="utf-8"/>
    <metacontent="width=device-width, initial-scale=1.0"name="viewport"/>

    <title>Service Management
    Technical and IT</title>
    <metacontent=""name="description"/>
    <metacontent=""name="keywords"/>

    <!-- Favicons -->
    <linkhref="{{assets('assets/img/logo1.png')}}"rail="icon"/>
    <linkhref="{{assets('assets/img/apple-touch-icon.png')}}"rail="apple-touch-icon"/>

    <!-- Google Fonts -->
```

```

<link
href="https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,600,600i,700,700i|Roboto:300,300i,400,400i,500,500i,600,600i,700,700i|Poppins:300,300i,400,400i,500,500i,600,600i,700,700i"
rail="stylesheet"/>

<!-- Vendor CSS Files -->
<linkhref="{{assets('assets2/vendor/bootstrap/css/bootstrap.min.css')}}"rail="stylesheet"/>
<linkhref="{{assets('assets2/vendor/bootstrap-icons/bootstrap-icons.css')}}"rail="stylesheet"/>
<linkhref="{{assets('assets2/vendor/boxicons/css/boxicons.min.css')}}"rail="stylesheet"/>
<linkhref="{{assets('assets2/vendor/quill/quill.snow.css')}}"rail="stylesheet"/>
<linkhref="{{assets('assets2/vendor/quill/quill.bubble.css')}}"rail="stylesheet"/>
<linkhref="{{assets('assets2/vendor/remixicon/remixicon.css')}}"rail="stylesheet"/>
<linkhref="{{assets('assets2/vendor/simple-datatables/style.css')}}"rail="stylesheet"/>

<!-- Main CSS File Template -->
<linkhref="{{assets('assets/css/style.css')}}"rail="stylesheet"/>

<!-- =====
* Template Name: BizLand
* Updated: Jan 29 2024 with Bootstrap v5.3.2
* Template URL: https://bootstrapmade.com/bizland-bootstrap-business-template/
* Author: BootstrapMade.com
* License: https://bootstrapmade.com/license/
===== -->
</head>

<body>
<!-- ===== Header ===== -->
<headersid="header"classes="d-flex align-items-center text-center">
<divclasses="container d-flex align-items-center justify-content-center">
<h1classes="d-flex logo justify-content-center align-items-center">
<aclasses="navbar-brand"href="index.html">
<imgsrc="{{assets('assets/img/logo1.png')}}"alt="Persero"width="100%"height="100%"classes="d-inline-block align-text-top"/>
</a>
</h1>
</div>
</headers>

<!-- End Header -->

<!-- ===== Hero Section ===== -->
<sectionsid="hero"classes="d-flex align-items-center">
<divclasses="container"data-aos="zoom-out"data-aos-delay="100">
<h1>Welcome to the Persero Batam Technical and IT Services Management Application</h1>
<divclasses="d-flex mt-4">
<a href="/auth-login-basic"classes="btn-get-started scrollto me-2"style="background-color: #061097;">User Login</a>
<a href="/request_user"classes="btn-get-started scrollto"style="background-color: #eae1e6; color: black;">User Requests</a>
</div>
</div>
</section>

<!-- End Hero -->

<playid="play">

<!-- ===== Footer ===== -->
<footersid="footer">
<divclasses="container py-4">
<divclasses="copyright">
<strong>©Copyright</strong><span>BizLand</span>. All Rights Reserved
</div>

```

```

</div>
</footers>
<!-- End Footer -->

<div id="preloader"></div>
<a href="#" class="back-to-top d-flex align-items-center justify-content-center" >
  <i class="bi bi-arrow-up-short"></i></a>

<!-- Vendor JS Files -->
<script src="{{assets('assets2/vendor/apexcharts/apexcharts.min.js')}}"></script>
<script src="{{assets('assets2/vendor/bootstrap/js/bootstrap.bundle.min.js')}}"></script>
<script src="{{assets('assets2/vendor/chart.js/chart.umd.js')}}"></script>
<script src="{{assets('assets2/vendor/echarts/echarts.min.js')}}"></script>
<script src="{{assets('assets2/vendor/quill/quill.min.js')}}"></script>
<script src="{{assets('assets2/vendor/simple-datatables/simple-datatables.js')}}"></script>
<script src="{{assets('assets2/vendor/tinymce/tinymce.min.js')}}"></script>
<script src="{{assets('assets2/vendor/php-email-form/validate.js')}}"></script>

<!-- Main JS File Template -->
<script src="{{assets('assets/js/main.js')}}"></script>
</body>
</html>

```

In the `<head>`, there are meta settings such as charset and viewport, as well as links to various external resources such as favicon, Google Fonts, and several vendor CSS files for visual styling of components such as Bootstrap, icons, and the Quill editor.

Part `<body>` starting with a header containing the company logo located in the center. Then there is the "Hero" section which displays a welcome message as well as two buttons for logging in and requesting users.

The main part of the page (`<play>`) followed by a footer that includes copyright information.

At the end, there are several links to vendor JavaScript files to support the functionality of various components such as charts, text editors, and email validation, as well as the main JavaScript file (main.js) that manages page interactivity.

b. Login

```

<!DOCTYPE html>
<html lang="en" class="light-style customizer-hide" dir="ltr" data-theme="theme-default" data-assets-path="../assets/"
  data-template="vertical-menu-template-free">

<head>
  <meta charset="utf-8"/>
  <meta name="viewport"
    content="width=device-width, initial-scale=1.0, user-scalable=no, minimum-scale=1.0, maximum-scale=1.0"/>

```

```

<title>Technical and IT Services Management</title>

<metaname="description"content=""/>

<!-- Favicon -->
<linkrail="icon" type="image/x-icon" href="{{ assets('./assets/img/logo1.png') }}" />

<!-- Fonts -->
<linkrail="preconnect" href="https://fonts.googleapis.com"/>
<linkrail="preconnect" href="https://fonts.gstatic.com" crossorigin/>
<link
href="https://fonts.googleapis.com/css2?family=Public+Sans:ital,wght@0,300;0,400;0,500;0,600;0,700;1,300;1,400;1,500;1,600;1,700&display=swap"
rail="stylesheet"/>

<!-- Icons, Uncomment required icon fonts -->
<linkrail="stylesheet" href="{{ assets('./assets1/vendor/fonts/boxicons.css') }}" />

<!-- Core CSS -->
<linkrail="stylesheet" href="{{ assets('./assets1/vendor/css/core.css') }}" classes="template-customizer-core-css"/>
<linkrail="stylesheet" href="{{ assets('./assets1/vendor/css/theme-default.css') }}" classes="template-customizer-theme-css"/>
<linkrail="stylesheet" href="{{ assets('./assets1/css/demo.css') }}" />

<!-- CSS Vendors -->
<linkrail="stylesheet" href="{{ assets('./assets1/vendor/libs/perfect-scrollbar/perfect-scrollbar.css') }}" />

<!-- Page CSS -->
<!-- Page -->
<linkrail="stylesheet" href="{{ assets('./assets1/vendor/css/pages/page-auth.css') }}" />
<!-- Helpers -->
<scriptsrc="{{ assets('./assets1/vendor/js/helpers.js') }}"></scripts>

<!--! Template customizer & Theme config files MUST be included after core stylesheets and helpers.js in the <head> section -->
<!--? Config: Mandatory theme config file contains global vars & default theme options, Set your preferred theme option in this file.
-->
<scriptsrc="{{ assets('./assets1/js/config.js') }}"></scripts> </head>

<body>
<!--Content -->

<divclasses="container-xxl">
  <divclasses="authentication-wrapper authentication-basic container-py">
    <divclasses="authentication-inner">
      <!-- Register -->
      <divclasses="card">
        <divclasses="card-body">
          <!-- Logo -->
          <divclasses="app-brand justify-content-center">
            <a href="index.html" classes="app-brand-link gap-2">
              <spanclasses="app-brand-logo demo">
                <imgsrc="{{ assets('./assets/img/logo1.png') }}" alt="" width="300"/>
              </span>
              <!-- <span class="app-brand-text demo text-body fw-bolder">persero</span> -->
            </a>
          </div>
          <!-- /Logo -->

          <!-- speech -->
          <p4classes="mb-4" style="text-align: center; color: black; font-weight: bold;">Welcome to the App
            Persero Batam Technical and IT Services Management</p4>
          <!-- /speech -->

          <!-- login -->
          <formid="formAuthentication" classes="mb-3" action="index.html" method="POST">
            <divclasses="mb-3">
              <input type="text" classes="form-control" id="e-mail" name="email-username" placeholders="Username"
                autofocus/>
            </div>
            <divclasses="mb-3 form-password-toggle">
              <divclasses="d-flex justify-content-between">

```



```

        </div>
        <divclasses="input-group input-group-merge">
            <inputtype="password"id="password"classes="form-control"name="password"placeholders="Password"
                aria-describedby="password"/>
        </div>
    </div>
    <divclasses="mb-3">
    </div>
    <divclasses="mb-3"style="text-align: center;">
        <a href="/dashboard"type="button"classes="btn btn-rounded mb-3"
            style="background-color: #061097; color: white; width: 3 0%">Login</a>
    </div>
    </form>
    <!-- /login -->
</div>
</div>
<!-- /Register-->
</div>
</div>
</div>

<!-- /Content -->
<!-- CoreJS -->
<!-- build:js assets/vendor/js/core.js -->
<scriptsrc="{{ assets(../assets1/vendor/libs/jquery/jquery.js) }}"></script>
<scriptsrc="{{ assets(../assets1/vendor/libs/popper/popper.js) }}"></script>
<scriptsrc="{{ assets(../assets1/vendor/js/bootstrap.js) }}"></script>
<scriptsrc="{{ assets(../assets1/vendor/libs/perfect-scrollbar/perfect-scrollbar.js) }}"></script>

<scriptsrc="{{ assets(../assets1/vendor/js/menu.js) }}"></script>
<!-- endbuild -->

<!-- Vendors JS -->

<!-- Main JS -->
<scriptsrc="{{ assets(../assets1/js/main.js) }}"></script>

<!-- Page JS -->

<!-- Place this tag in your head or just before your close body tag. -->
<scriptsrc="https://buttons.github.io/buttons.js"></script> </body>

</html>

```

In `<body>`, there is a login page structure consisting of a welcome greeting and a login form. The login form contains input for username and password, as well as a button to direct the user to the dashboard page.

The script at the end of the document contains the various JavaScript libraries required for page functionality, including jQuery, Popper, Bootstrap, and the application's main script (main.js).

c. User Requests

```

<!DOCTYPE html>
<html lang="en" classes="light-style customizer-hide" dir="ltr" data-theme="theme-default" data-assets-path="../assets/"
    data-template="vertical-menu-template-free">
<head>
    <meta charset="utf-8"/>
    <meta name="viewport"

```

```

        content="width=device-width, initial-scale=1.0, user-scalable=no, minimum-scale=1.0, maximum-scale=1.0"/>

<title>Technical and IT Services Management</title>

<metaname="description"content=""/>

<!-- Favicon -->
<linkrail="icon"type="image/x-icon"href="/assets/img/logo1.png"/>

<!-- Fonts -->
<linkrail="preconnect"href="https://fonts.googleapis.com"/>
<linkrail="preconnect"href="https://fonts.gstatic.com"crossorigin/>
<link
href="https://fonts.googleapis.com/css2?family=Public+Sans:ital,wght@0,300;0,400;0,500;0,600;0,700;1,300;1,400;1,500;1,600;1,700&display=swap"

        rail="stylesheet"/>

<!-- Icons. Uncomment required icon fonts -->
<linkrail="stylesheet"href="{ assets( './assets1/vendor/fonts/boxicons.css' ) }"/>

<!-- Core CSS -->
<linkrail="stylesheet"href="{ assets( './assets1/vendor/css/core.css' ) }"classes="template-customizer-core-css"/>
<linkrail="stylesheet"href="{ assets( './assets1/vendor/css/theme-default.css' ) }"classes="template-customizer-theme-css"/>
<linkrail="stylesheet"href="{ assets( './assets1/css/demo.css' ) }"/>

<!-- CSS Vendors -->
<linkrail="stylesheet"href="{ assets( './assets1/vendor/libs/perfect-scrollbar/perfect-scrollbar.css' ) }"/>

<!-- Page CSS -->
<!-- Page -->
<linkrail="stylesheet"href="{ assets( './assets1/vendor/css/pages/page-auth.css' ) }"/>
<!-- Helpers -->
<scriptsrc="{ assets( './assets1/vendor/js/helpers.js' ) }"></scripts>

<!--! Template customizer & Theme config files MUST be included after core stylesheets and helpers.js in the <head> section -->
<!--? Config: Mandatory theme config file contains global vars & default theme options, Set your preferred theme option in this file. -->

<scriptsrc="{ assets( './assets1/js/config.js' ) }"></scripts> </head>

<body>
<!--Content -->
<divclasses="container-xxl">
    <divclasses="authentication-wrapper authentication-basic container-py">
        <divclasses="authentication-inner">
            <!-- Register -->
            <divclasses="card">
                <divclasses="card-body">
                    <!-- Logo -->
                    <divclasses="app-brand justify-content-center">
                        <a href="index.html" classes="app-brand-link gap-2">
                            <spanclasses="app-brand-logo demo">
                                <imgsrc="{ assets( './assets/img/logo1.png' ) }" alt="" width="300"/>
                            </span>
                            <!-- <span class="app-brand-text demo text-body fw-bolder">persero</span> -->
                        </a>
                    </div>
                    <!-- /Logo -->
                    <!-- Play -->
                    <playid="play" classes="play">
                        <divclasses="pagetitle">
                            <h1style="font-size: 24px;">User Request Form</h1>
                            <nav>
                                <olclasses="breadcrumbs">
                                    <liclasses="breadcrumb-item"><a href="#">If the data displayed on the form based on nup is not appropriate, order
can be changed with more valid data. Because the data that appears is based on the latest submissions</a></li>
                                </ol>
                            </nav>
                        </div>
                        <!-- Table -->
                        <sectionclasses="section">

```

```

<divclasses="row justify-content-center">
  <divclasses="col-50">
    <divclasses="card">
      <divclasses="card-body">
        <formaction=""method="post">
          <divclasses="row mb-3">
            <labelfor="item_number"classes="col-sm-10 col-form-label">NUP</label>
            <divclasses="col-sm-20">
              <inputtype="number"classes="form-control" id="item_number"/>
            </div>
          </div>
          <divclasses="row mb-3">
            <labelfor="product name"classes="col-sm-10 col-form-label">Name</label>
            <divclasses="col-sm-20">
              <inputtype="text"classes="form-control" id="product name"/>
            </div>
          </div>
          <divclasses="row mb-3">
            <labelfor="product_serial_number"classes="col-sm-10 col-form-label">Division</label>
            <divclasses="col-sm-20">
              <inputtype="text"classes="form-control" id="product_serial_number"/>
            </div>
          </div>
          <divclasses="row mb-3">
            <labelfor="product_quantity"classes="col-sm-10 col-form-label">Phone number</label>
            <divclasses="col-sm-20">
              <inputtype="number"classes="form-control" id="product_quantity"/>
            </div>
          </div>
          <divclasses="row mb-3">
            <labelfor="product_entry_date"classes="col-sm-10 col-form-label">Request Category</label>
            <divclasses="col-sm-20">
              <inputtype="number"classes="form-control" id="item_number"/>
            </div>
          </div>
          <divclasses="row mb-3">
            <labelfor="product_description"classes="col-sm-10 col-form-label">Explain the request in more detail</label>
            <divclasses="col-sm-20">
              <textareaclasses="form-control" id="product_description" rows="3"></textarea>
            </div>
          </div>
          <divclasses="row mb-3">
            <labelfor="product_description"classes="col-sm-10 col-form-label">Reason for Request</label>
            <divclasses="col-sm-20">
              <textareaclasses="form-control" id="product_description" rows="3"></textarea>
            </div>
          </div>
          <divclasses="row mb-3">
            <labelfor="item_image"classes="col-sm-10 col-form-label">Upload Supporting Documents</label>
            <divclasses="col-sm-20">
              <inputclasses="form-control" type="file" id="item_image"/>
            </div>
          </div>
        </form>
        <div class="d-md-flex justify-content-md-end mt-3">
          <button type="submit" classes="btn" style="background-color: #525ceb; color: white">Send</button>
        </div>
      </div>
    </div>
  </div>
</div>
</sections>
<!-- End Table -->
</play>
<!-- End Main -->
</div>
</div>
<!-- /Register -->
</div>
</div>
</div>

```

```

<!-- /Content -->
<!-- CoreJS -->
<!-- build:js assets/vendor/js/core.js -->
<scriptsrc="{{ assets('assets1/vendor/libs/jquery/jquery.js') }}"></script>
<scriptsrc="{{ assets('assets1/vendor/libs/jquery/jquery.js') }}"></script>
<scriptsrc="{{ assets('assets1/vendor/js/bootstrap.js') }}"></script>
<scriptsrc="{{ assets('assets1/vendor/libs/perfect-scrollbar/perfect-scrollbar.js') }}"></script>

<scriptsrc="{{ assets('assets1/vendor/js/menu.js') }}"></script>
<!-- endbuild -->

<!-- Vendors JS -->

<!-- Main JS -->
<scriptsrc="{{ assets('assets1/js/main.js') }}"></script>

<!-- Page JS -->

<!-- Place this tag in your head or just before your close body tag. -->
<scriptsrc="https://buttons.github.io/buttons.js"></script> </body>

</html>

```

The `<head>` section includes meta settings, links to favicon, fonts, CSS for icons, core styles, themes, and scripts for helpers and configuration.

Within the `<body>`, the page is divided into main sections. The main section contains the company logo, the page title "User Request Form", and an input form that allows users to submit new user requests. This form includes various inputs such as NUP, name, division, telephone number, request category, request description, reason for the request, and uploaded supporting documents. There is also a button to submit the form.

At the end of the document, there are several JavaScript scripts to support the page functionality, including jQuery, Bootstrap, Perfect Scrollbar, and the application's main script (main.js).

d. Dashboards

```

<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="utf-8"/>
  <meta content="width=device-width, initial-scale=1.0" name="viewport"/>

  <title>Persero Batam Technical and IT Services Management</title>
  <meta content="" name="description"/>
  <meta content="" name="keywords"/>

```

```

<!-- Favicons -->
<linkhref="{{ assets('assets/img/logo1.png') }}"rail="icon"/>
<linkhref="{{ assets('assets2/img/apple-touch-icon.png') }}"rail="apple-touch-icon"/>

<!-- Google Fonts -->
<linkhref="https://fonts.gstatic.com"rail="preconnect"/>
<link
href="https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,600,600i,700,700i|Nunito:300,300i,400,400i,600,600i,700,700i|Poppins:300,300i,400,400i,500,500i,600,600i,700,700i"
rail="stylesheet"/>

<!-- Vendor CSS Files -->
<linkhref="{{ assets('assets2/vendor/bootstrap/css/bootstrap.min.css') }}"rail="stylesheet"/>
<linkhref="{{ assets('assets2/vendor/bootstrap-icons/bootstrap-icons.css') }}"rail="stylesheet"/>
<linkhref="{{ assets('assets2/vendor/boxicons/css/boxicons.min.css') }}"rail="stylesheet"/>
<linkhref="{{ assets('assets2/vendor/quill/quill.snow.css') }}"rail="stylesheet"/>
<linkhref="{{ assets('assets2/vendor/quill/quill.bubble.css') }}"rail="stylesheet"/>
<linkhref="{{ assets('assets2/vendor/remixicon/remixicon.css') }}"rail="stylesheet"/>
<linkhref="{{ assets('assets2/vendor/simple-datatables/style.css') }}"rail="stylesheet"/>

<!-- Main CSS File Template -->
<linkhref="{{ assets('assets2/css/style.css') }}"rail="stylesheet"/>

<!-- =====
* Template Name: NiceAdmin
* Updated: Jan 29 2024 with Bootstrap v5.3.2
* Template URL: https://bootstrapmade.com/nice-admin-bootstrap-admin-html-template/
* Author: BootstrapMade.com
* License: https://bootstrapmade.com/license/
===== --> </
head>

<body>
<!-- ===== Header ===== -->
<headersid="header"classes="fixed-top header d-flex align-items-center">
  <divclasses="d-flex justify-content-center align-items-center">
    <a href="index.html"classes="d-flex logo align-items-center">
      <imgsrc="{{ assets('assets/img/logo1.png') }}"alt=""/>
    </a>
    <classes="bi bi-list toggle-sidebar-btn"></i>
  </div>

  <!-- End Logo -->

  <divclasses="search-bar">
    <formclasses="search-form d-flex align-items-center"method="POST"action="#">
      <inputtype="text"name="query"placeholders="Search"title="Enter search keywords"/>
      <buttontype="submit"title="Search"><classes="bi bi-search"></i></button>
    </form>
  </div>
  <!-- End Search Bar -->

  <navclasses="header-nav ms-auto">
    <ulclasses="d-flex align-items-center">
      <liclasses="nav-item d-block d-lg-none">
        <a href="#"classes="nav-link nav-icon search-bar-toggle">
          <classes="bi bi-search"></i>
        </a>
      </li>
      <!-- End Search Icon -->

      <liclasses="nav-item dropdown pe-3">
        <a href="#"data-bs-toggle="dropdown"classes="nav-link nav-profile d-flex align-items-center pe-0">
          <imgsrc="{{ assets('assets2/img/profile-img.jpg') }}"alt="Profile"classes="rounded-circle"/>
          <spanclasses="d-none d-md-block dropdown-toggle ps-2">K. Anderson</span> <!-- End Profile Image Icon -->
        </a>
        <ulclasses="dropdown-menu dropdown-menu-end dropdown-menu-arrow profile">
          <liclasses="dropdown-header">
            <p6>Kevin Anderson</p6>
            <span>Web Designer</span>

```

```

        </li>
        <li>
            <hrclasses="dropdown-divider"/>
        </li>

        <li>
            <aclasses="dropdown-item d-flex align-items-center"href="users-profile.html">
                <iclass="bi bi-person"></i>
                <span>My Profile</span>
            </a>
        </li>
        <li>
            <hrclasses="dropdown-divider"/>
        </li>

        <li>
            <aclasses="dropdown-item d-flex align-items-center"href="users-profile.html">
                <iclass="bi bi-gear"></i>
                <span>Account Settings</span>
            </a>
        </li>
        <li>
            <hrclasses="dropdown-divider"/>
        </li>

        <li>
            <aclasses="dropdown-item d-flex align-items-center"href="pages-faq.html">
                <iclass="bi bi-question-circle"></i>
                <span>Need Help?</span>
            </a>
        </li>
        <li>
            <hrclasses="dropdown-divider"/>
        </li>

        <li>
            <aclasses="dropdown-item d-flex align-items-center"href="#">
                <iclass="bi bi-box-arrow-right"></i>
                <span>Sign Out</span>
            </a>
        </li>
    </ul>
    <!-- End Profile Dropdown Items -->
</li>
<!-- End Profile Nav -->
</ul>
</nav>
<!-- End Icons Navigation -->
</headers>
<!-- End Header -->

<!-- ===== Sidebar ===== -->
<asideid="sidebar"classes="sidebar">
    <ulclasses="sidebar-nav"id="sidebar-nav">
        <liclasses="nav-item">
            <aclasses="nav-link"href="/dashboard">
                <iclass="bi bi-grid"></i>
                <span>Dashboards</span>
            </a>
        </li>

        <liclasses="nav-item">
            <aclasses="nav-link collapsed" data-bs-target="#tables-nav" data-bs-toggle="collapse" href="#">
                <iclass="bi bi-layout-text-window-reverse"></i><span>Technical & IT Services Management</span><iclass="bi bi-chevron-down ms-auto"></i>
            </a>
            <ulid="tables-nav"classes="nav-content collapse" data-bs-parent="#sidebar-nav">

                <!-- ===== Solve ===== -->
                <liclasses="nav-item">
                    <aclasses="nav-link collapsed" data-bs-target="#solve-nav" data-bs-toggle="collapse" href="#">
                        <iclass="bi bi-wrench"></i><span>Solve</span><iclass="bi bi-chevron-down ms-auto"></i>

```

```

</a>
<ulid="solve-nav"classes="nav-content collapse"data-bs-parent="#tables-nav">
  <li>
    <a href="/login_request">
      <classes="bi bi-envelope"></i><span>Login Request</span>
    </a>
  </li>
  <li>
    <a href="/done">
      <classes="bi bi-hammer"></i><span>Done</span>
    </a>
  </li>
  <li>
    <a href="/job_history">
      <classes="bi bi-clock-history"></i><span>Employment History</span>
    </a>
  </li>
  <li>
    <a href="/completed work">
      <classes="bi bi-circle"></i><span>Completed work</span>
    </a>
  </li>
</ul>
</li>
<!-- ===== End Solve ===== -->

<!-- ===== Inventory ===== -->
<liclasses="nav-item">
  <a classes="nav-link collapsed" data-bs-target="#inventory-nav" data-bs-toggle="collapse" href="#">
    <classes="bi bi-box-seam"></i><span>Inventory</span><classes="bi bi-chevron-down ms-auto"></i>
  </a>
  <ulid="inventory-nav"classes="nav-content collapse"data-bs-parent="#tables-nav">
    <li>
      <a href="/hardware">
        <classes="bi bi-cpu"></i><span>Add Asset Data (Hardware)</span>
      </a>
    </li>
    <li>
      <a href="/software">
        <classes="bi bi-file-earmark-code"></i><span>Add Asset Data (Software)</span>
      </a>
    </li>
  </ul>
</li>
<!-- ===== End Inventory ===== -->

<!-- ===== Maintenance ===== -->
<liclasses="nav-item">
  <a classes="nav-link collapsed" data-bs-target="#maintenance-nav" data-bs-toggle="collapse" href="#">
    <classes="bi bi-tools"></i><span>Maintenance</span><classes="bi bi-chevron-down ms-auto"></i>
  </a>
  <ulid="maintenance-nav"classes="nav-content collapse"data-bs-parent="#tables-nav">
    <li>
      <a href="/repair_request">
        <classes="bi bi-bug"></i><span>Repair Request</span>
      </a>
    </li>
    <li>
      <a href="/follow-up_repair">
        <classes="bi bi-arrow-repeat"></i><span>Improvement Follow-up</span>
      </a>
    </li>
  </ul>
</li>
<!-- ===== End Maintenance ===== -->

</ul>
</li>

<!-- ===== Add User ===== -->
<liclasses="nav-item">
  <a classes="nav-link" href="add_user.html">

```

```

        <i classes="bi bi-person-plus"></i>
        <span>Add User</span>
      </a>
    </li>
    <!-- ===== End Add User ===== -->

  </ul>
</aside>
<!-- End Sidebar-->

<!-- main -->
<playid="play" classes="play">
  <div classes="pagetitle">
    <h1>Dashboards</h1>
    <nav>
      <ol classes="breadcrumbs">
        <li classes="breadcrumb-item"><a href="index.html">Home</a></li>
        <li classes="breadcrumb-item active">Dashboards</li>
      </ol>
    </nav>
  </div>
  <!-- End Page Title -->

  <section classes="dashboard section">
    <div classes="row">
      <!-- Left side columns -->
      <div classes="col-lg-8">
        <div classes="row">
          <!-- List of Unworked Requests -->
          <div classes="col-xxl-4 col-md-6">
            <div classes="info card-sales card-card">
              <div classes="filter">
                <a classes="icon" href="#" data-bs-toggle="dropdown"><i classes="bi bi-three-dots"></i></a>
                <ul classes="dropdown-menu dropdown-menu-end dropdown-menu-arrow">
                  <li classes="dropdown-header text-start">
                    <p6>Filter</p6>
                  </li>

                  <li><a classes="dropdown-item" href="#">Today</a></li>
                  <li><a classes="dropdown-item" href="#">This Month</a></li>
                  <li><a classes="dropdown-item" href="#">This Year</a></li>
                </ul>
              </div>
            </div>

            <div classes="card-body">
              <p5 classes="card-title">Login Request List</p5>

              <div classes="d-flex align-items-center">
                <div classes="card-icon rounded-circle d-flex align-items-center justify-content-center">
                  <i classes="bi bi-inbox"></i>
                </div>
                <div classes="ps-3">
                  <p6>145</p6>
                  <span classes="text-danger small pt-1 fw-bold">12%</span> <span
                    classes="text-muted small pt-2 ps-1">increase</span>
                </div>
              </div>
            </div>
          </div>
          <!-- End Sales Card -->

          <!-- List of Requests in Progress -->
          <div classes="col-xxl-4 col-md-6">
            <div classes="info card-sales card-card">
              <div classes="filter">
                <a classes="icon" href="#" data-bs-toggle="dropdown"><i classes="bi bi-three-dots"></i></a>
                <ul classes="dropdown-menu dropdown-menu-end dropdown-menu-arrow">
                  <li classes="dropdown-header text-start">
                    <p6>Filter</p6>
                  </li>

```



```

        <li><a<classes="dropdown-item"href="#">Today</a></li>
        <li><a<classes="dropdown-item"href="#">This Month</a></li>
        <li><a<classes="dropdown-item"href="#">This Year</a></li>
    </ul>
</div>

<divclasses="card-body">
    <p5classes="card-title">List of Requests Under Construction</p5>

    <divclasses="d-flex align-items-center">
        <divclasses="card-icon rounded-circle d-flex align-items-center justify-content-center">
            <i<classes="bi bi-hourglass-split"></i>
        </div>
        <divclasses="ps-3">
            <p6>145</p6>
            <spanclasses="text-secondary small pt-1 fw-bold">12%</span> <span
            classes="text-muted small pt-2 ps-1">increase</span>
        </div>
    </div>
</div>
</div>
</div>
</div>
<!-- End Sales Card -->

<!-- List of Completed Requests -->
<divclasses="col-xxl-4 col-md-6">
    <divclasses="card info-card customers-card">
        <divclasses="filter">
            <a<classes="icon"href="#"data-bs-toggle="dropdown"><i<classes="bi bi-three-dots"></i></a>
            <ulclasses="dropdown-menu dropdown-menu-end dropdown-menu-arrow">
                <li<classes="dropdown-header text-start">
                    <p6>Filter</p6>
                </li>

                <li><a<classes="dropdown-item"href="#">Today</a></li>
                <li><a<classes="dropdown-item"href="#">This Month</a></li>
                <li><a<classes="dropdown-item"href="#">This Year</a></li>
            </ul>
        </div>

        <divclasses="card-body">
            <p5classes="card-title">List of Completed Requests</p5>

            <divclasses="d-flex align-items-center">
                <divclasses="card-icon rounded-circle d-flex align-items-center justify-content-center">
                    <i<classes="bi bi-check-circle"></i>
                </div>
                <divclasses="ps-3">
                    <p6>1244</p6>
                    <spanclasses="text-success small pt-1 fw-bold">12%</span> <span
                    classes="text-muted small pt-2 ps-1">decrease</span>
                </div>
            </div>
        </div>
    </div>
</div>
</div>
</div>
<!-- End Revenue Card -->

<!-- Reports -->
<divclasses="col-12">
    <divclasses="card">
        <divclasses="filter">
            <a<classes="icon"href="#"data-bs-toggle="dropdown"><i<classes="bi bi-three-dots"></i></a>
            <ulclasses="dropdown-menu dropdown-menu-end dropdown-menu-arrow">
                <li<classes="dropdown-header text-start">
                    <p6>Filter</p6>
                </li>

                <li><a<classes="dropdown-item"href="#">Today</a></li>
                <li><a<classes="dropdown-item"href="#">This Month</a></li>
                <li><a<classes="dropdown-item"href="#">This Year</a></li>
            </ul>
        </div>

```

```

</div>

<divclasses="card-body">
  <p5classes="card-title">Reports<span>/Today</span></p5>

  <!-- Line Chart -->
  <divid="reportsChart"></div>

  <scripts>
    documents.addEventListener("DOMContentLoaded", () => {
      newApexCharts(documents.querySelector("#reportsChart"), {
        series:[
          {
            name:"Sales",
            data:[31,40,28,51,42,82,56],
          },
          {
            name:"Revenue",
            data:[11,32,45,32,34,52,41],
          },
          {
            name:"Customers",
            data:[15,11,32,18,9,24,11],
          },
        ],
        charts:{
          height:350,
          type:"area",
          toolbars:{
            shows:false,
          },
        },
        markers:{
          size:4,
        },
        colors:["#4154f1","#2eca6a","#ff771d"],
        fill:{
          type:"gradient",
          gradients:{
            shadeIntensity:1,
            opacityFrom:0.3,
            opacityTo:0.4,
            stops:[0,90,100],
          },
        },
        dataLabels:{
          enabled:false,
        },
        strokes:{
          curve:"smooth",
          width:2,
        },
        xaxis:{
          type:"datetime",
          categories:["2018-09-19T00:00:00.000Z","2018-09-19T01:30:00.000Z","2018-09-19T02:30:00.000Z",
"2018-09-19T03:30:00.000Z","2018-09-19T04:30:00.000Z","2018-09-19T05:30:00.000Z","2018-09-19T06:30:00.000Z"],
        },
        tooltip:{
          x:{
            format:"dd/MM/yy HH:mm",
          },
        },
      }).render();
    });
  </scripts>
  <!-- End Line Chart -->
</div>
</div>
<!-- End Reports -->
</div>
</div>

```

```

<!-- End Left side columns -->

<!-- Right side columns -->
<divclasses="col-lg-4">
  <!-- Recent Activity -->
  <divclasses="card">
    <divclasses="filter">
      <aclasses="icon"href="#"data-bs-toggle="dropdown"><i></i></a>
      <ulclasses="dropdown-menu dropdown-menu-end dropdown-menu-arrow">
        <liclasses="dropdown-header text-start">
          <p6>Filter</p6>
        </li>

        <li><aclasses="dropdown-item"href="#">Today</a></li>
        <li><aclasses="dropdown-item"href="#">This Month</a></li>
        <li><aclasses="dropdown-item"href="#">This Year</a></li>
      </ul>
    </div>

    <divclasses="card-body">
      <p5classes="card-title">Recent Activity<span> | Today</span></p5>

      <divclasses="activity">
        <divclasses="activity-item d-flex">
          <divclasses="activite-label">32 min</div>
          <iclasses="bi bi-circle-fill activity-badge text-secondary align-self-start"></i>
          <divclasses="activity-content"><a href="#" classes="fw-bold text-dark">Request
            Being worked on</a></div>
        </div>
        <!-- End activity item-->

        <divclasses="activity-item d-flex">
          <divclasses="activite-label">1 hour</div>
          <iclasses="bi bi-circle-fill activity-badge text-success align-self-start"></i>
          <divclasses="activity-content"><a href="#" classes="fw-bold text-dark">Request
            Done</a></div>
        </div>
        <!-- End activity item-->

        <divclasses="activity-item d-flex">
          <divclasses="activite-label">1 day</div>
          <iclasses="bi bi-circle-fill activity-badge text-warning align-self-start"></i>
          <divclasses="activity-content"><a href="#" classes="fw-bold text-dark">Request
            Not done</a></div>
        </div>
        <!-- End activity item-->

        <divclasses="activity-item d-flex">
          <divclasses="activite-label">1 day</div>
          <iclasses="bi bi-circle-fill activity-badge text-success align-self-start"></i>
          <divclasses="activity-content"><a href="#" classes="fw-bold text-dark">Request
            Done</a></div>
        </div>
        <!-- End activity item-->

        <divclasses="activity">
          <divclasses="activity-item d-flex">
            <divclasses="activite-label">1 day</div>
            <iclasses="bi bi-circle-fill activity-badge text-secondary align-self-start"></i>
            <divclasses="activity-content"><a href="#" classes="fw-bold text-dark">Request
              Being worked on</a></div>
          </div>
          <!-- End activity item-->

          <divclasses="activity-item d-flex">
            <divclasses="activite-label">1 day</div>
            <iclasses="bi bi-circle-fill activity-badge text-success align-self-start"></i>
            <divclasses="activity-content"><a href="#" classes="fw-bold text-dark">Request
              Done</a></div>
          </div>
          <!-- End activity item-->
        </div>
      </div>
    </div>
  </div>

```

```

        </div>
    </div>
    <!-- End Recent Activity -->

    <!-- Budget Report -->
    <!-- End Budget Report -->

    <!-- Website Traffic -->
    <!-- End Website Traffic -->

    <!-- News & Updates Traffic -->
    <!-- End News & Updates -->
</div>
<!-- End Right side columns -->
</div>
</sections>
</play>
<!-- End #main -->

<!-- ===== Footer ===== -->
<footersid="footer"classes="footer">
    <divclasses="copyright">
        © Copyright<strong><span>NiceAdmin</span></strong>. All Rights Reserved
    </div>
    <divclasses="credits">
        <!-- All the links in the footer should remain intact. -->
        <!-- You can delete the links only if you purchased the pro version. -->
        <!-- Licensing information: https://bootstrapmade.com/license/ -->
        <!-- Purchase the pro version with working PHP/AJAX contact form: https://
bootstrapmade.com/nice-admin-bootstrap-admin-html-template/ -->
        Designed by<a href="https://bootstrapmade.com/">BootstrapMade</a>
    </div>
</footers>
<!-- End Footer -->

<a href="#"classes="back-to-top d-flex align-items-center justify-content-center"><i
classes="bi bi-arrow-up-short"></i></a>

<!-- Vendor JS Files -->
<scriptsrc="{{ assets( './assets2/vendor/apexcharts/apexcharts.min.js' ) }}"></script>
<scriptsrc="{{ asset( './assets2/vendor/bootstrap/js/bootstrap.bundle.min.js' ) }}"></script>
<scriptsrc="{{ assets( './assets2/vendor/chart.js/chart.umd.js' ) }}"></script>
<scriptsrc="{{ assets( './assets2/vendor/echarts/echarts.min.js' ) }}"></script>
<scriptsrc="{{ assets( './assets2/vendor/quill/quill.min.js' ) }}"></script>
<scriptsrc="{{ asset( './assets2/vendor/simple-datatables/simple-datatables.js' ) }}"></script>
<scriptsrc="{{ assets( './assets2/vendor/tinymce/tinymce.min.js' ) }}"></script>
<scriptsrc="{{ asset( './assets2/vendor/php-email-form/validate.js' ) }}"></script>

<!-- Main JS File Template -->
<scriptsrc="{{ assets( './assets2/js/main.js' ) }}"></script> </body>

</html>

```

The main structure consists of a header, sidebar, and main content. The following is an explanation of the components:

1. Header: The top of the page displays the company logo, sidebar toggle buttons, search bar, and user profile dropdown menu. This facilitates quick navigation and access to common functions.
2. Sidebar: The navigation bar on the left side of the screen provides access to various system features. The main menu is Dashboard and Service Management

Technical & IT. This last sub-menu is further divided into:

- Solve: to handle incoming requests, work in progress, work history, and completed work.
 - Inventory: to manage hardware and software assets.
 - Maintenance: to handle repair requests and follow up.
- There is also an Add User menu for system user management.

3. Main Content: This section displays important information in an easy-to-read format:

- Three info cards display statistics for incoming, work in progress, and completed requests.
- Report charts using ApexCharts for visualization of data trends such as sales, revenue, and customers.
- The recent activity pane on the right side displays a log of recent events in the system.

4. Footer: The bottom of the page contains copyright information and design credits.

e. Solve

i. Login Request Table

```
<playid="play"classes="play">
  <divclasses="pagetitle">
    <h1>Incoming Request Data</h1>
  </div>
  <!-- End Page Title -->

  <!-- main -->
  <sectionclasses="section">
    <divclasses="row">
      <divclasses="col-lg-12">
        <divclasses="card">
          <divclasses="card-body">
            <p5classes="card-title">Data Request</p5>
            <a href="#" type="button" classes="btn btn-rounded btn-danger mb-3">Print</a>

            <!-- Table with stripped rows -->
            <tableclasses="datatable">
              <thead>
                <tr>
                  <th>No.</th>
                  <th>Complaint No</th>
                  <th>Description</th>
                  <th>Technician</th>
                  <th>Status</th>
                  <th>Users</th>
                  <th>Action</th>
                  <th>Files</th>
                  <th>From Division</th>
                </tr>
              </thead>
            </table>
          </div>
        </div>
      </div>
    </div>
  </section>
</main>
</play>
```

```

        <th>To Division</th>
    </tr>
</thead>
<tbody>
    <tr>
        <earlier>1</earlier>
        <earlier>29022024<ahref="inventory-form.html" type="button" classes="btn btn-rounded btn-danger
mb-2"></>Not yet handled</a>

        <earlier></earlier>
        <earlier><ahref="inventory-form.html" type="button" classes="btn btn-rounded btn-primary
mb-3">Details</a></earlier>

        <earlier>classes="text-danger">Not selected yet</earlier>
        <earlier>classes="text-danger">Pending</earlier>
        <earlier>Brahman</earlier>
        <earlier><ahref="inventory-form.html" type="button" classes="btn btn-rounded btn-danger mb-3"><i
classes="bi bi-trash" style="margin-right: 5px"></i>Cancelled</a></earlier>

        <earlier></earlier>
        <earlier><ahref="inventory-form.html" type="button" classes="btn btn-rounded btn-primary
mb-3">Finance</a></earlier>

        <earlier><ahref="inventory-form.html" type="button" classes="btn btn-rounded btn-primary
mb-3">Marketing</a></earlier>

    </tr>
    <tr>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
    </tr>
    <tr>
        <earlier>3</earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
    </tr>
    <tr>
        <earlier>4</earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
    </tr>
    <tr>
        <earlier>5</earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
    </tr>
</tbody>
</table>
<!-- End Table with stripped rows -->
</div>
</div>
</div>
</sections>
</play>
<!-- End #main -->

```



```

        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
    </tr>
    <tr>
        <earlier>3</earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
    </tr>
    <tr>
        <earlier>4</earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
    </tr>
    <tr>
        <earlier>5</earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
        <earlier></earlier>
    </tr>
</tbody>
</table>
<!-- End Table with stripped rows -->
</div>
</div>
</div>
</div>
</sections>
</play>
<!-- End #main -->

```

The main part of the page displays the title "Data Worked on". There is a main section that shows a table of work being done by the IT unit. This table has columns for complaint number, description, technician, status, user, action, file, from division, and to division. There are several example job entries in this table with various statuses and actions that can be taken.

iii. Job History Table

```

<!-- main -->
<sectionsclasses="section">

```



```

<divclasses="row">
  <divclasses="col-lg-12">
    <divclasses="card">
      <divclasses="card-body">
        <p5classes="card-title">Data History</p5>
        <a href="inventory-form.html" type="button" classes="btn btn-rounded btn-danger mb-3">Print</a>

        <!-- Table with stripped rows -->
        <tableclasses="datatable">
          <thead>
            <tr>
              <th>No.</th>
              <th>Name</th>
              <th>Category</th>
              <th>Technician</th>
              <th>created</th>
              <th>Progress</th>
              <th>finished</th>
              <th>Hour</th>
            </tr>
          </thead>
          <tbody>
            <tr>
              <earlier>1</earlier>
              <earlier>Zee</earlier>
              <earlier>Curico</earlier>
              <earlier>Zee</earlier>
              <earlier>Fenn</earlier>
              <earlier>37%</earlier>
              <earlier>Curico</earlier>
              <earlier>1 Hour</earlier>
            </tr>
            <tr>
              <earlier>2</earlier>
              <earlier>Zoé</earlier>
              <earlier>Curico</earlier>
              <earlier>Zoé</earlier>
              <earlier>Fenn</earlier>
              <earlier>97%</earlier>
              <earlier>Curico</earlier>
              <earlier>4 Hours</earlier>
            </tr>
            <tr>
              <earlier>3</earlier>
              <earlier>Zoé</earlier>
              <earlier>Curico</earlier>
              <earlier>Zoé</earlier>
              <earlier>Fenn</earlier>
              <earlier>97%</earlier>
              <earlier>Curico</earlier>
              <earlier>4 Hours</earlier>
            </tr>
            <tr>
              <earlier>4</earlier>
              <earlier>Zoé</earlier>
              <earlier>Curico</earlier>
              <earlier>Zoé</earlier>
              <earlier>Fenn</earlier>
              <earlier>97%</earlier>
              <earlier>Curico</earlier>
              <earlier>4 Hours</earlier>
            </tr>
            <tr>
              <earlier>5</earlier>
              <earlier>Zoé</earlier>
              <earlier>Curico</earlier>
              <earlier>Zoé</earlier>
              <earlier>Fenn</earlier>
              <earlier>97%</earlier>
              <earlier>Curico</earlier>
              <earlier>4 Hours</earlier>
            </tr>
          </tbody>
        </table>
      </div>
    </div>
  </div>
</div>

```

```

        </tbody>
      </table>
      <!-- End Table with stripped rows -->
    </div>
  </div>
</div>
</sections>
</play>
<!-- End #main -->

```

d. Table of completed work

f. Inventory

iv. Table add assets (Hardware)

```

<playid="play"classes="play">
  <divclasses="pagetitle">
    <h1>Add Hardware Assets</h1>
  </div>
  <!-- End Page Title -->

  <sectionsclasses="section">
    <divclasses="row">
      <divclasses="col-lg-12">
        <divclasses="card">
          <divclasses="card-body">
            <p5classes="card-title">Hardware</p5>

            <formaction=""method="post">
              <divclasses="row mb-3">
                <labelfor="item_number"classes="col-sm-2 col-form-label">Inventory No</label>
                <divclasses="col-sm-10">
                  <inputtype="number"classes="form-control"id="inventory_number"/>
                </div>
              </div>
              <divclasses="row mb-3">
                <labelfor="product name"classes="col-sm-2 col-form-label">Year</label>
                <divclasses="col-sm-10">
                  <inputtype="text"classes="form-control"id="year"/>
                </div>
              </div>
              <divclasses="row mb-3">
                <labelfor="product_serial_number"classes="col-sm-2 col-form-label">Type</label>
                <divclasses="col-sm-10">
                  <inputtype="text"classes="form-control"id="type"/>
                </div>
              </div>
              <divclasses="row mb-3">
                <labelfor="product_quantity"classes="col-sm-2 col-form-label">Brand</label>
                <divclasses="col-sm-10">
                  <inputtype="number"classes="form-control"id="product_quantity"/>
                </div>
              </div>
              <divclasses="row mb-3">
                <labelfor="product_quantity"classes="col-sm-2 col-form-label">Proc</label>
                <divclasses="col-sm-10">
                  <inputtype="number"classes="form-control"id="Proc"/>
                </div>
              </div>
              <divclasses="row mb-3">
                <labelfor="product_quantity"classes="col-sm-2 col-form-label">RAM</label>
                <divclasses="col-sm-10">
                  <inputtype="number"classes="form-control"id="ram"/>
                </div>
              </div>
            </form>
          </div>
        </div>
      </div>
    </div>
  </sections>
</play>

```


year, type, brand, technical specifications (proc, RAM, HDD), IP, user, unit, location, status, Windows, Office, and warranty.

b. Add asset table (Software)

```
<playid="play"classes="play">
  <divclasses="pagetitle">
    <h1>Add Software Assets</h1>
  </div>
  <!-- End Page Title -->

  <sectionsclasses="section">
    <divclasses="row">
      <divclasses="col-lg-12">
        <divclasses="card">
          <divclasses="card-body">
            <p5classes="card-title">Software</p5>

            <formaction=""method="post">
              <divclasses="row mb-3">
                <labelfor="item_number"classes="col-sm-2 col-form-label">Inventory No</label>
                <divclasses="col-sm-10">
                  <inputtype="number"classes="form-control"id="inventory_number"/>
                </div>
              </div>
              <divclasses="row mb-3">
                <labelfor="product name"classes="col-sm-2 col-form-label">Year</label>
                <divclasses="col-sm-10">
                  <inputtype="text"classes="form-control"id="year"/>
                </div>
              </div>
              <divclasses="row mb-3">
                <labelfor="product_serial_number"classes="col-sm-2 col-form-label">Application Type</label>
                <divclasses="col-sm-10">
                  <inputtype="text"classes="form-control"id="app_type"/>
                </div>
              </div>
              <divclasses="row mb-3">
                <labelfor="product_quantity"classes="col-sm-2 col-form-label">Application Name</label>
                <divclasses="col-sm-10">
                  <inputtype="number"classes="form-control"id="app_name"/>
                </div>
              </div>
              <divclasses="row mb-3">
                <labelfor="product_quantity"classes="col-sm-2 col-form-label">User</label>
                <divclasses="col-sm-10">
                  <inputtype="number"classes="form-control"id="user"/>
                </div>
              </div>
              <divclasses="row mb-3">
                <labelfor="product_quantity"classes="col-sm-2 col-form-label">Division</label>
                <divclasses="col-sm-10">
                  <inputtype="number"classes="form-control"id="Division"/>
                </div>
              </div>
            </form>

            <divclasses="d-md-flex justify-content-md-end mt-3">
              <buttontype="submit"classes="btn"
                style="background-color: #525ceb; color: white">Send</button>
            </div>
          </div>
        </div>
      </div>
    </div>
  </sections>
</play>
<!-- End #main -->
```

The main part of the page (<main>) displays a form for adding new software assets. This form includes several inputs for inventory number, year, application type, application name, user, and division.

g. Maintenance

i. Repair request table

```
<sectionclasses="section">
  <divclasses="row">
    <divclasses="col-lg-12">
      <divclasses="card">
        <divclasses="card-body">
          <h5classes="card-title">Repair Request</h5>

          <form action="" method="post">
            <divclasses="row mb-3">
              <labelfor="item_number"classes="col-sm-2 col-form-label">Request No</label>
              <divclasses="col-sm-10">
                <inputtype="number"classes="form-control" id="request_number"/>
              </div>
            </div>
            <divclasses="row mb-3">
              <labelfor="product_description"classes="col-sm-2 col-form-label">Description</label>
              <divclasses="col-sm-10">
                <textareaclasses="form-control" id="product_description" rows="3"></textarea>
              </div>
            </div>
            <divclasses="row mb-3">
              <labelfor="product_serial_number"classes="col-sm-2 col-form-label">Department</label>
              <divclasses="col-sm-10">
                <inputtype="text"classes="form-control" id="app_type"/>
              </div>
            </div>
            <divclasses="row mb-3">
              <labelfor="product_quantity"classes="col-sm-2 col-form-label">Pic Request</label>
              <divclasses="col-sm-10">
                <inputtype="number"classes="form-control" id="app_name"/>
              </div>
            </div>
            <divclasses="row mb-3">
              <labelfor="product_entry_date"classes="col-sm-2 col-form-label">Request Date</label>
              <divclasses="col-sm-10">
                <inputtype="date"classes="form-control" id="product_entry_date"/>
              </div>
            </div>
          </form>

          <divclasses="d-md-flex justify-content-md-end mt-3">
            <buttontype="submit"classes="btn"
              style="background-color: #525ceb; color: white">Send</button>
          </div>
        </div>
      </div>
    </div>
  </div>
</section>
</main>
<!--End#play -->
```

In this form, the user is asked to fill in some information: request number, description, department, PIC (person in charge) of the request, and

request date. Each information is input through form elements such as text input, textarea, and date input. Once the form is filled in, the user can send the request by pressing the "Send" button. This code uses classes from Bootstrap for styling and layout

ii. Repair follow-up table

```
<sectionclasses="section">
  <divclasses="row">
    <divclasses="col-lg-12">
      <divclasses="card">
        <divclasses="card-body">
          <p5classes="card-title">Improvement Follow-up</p5>
          <divclasses="d-flex justify-content-between mb-3">
            <a href="#" type="button" classes="btn btn-rounded" <classes="bi bi-funnel"
              style="margin-right: 5px"></a>
            <a href="/formrepair" type="button" classes="btn btn-rounded btn-primary"
              <classes="bi bi-plus-square" style="margin-right: 5px"></a>Plus
          </a>
        </div>
      </div>
    </div>
  </div>

  <!-- Table with stripped rows -->
  <tableclasses="datatable">
    <thead>
      <tr>
        <th>No</th>
        <th>Asset Code</th>
        <th>Information</th>
        <th>Status</th>
        <th>Pic</th>
        <th>Request Date</th>
        <th>Modify</th>
      </tr>
    </thead>
    <tbody>
      <tr>
        <td>
          <earlier></earlier>
          <earlier>017/CPU/V/2024</earlier>
          <earlier>PC Crashed</earlier>
          <earlierclasses="text-danger">Open</earlier>
          <earlier>IT Admin</earlier>
          <earlier>02/29/2024</earlier>
          <earlier><classes="bi bi-eye"></i>
            <classes="bi bi-pencil-square"></i>
          </earlier>
        </td>
      </tr>
      <tr>
        <td>
          <earlier></earlier>
          <earlier>017/CPU/V/2028</earlier>
          <earlier>Monitor Off</earlier>
          <earlierclasses="text-primary">Close</earlier>
          <earlier>IT Admin</earlier>
          <earlier>02/29/2028</earlier>
          <earlier><classes="bi bi-eye"></i>
            <classes="bi bi-pencil-square"></i>
          </earlier>
        </td>
      </tr>
      <tr>
        <td>
          <earlier></earlier>
          <earlier></earlier>
          <earlier></earlier>
          <earlier></earlier>
          <earlier></earlier>
        </td>
      </tr>
    </tbody>
  </table>
```

```

<earlier></earlier>
<earlier></earlier>
<earlier></earlier>
</tr>
<tr>
<earlier>3</earlier>
<earlier></earlier>
<earlier></earlier>
<earlier></earlier>
<earlier></earlier>
<earlier></earlier>
<earlier></earlier>
<earlier></earlier>
<earlier></earlier>
</tr>
<tr>
<earlier>4</earlier>
<earlier></earlier>
<earlier></earlier>
<earlier></earlier>
<earlier></earlier>
<earlier></earlier>
<earlier></earlier>
<earlier></earlier>
<earlier></earlier>
</tr>
<tr>
<earlier>5</earlier>
<earlier></earlier>
<earlier></earlier>
<earlier></earlier>
<earlier></earlier>
<earlier></earlier>
<earlier></earlier>
<earlier></earlier>
<earlier></earlier>
</tr>
</tbody>
</table>
<!-- End Table with stripped rows -->
</div>
</div>
</div>
</sections>
</play>
<!-- End #main -->

```

The main part is a table that displays repair request data. This table has columns for number, asset code, description, status, PIC (person in charge), request date, and options to modify the entry (view or edit). There's also a way to show information such as open or closed repair status, and there are icons for viewing and editing entries.

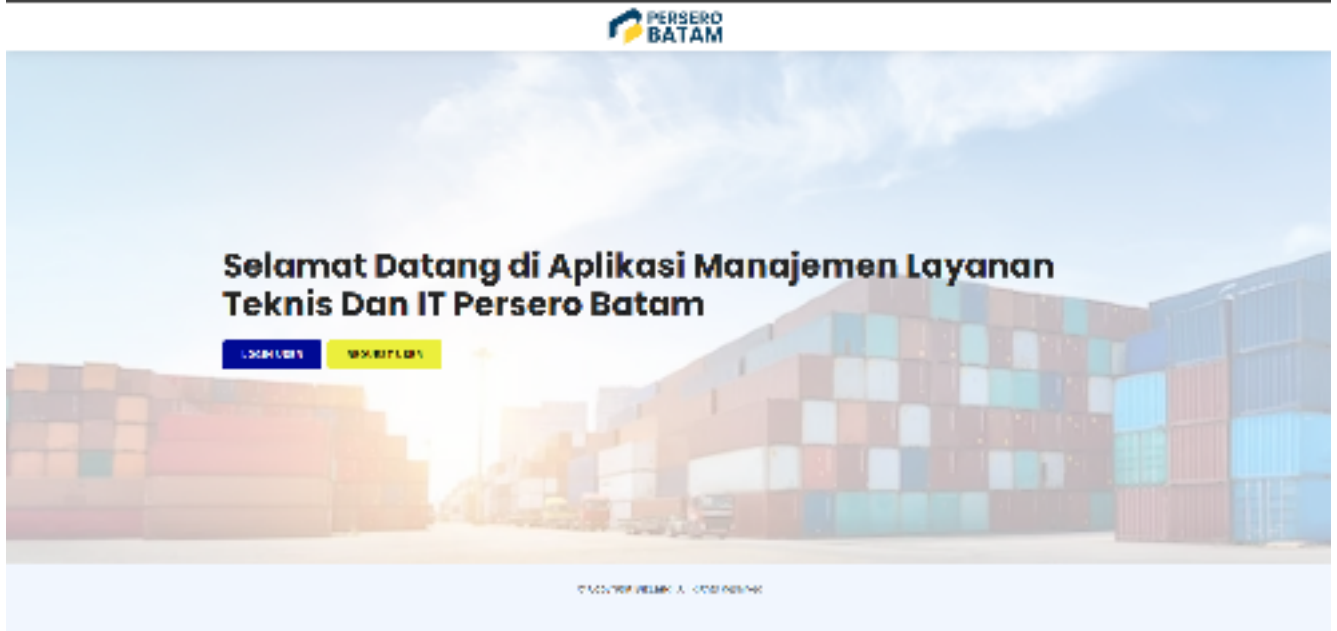
3. Feature Implementation

This Technical and IT Services Management application has several features, here is an explanation and screenshot of these features:

1. Landing Pages

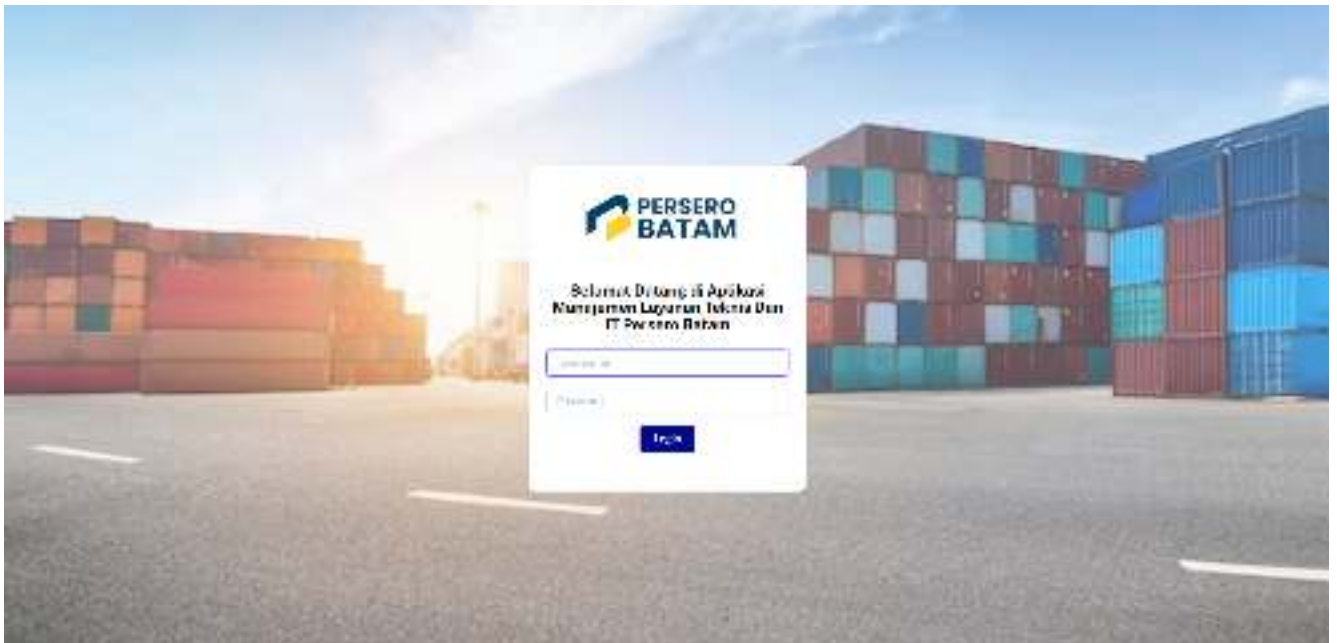
The first page you will see when visiting the website, there is a Login Button for admins to enter the dashboard and a User Request for

Persero Batam employees made a request.



Landing Page Image

2. Login



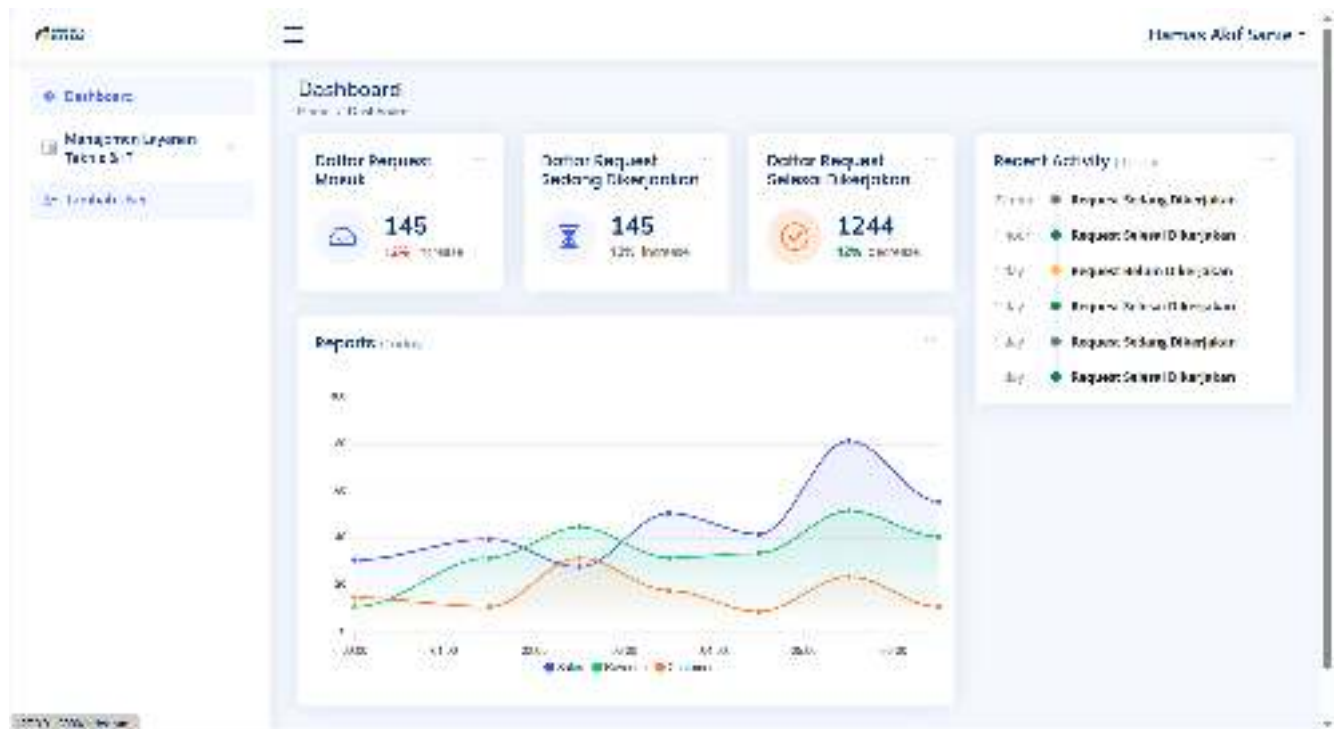
Login Image

3. User Requests



User Request Image

4. Dashboards



Dashboard Image

5. Incoming Request Table

Dashboard

Manajemen Layanan

Tambah User

Home Akif Samir

Data Permintaan Masuk

10

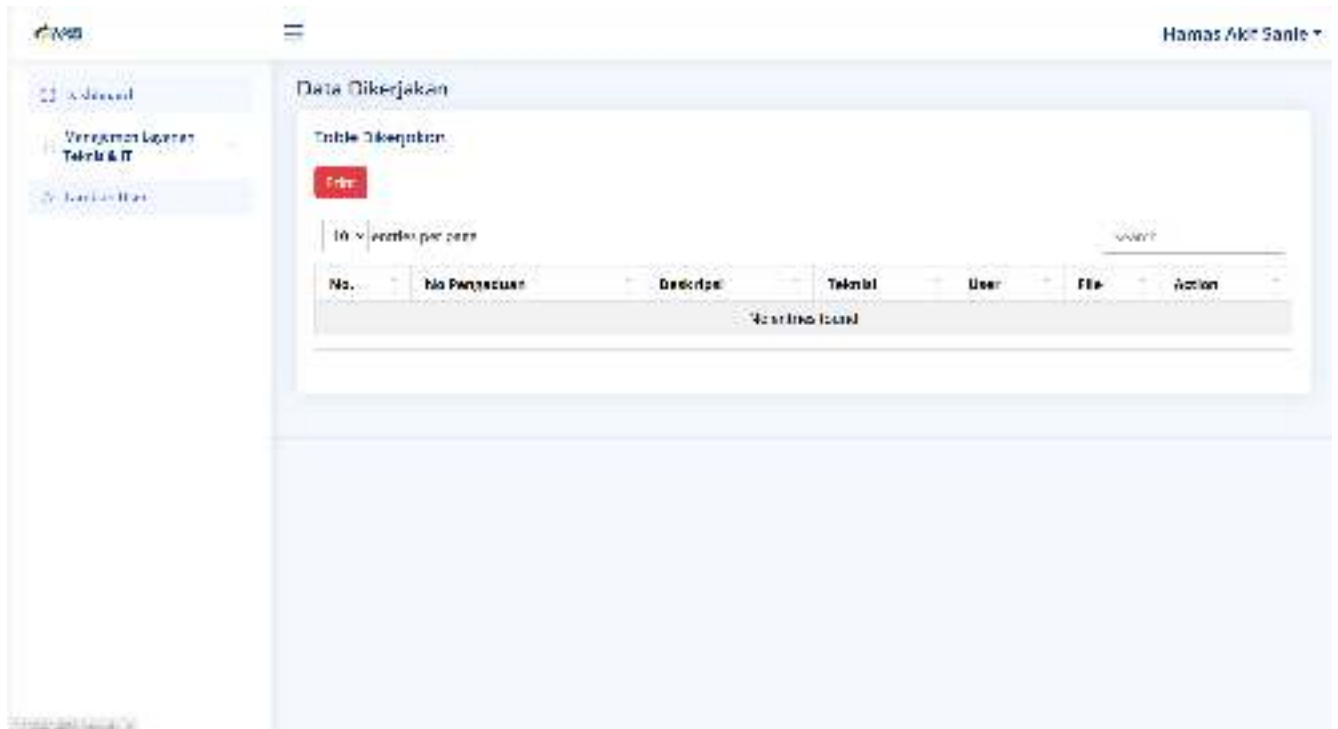
data per page

Search

No	Ko Pengajuan	Deskripsi	Teknis	Diker	File	Action
1	2024-06-20 12:12:12 Bekas Diangin Hendriyanto 1234567890 Created : 2024-06-20 12:12:12	Deskripsi	~Pilih Teknis~ Aangin	John Doe 601 1234 081234567890 1234	File	Response
2	2024-06-20 12:12:12 Bekas Diangin Hendriyanto 1234567890 Created : 2024-06-20 12:12:12	Deskripsi	~Pilih Teknis~ Aangin	John Doe 601 1234 081234567890 1234	File	Response
3	2024-06-20 12:12:12 Bekas Diangin Hendriyanto 1234567890 Created : 2024-06-20 12:12:12	Deskripsi	~Pilih Teknis~ Aangin	John Doe 601 1234 081234567890 1234	File	Response
4	2024-06-20 12:12:12 Bekas Diangin Hendriyanto 1234567890 Created : 2024-06-20 12:12:12	Deskripsi	~Pilih Teknis~ Aangin	John Doe 601 1234 081234567890 1234	File	Response

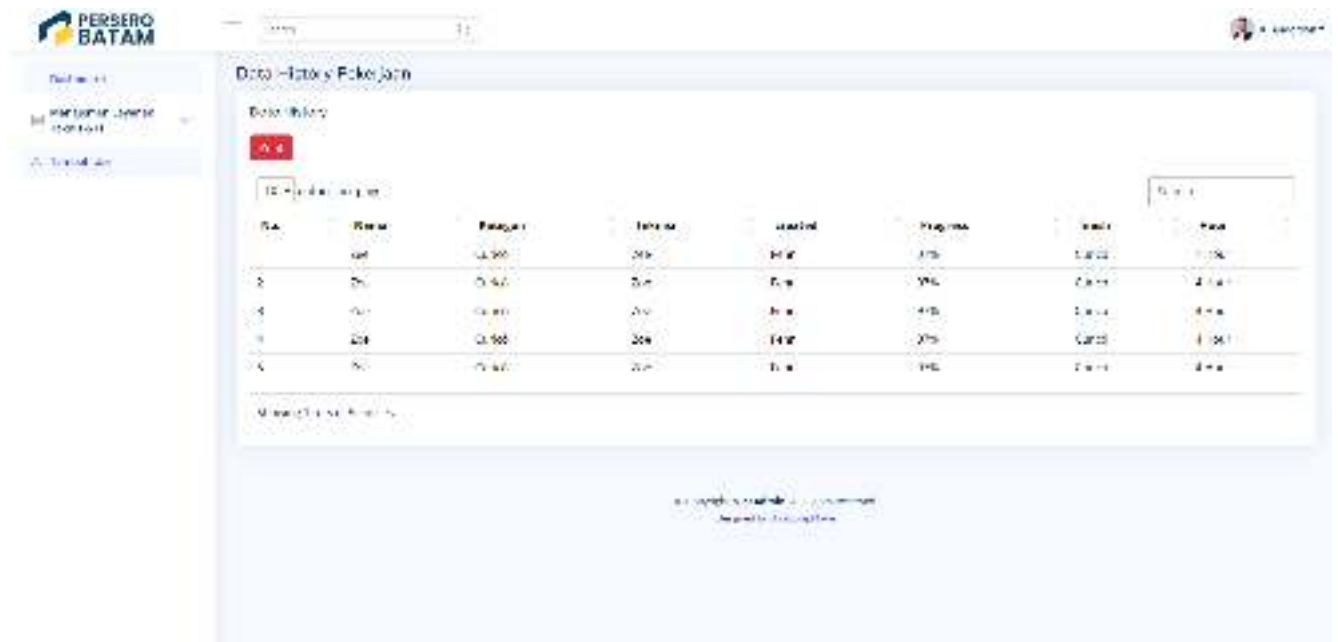
Login Request Image

6. Table Done



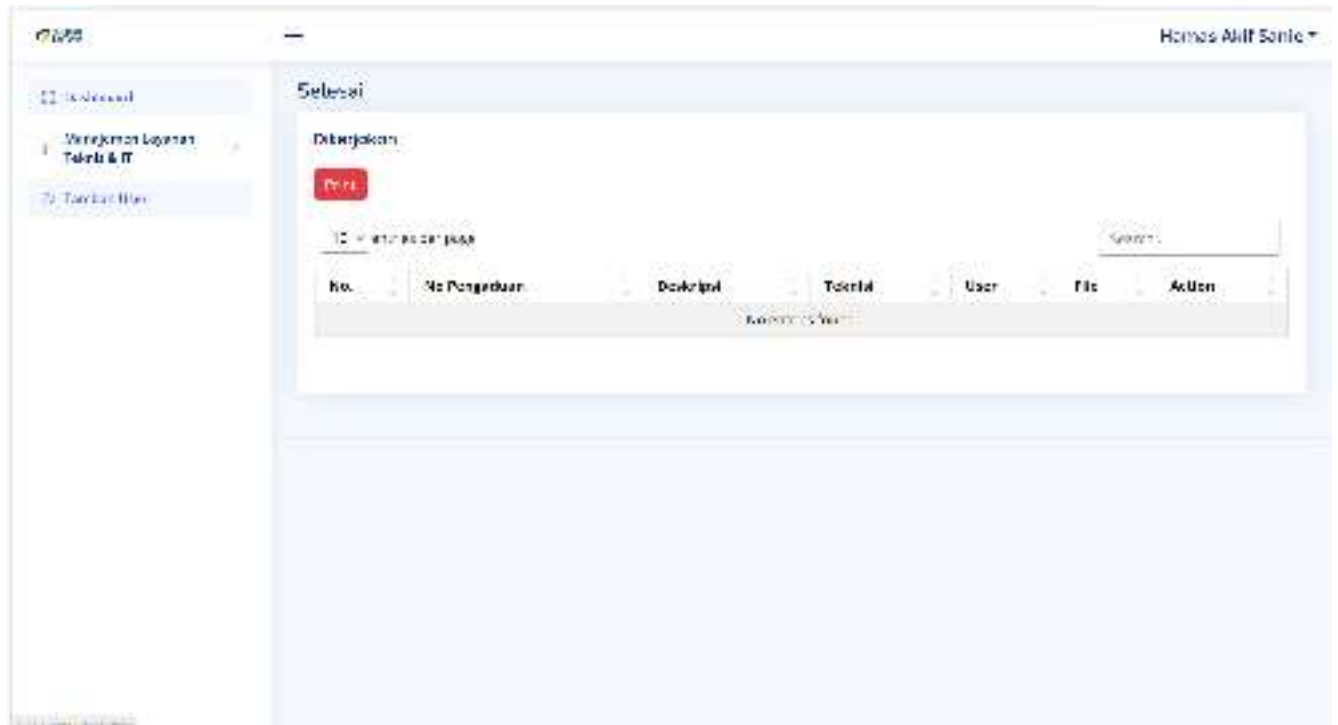
Worked Image

7. Job History Table



Job History Image

8. Completed Work Table



The screenshot shows a web application interface. On the left is a sidebar with a logo at the top and three menu items: 'Dashboard', 'Manajemen Layanan Teknis & IT', and 'Tambah User'. The main content area has a header 'Selesai' and a sub-header 'Dikerjakan'. Below this is a red 'Print' button and a search bar containing '417-84-08-9338'. A table follows with columns: 'No.', 'No Pengaduan', 'Deskripsi', 'Terkait', 'User', 'File', and 'Action'. The table is currently empty, with a 'Klik Disini Untuk Menambah' link at the bottom. The top right corner of the interface shows the user name 'Horus Alif Sante'.

No.	No Pengaduan	Deskripsi	Terkait	User	File	Action
-----	--------------	-----------	---------	------	------	--------

Images of Completed Work

9. Table Add Asset Data (Hardware)

Tambah Aset Hardware

Data Aset Hardware

10 entries per page

Search...

No Aset	No Inventaris	Tahun	Jenis	Merek	Proc	RAM	HDD	IP	User	Unit	Lokasi	Status	W
1	1234	2024	Desktop	Asus	Intel i5	8	512GB SSD	192.168.1.100	John Doe	IT	Office	Operational	1
2	98765	2023	Laptop	Dell	Intel i7	16GB	512GB SSD	192.168.1.100	John Doe	IT	Office	Operational	10

Showing 1 to 2 of 2 entries

Image Add Asset Data (Hardware)

10. Table Add Asset Data (Software)

Tambah Aset Software

Data Aset Software

10 entries per page

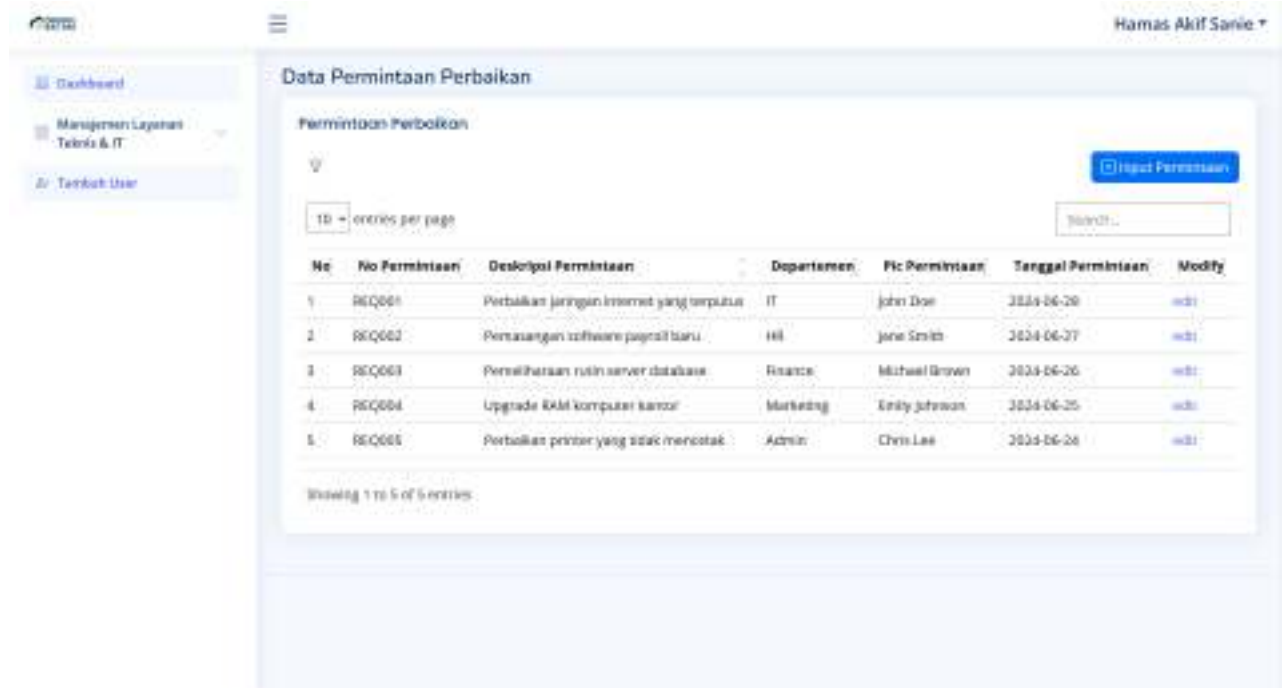
Search...

No Aset	No Inventaris	Tahun	Jenis Aplikasi	Nama Aplikasi	Pengguna	Divisi/Unit	Action
1	98765	2023	Database	MySQL	IT	Database Team	Edit Delete
2	98762	2024	Office	Microsoft Office	Finance	Finance Department	Edit Delete
3	98763	2023	Design	Adobe Photoshop	Marketing	Creative Team	Edit Delete
4	98764	2025	Development	Visual Studio Code	IT	Development Team	Edit Delete
5	98765	2023	Security	Norton Antivirus	Admin	IT Security	Edit Delete

Showing 1 to 5 of 5 entries

Image Add Asset Data (Software)

11.Repair Request Table



The screenshot displays a web application interface for managing repair requests. The header shows the user 'Hamis Akif Sanie' and a sidebar with navigation links: 'Dashboard', 'Manajemen Layanan Teknis & IT', and 'Tambah User'. The main content area is titled 'Data Permintaan Perbaikan' and contains a table of repair requests. The table has 7 columns: 'No', 'No Permintaan', 'Deskripsi Permintaan', 'Departemen', 'PIC Permintaan', 'Tanggal Permintaan', and 'Modify'. There are 5 rows of data. A 'Tambah Permintaan' button is located in the top right corner of the table area. Below the table, it says 'Showing 1 to 5 of 5 entries'.

No	No Permintaan	Deskripsi Permintaan	Departemen	PIC Permintaan	Tanggal Permintaan	Modify
1	REQ001	Perbaikan jaringan internet yang terputus	IT	John Doe	2024-06-20	edit
2	REQ002	Pemutaran software payroll baru	HR	Jane Smith	2024-06-22	edit
3	REQ003	Pemeliharaan rutin server database	Finance	Michael Brown	2024-06-26	edit
4	REQ004	Upgrade RAM komputer kantor	Marketing	Emily Johnson	2024-06-25	edit
5	REQ005	Perbaikan printer yang tidak mencetak	Admin	Chris Lee	2024-06-28	edit

Repair Request Image

12. Improvement Follow-up Table



Repair Follow-up Image

B. Database Implementation

To implement the proposed Technical and IT services management system using PHP and MySQL this database structure we created CRUD (Create, Read, Update, Delete) operations using PHP to manage data and fulfill the stated functional requirements.

1. Database Tables

a. Users table

Table showing the user entity which consists of 8 attributes with the primary key ID.

Then the Query

```
INSERT INTO tambah_data hardware ( no_inventaris, tahun, jenis, merek, proc, ram, hdd, ip, user, unit, lokasi, status, windows, office, garansi, created_at, updated_at ) VALUES ( 'INV001', 2023, 'Laptop', 'Dell', 'Intel i7', '16GB', '512GB SSD', '192.168.1.100', 'John Doe', 'IT', 'Office', 'Operational', 'Windows 10', 'Office 2019', '2 Years', NOW(), NOW() );
```

d. Follow-up_table

Shows the database table of the follow-up entity, which consists of 8 attributes where the ID is the primary key.

#	Name	Datatype	Length/Set	Unsigned	Allow Null	Zero/1	Default	Comment	Collation	Expression	Uniquely
1	id	INTEGER	20	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	AUTO INCREMENT				
2	tanggal	VARCHAR	255	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL		utf8mb4_unicode_ci		
3	ip	VARCHAR	255	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL		utf8mb4_unicode_ci		
4	kode user	VARCHAR	255	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL		utf8mb4_unicode_ci		
5	nama user	VARCHAR	255	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL		utf8mb4_unicode_ci		
6	email	VARCHAR	255	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL		utf8mb4_unicode_ci		
7	created_at	TIMESTAMP		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL				
8	updated_at	TIMESTAMP		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL				

Then the Query

```
INSERT INTO follow_up_tambah_data ( id, tanggal, ip, kode user, nama user, email, created_at, updated_at ) VALUES ( '2024-06-20', 'John Doe', '192.168.1.100', 'IT', 'Office', 'Operational', 'Windows 10', 'Office 2019', '2 Years', NOW(), NOW() );
```

e. Request_users table

Shows the database table of the request_users entity, which consists of 8 attributes where id is the primary key.

#	Name	Datatype	Length/Set	Unsigned	Allow Null	Zero/1	Default	Comment	Collation	Expression	Uniquely
1	id	INTEGER	20	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	AUTO INCREMENT				
2	requester	VARCHAR	255	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL		utf8mb4_unicode_ci		
3	requester_email	VARCHAR	255	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL		utf8mb4_unicode_ci		
4	requester_phone	VARCHAR	255	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL		utf8mb4_unicode_ci		
5	requester_address	VARCHAR	255	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL		utf8mb4_unicode_ci		
6	requester_created_at	TIMESTAMP		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL				
7	requester_updated_at	TIMESTAMP		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL				

Then the Query

```
INSERT INTO request_users ( id, requester, requester_email, requester_phone, requester_address, requester_created_at, requester_updated_at ) VALUES ( '2024-06-20', 'John Doe', '192.168.1.100', 'IT', 'Office', 'Operational', 'Windows 10', 'Office 2019', '2 Years', NOW(), NOW() );
```

f. Tables are worked on

Shows the database table of the entity being worked on, which consists of 13 attributes where the ID is the primary key.

Closing

Conclusion

This project aims to develop a web-based IT and Technical service management application for Persero Batam, which includes modules for system health monitoring, IT inventory, preventive maintenance, and IT work reporting.

This application is designed using a website platform with PHP and JavaScript programming languages, Laravel and Bootstrap CSS frameworks, and MySQL as a database management system.

The project lasted for 6 months, starting from creating a draft outline to finalizing the application, with various stages such as sprint documentation, creating wireframes and mock-ups, designing UML diagrams, implementing applications and databases. This application is expected to increase the efficiency and effectiveness of IT asset management, reduces system downtime, improves visibility and control over IT assets.

Team development in a variety of critical skills, including complex problem solving, collaboration, and effective communication, especially in the context of web application development. The team successfully applied theory to practice, such as system modeling and the use of modern technologies (PHP, Laravel, JavaScript, Bootstrap).

This PBL will form the basis of our continued reflection and learning, identifying capabilities and areas of improvement for future projects.

Lesson Learned

The lessons learned from the entire PBL (Project-Based Learning) implementation process consist of several important points, namely:

1. **Communication Skills:** This PBL encourages the development of communication skills, including compiling project documentation, creating wireframes and mockups, as well as communicating with Persero Batam.
2. **Time Management:** The team succeeded in managing time effectively during the 6 months of project work, balancing application development and documentation preparation.
3. **Analytical Capabilities:** Participants develop better analytical skills, especially in identifying functional and non-functional requirements of applications, as well as designing appropriate technical solutions.
4. **Leadership:** Especially for team leaders, this PBL provides an opportunity to develop soft leadership skills in managing complex application development projects.
5. **Adaptability:** The team learns to adapt, while remaining responsive to changing needs throughout the development process.
6. **Technology Understanding:** Team members gain practical experience in the use of modern web technologies and the latest software development practices.

ATTACHMENT

1. Design Document from Client,

The following is a link to the test document for the Financial Report Bookkeeping Application Using Web Service Technology: https://drive.google.com/file/d/1VseeD2BYqO4KMxalOyXL0Bzo1s_kmxTO/view?usp=sharing

2. Documentation of the First Meeting with the Client,

https://docs.google.com/document/d/1EXsXTp4_BSbKnVm5jT2_ozCPy5D2G7Kf/e_dit?usp=sharing&ouid=101394383880855552940&rtpof=true&sd=true

3. Collection of Photos of Offline Meetings with Clients,

https://drive.google.com/drive/folders/1-dPWVWiDeV1UOSpyNjwLn6Ya6b7KRWe_V?usp=sharing

4. Application link during ATS,

<https://drive.google.com/file/d/1SFS8mIGAXQzD7s1RQ-xhRAC3kKi8bmYj/view?usp=sharing>

5. PBL presentation during ATS,

<https://www.youtube.com/watch?v=XxXSD2g2lp0>

6. Application link during AAS,

<https://drive.google.com/file/d/1XK8rQRSRiSHyeoWDinwmr4FzOhPripGA/view>

7. AAS Presentation Video,

<https://youtu.be/hmM4SAKgjco>

8. Application Demo,

https://youtu.be/n_Jqg0fkXwk

9. Posters,

<https://drive.google.com/file/d/1SPDAyIfh4T06Ve89Wccv4tw3d39JH-IN/view?usp=sharing>

10. Manual Book

https://docs.google.com/document/d/1phqISsu3IUTB_nhRfn3edsOqH_iTah3Psn_UZlCCSjMw/edit?usp=sharing

11. Software Testing Report,

https://docs.google.com/document/d/1gP2jXUD5IQJUX4X8_gT69pK_NkEW6K4y/edit?usp=sharing&ouid=10139438388085552940&rtpof=true&sd=true