Giraldo Nainggolan

Portofofolio

2025

Information Systems

Giraldo Nainggolan

IINNOVATIVE IT PROGRAMMER

About Me

I am an Information Systems student with an interest in technology and innovation. Experienced in website development, UI/UX, mobile application, data analysis, and project management, I focus on creating digital solutions that are secure, efficient, and impactful.

Skills

- Python
- Javascript
- Java / Kotlin
- Wordpress
- PHP
- Laravel
- SQL

Contact

082383077087

https://giraldonainggolan.blogspot.com/

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Education

senior high school
SMAKN SAMOSIR — 2018 - 2021

Information Systems Students
Trunojoyo University — 2022 - 2026

During my studies, I have been actively involved in various IT trainings and projects, including software redesign, website and Android application debugging, and user convenience implementation. I am active in the Information Systems Association organization, Google Developer Campus, ITC, and several other additional activities.

Experience

Project Management - Surabaya
Reka Village — April 2024 - June 2024
Explore my Real Estate Website project built with WordPress CMS. Featuring responsive design, SEO optimization, and advanced property search for seamless browsing.

Product Developmen - Surabaya
UPN East Java — June 2024 - Agustus 2024
Discover my FarmBot project: an innovative solution combining automation and precision farming to revolutionize sustainable agriculture and boost efficiency.

Software Staff
Bangkalan Legislative Council — Sep 2024 - Dec 2024
Tasked with designing a cross-platform application for the Bangkalan Regional People's Representative Council (DPRD) to facilitate efficient correspondence and communication.

Audit & Corporate Governance
PT Bukit Darmo.Tbk — Oct 2024 - Dec 2024
Data entry in the IT governance audit using COBIT 19 involves collecting, verifying, and recording information related to IT Processes, GAMO, and corporate compliance over a three-month period.

Production Planning and Inventory Control
PT Sebastian Jaya Metal — Jan 2025 - July 2025
In this role, I am responsible for production planning, inventory control, as well as ensuring a smooth production process in accordance with the demand and availability of raw materials.

PROJECT
WEBSITE

2022-2025

Giraldo Nainggolan   *Website Dev*

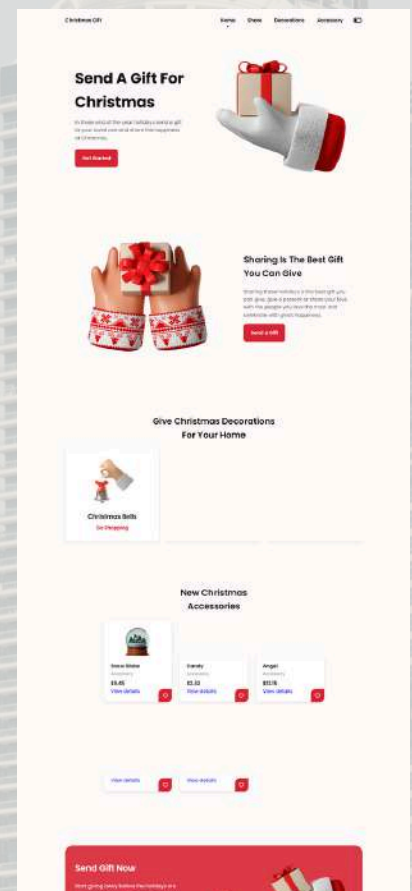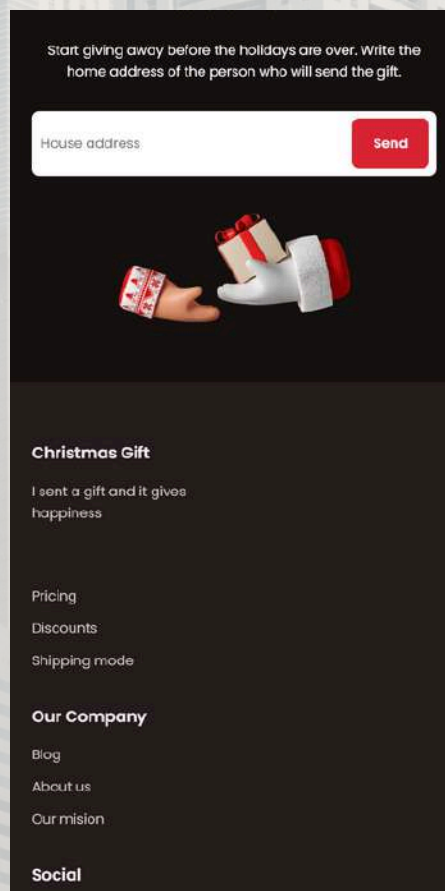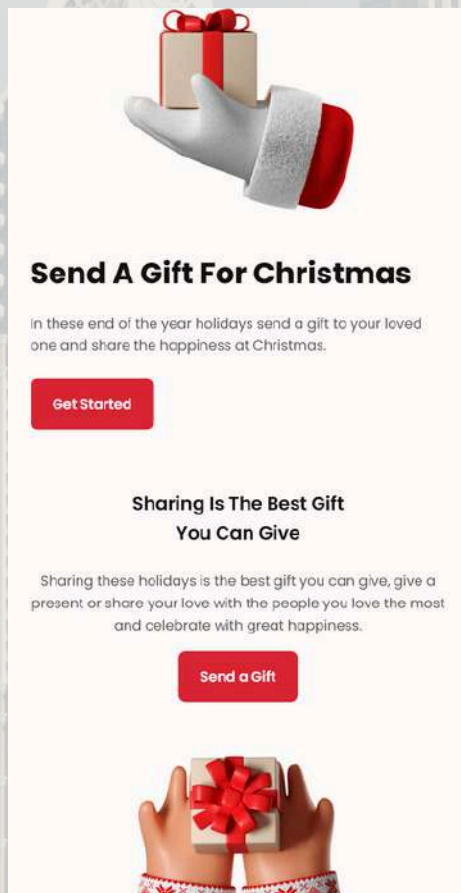# *Christmas Shop Landing Page*

Seasonal Sales on Christmas Day

Developed a fully responsive e-commerce website for Fashionista, a fashion retailer. The site includes an integrated shopping cart, user accounts, and a product recommendation engine.

Technologies Used:

Front-end: HTML, CSS, Javascript

Outcome:

This website is designed for someone who celebrates Christmas with all the trappings of thr celebrate

Send A Gift For Christmas

In these end of the year holidays send a gift to your loved one and share the happiness at Christmas.

Get Started

Sharing Is The Best Gift You Can Give

Sharing these holidays is the best gift you can give, give a present or share your love with the people you love the most and celebrate with great happiness.

Send a Gift

Start giving away before the holidays are over. Write the home address of the person who will send the gift.

House address — **Send**

Christmas Gift

I sent a gift and it gives happiness

Pricing
Discounts
Shipping mode

Our Company

Blog
About us
Our mision

Social

Laman-Landing-Page-Platform-Streaming

UI Modern dengan React & Tailwind

Developed a fully responsive streaming platform UI using React & Tailwind. Features dark mode, interactive navigation, dynamic movie display, and optimized performance. Ideal for media platforms, streaming services, or UI/UX portfolios.

Technologies Used:

Front-end: React.js,
Tailwind CSS,
JavaScript (ES6+),
Vite

Outcome:

✅ A modern, responsive streaming platform UI

✅ Dark mode design for an immersive experience

✅ Interactive navigation with search & watchlist

✅ Dynamic movie display with grid & carousel layout

✅ Optimized performance using React & Tailwind

✅ Scalable & customizable for various media projects
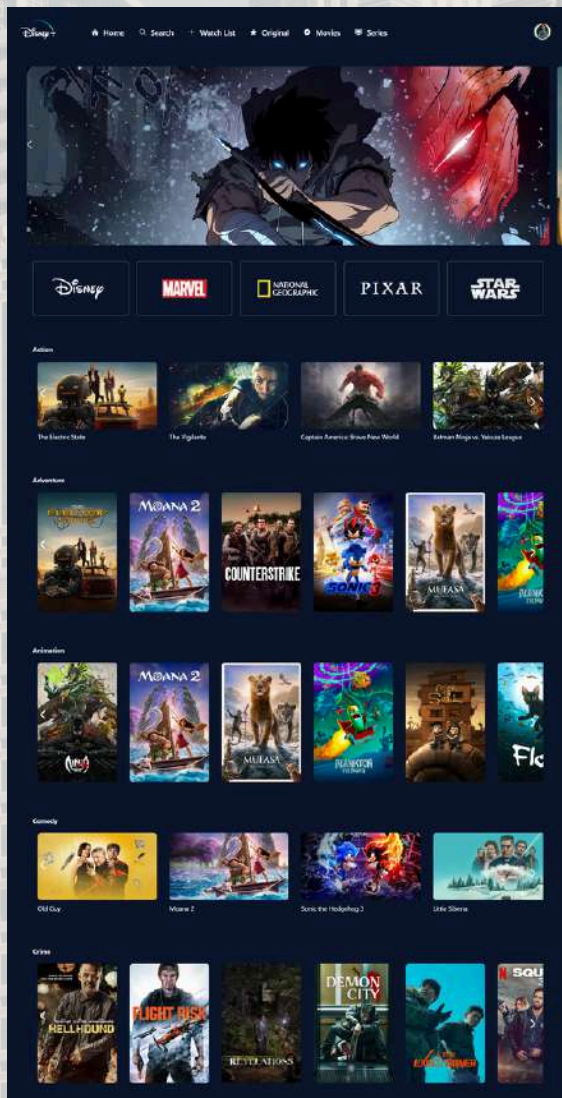
UTM Faculty of Engenering Room Loan Website - Laravel 11 Framework

Final project from lecturer

I developed a room reservation website for the Faculty of Engeneering UTM using Laravel 11, featuring an admin panel, user authentication, and booking functionality

Technologies Used:

Front-end: Bootstrap, Blade, CSS, Javascript.
Back-end: PHP, MySQL, Laravel, Hosting, GitHub, Herd

Outcome:

Developed a Laravel based room booking site for UTM Engeneering with admin panel, login, and reservation.
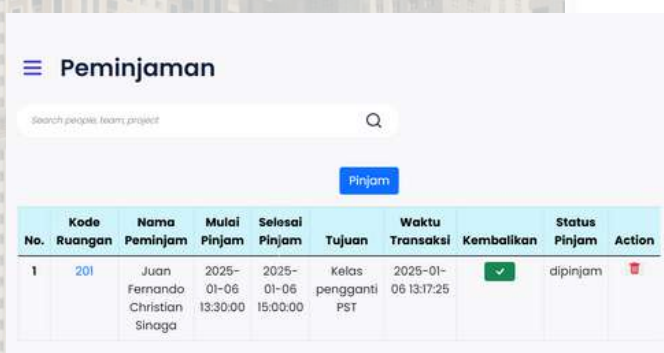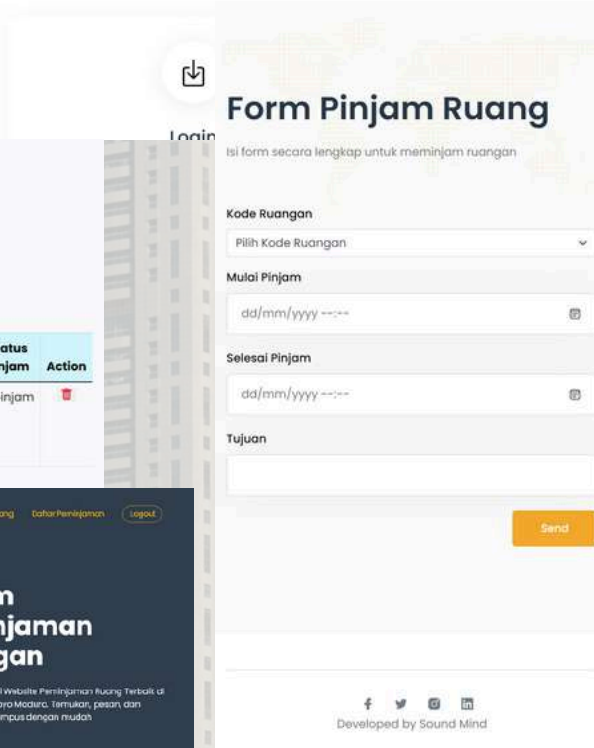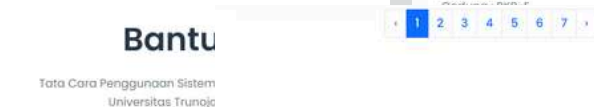
Villa Agency Management System with PHP Native

Property Management

Developed a Villa Agency project using PHP Native, featuring property listings, booking management, and a user-friendly interface for efficient operations.

Technologies Used:

Front-end: HTML, CSS, Javascrip, Bootstrap
Back-end: PHP, MySQL
Hosting: GitHub, Localhost

Outcome:

Developed a Laravel based room booking site for UTM Engeneering with admin panel, login, and reservation.
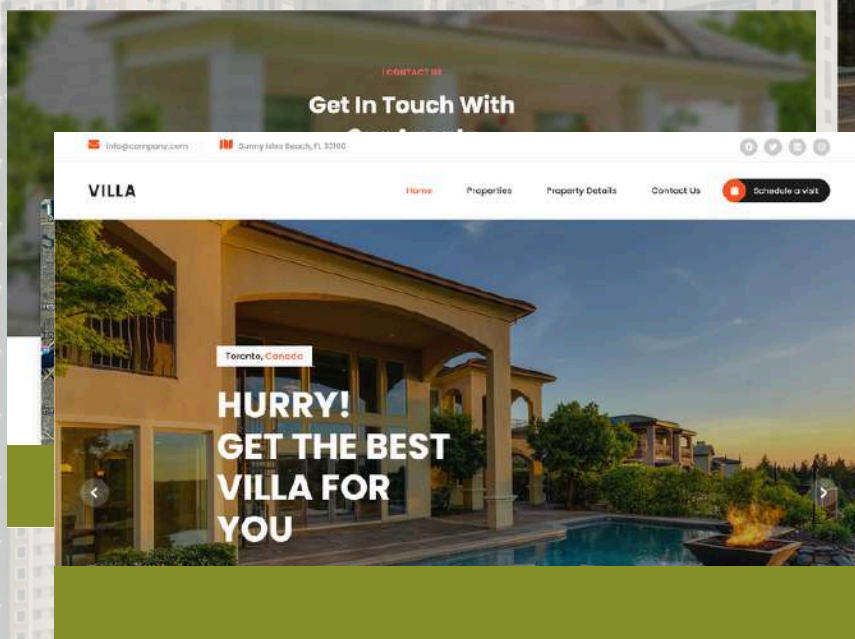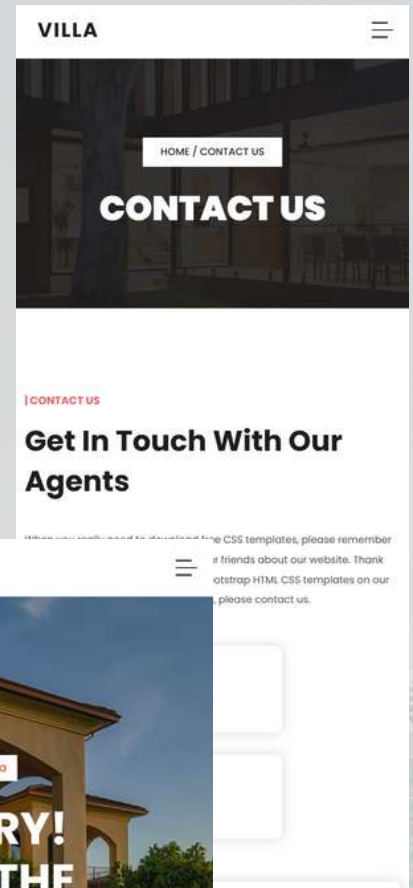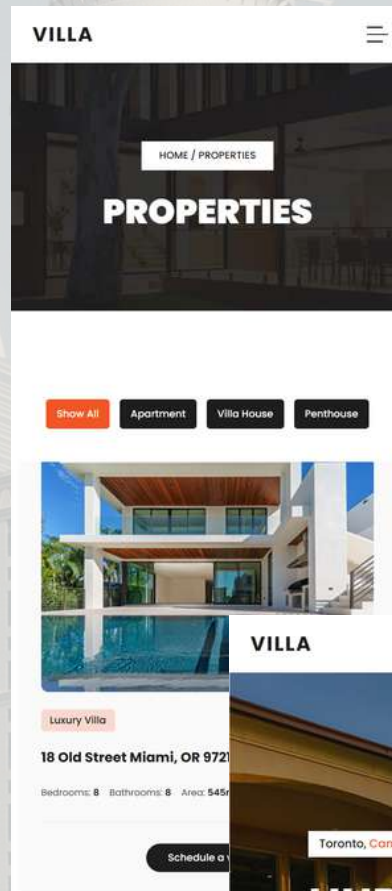
Spiritual Tourism to Jerusalem - Landing Page Project

Spiritual Inspiration for Your Journey

Developed a basic WordPress tutorial project featuring a spiritual tourism website for Jerusalem, showcasing essential design and content management techniques

Technologies Used:

Front-end: Pluggin, Theme, Elementor.
Back-end: PHP, MySQL
Hosting: GitHub, Localhost

Outcome:

Created a WordPress-based spiritual tourism site for Jerusalem, teaching basic web design

PERSONAL
BRANDING

20/25

PROJECT

DATA SPECIALIST

Data Science, Analytics, and Computer Vision for Advanced Insights and AI Solutions

Disusun oleh
Giraldo Naiggolan

Fruit Classification using CNN and Image Processin

Dataset properties:

The total number of images: 94110. Only images scaled to 100x100 pixels are counted here. Training set size: 70491 images (one object per image). Test set size: 23619 images (one object per image). The number of classes: 141 (fruits and vegetables). Image size in the largest dataset version: 100x100 pixels. Input (1.01 GB)

Technologies Used:

os, cv2 (OpenCV), matplotlib, seaborn, numpy, pandas, torch (PyTorch), torchvision, sklearn.model_selection (train_test_split), tensorflow.keras, tensorflow.keras.optimizers (Adam), tensorflow.keras.callbacks (EarlyStopping), sklearn.metrics (classification_report, confusion_matrix), mpl_toolkits.mplot3d.Axes3D, sklearn.preprocessing.StandardScaler

Sample Image: apple_golden_1/r1_276.jpg

Sample Image: apple_red_delicios_1/r1_276.jpg

Sample Image: cabbage_white_1/r0_118.jpg

Sample Image: cucumber_1/r0_118.jpg

Layer (type)	Output Shape	Param #
conv2d (Conv2D)	(None, 148, 148, 32)	896
max_pooling2d (MaxPooling2D)	(None, 74, 74, 32)	0
conv2d_1 (Conv2D)	(None, 72, 72, 64)	18,496
max_pooling2d_1 (MaxPooling2D)	(None, 36, 36, 64)	0
conv2d_2 (Conv2D)	(None, 34, 34, 128)	73,856
max_pooling2d_2 (MaxPooling2D)	(None, 17, 17, 128)	0
flatten (Flatten)	(None, 36992)	0
dense (Dense)	(None, 512)	18,940,416
dense_1 (Dense)	(None, 24)	12,312

https://www.kaggle.com/code/giraldonainggolan/fruit-classification-using-cnn-and-image-processin

Online shopping-KNN-ROC

Dataset properties:

The dataset provided contains data about several tourist attractions along with the predicted number of tourists who will visit these places. For example, Mutiara Beach is predicted to attract 50,000 tourists, while Maobu Beach has a predicted number of visitors ranging from 16,695 to 17,079 tourists, and Bone Labunta is expected to invite between 16,708 to 21,843 tourists.

Technologies Used:

numpy as np, pandas as pd, scikit-fuzzy, matplotlib.pyplot as plt, skfuzzy as fuzz, sklearn.model_selection, train_test_split, skfuzzy, control as ctrlsklearn.metrics, mean_absolute_error, mean_squared_error, matplotlib.pyplot as plt
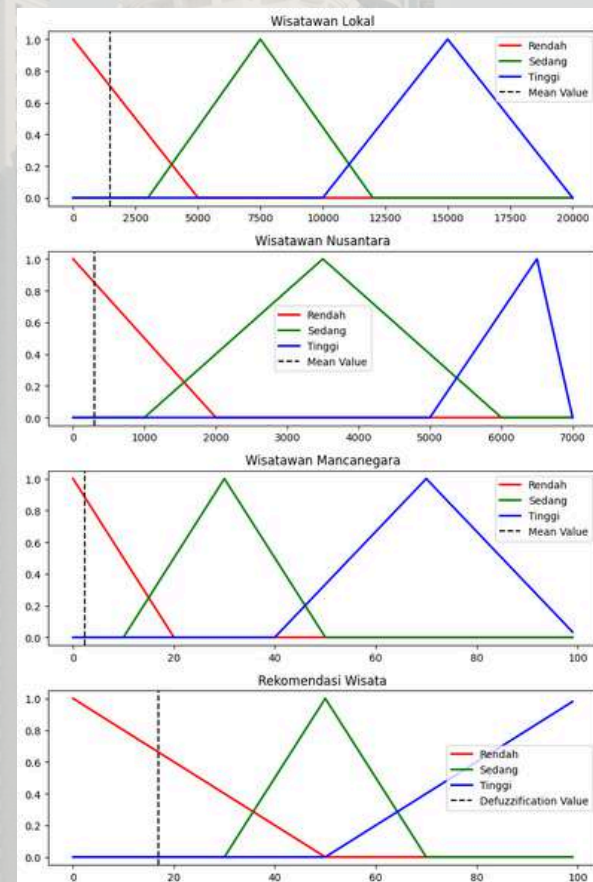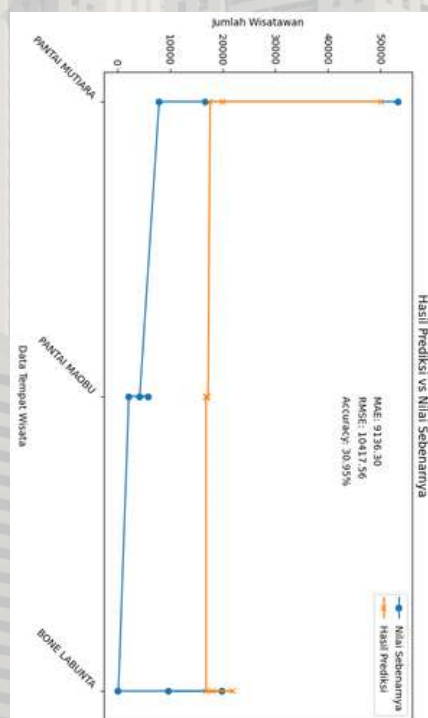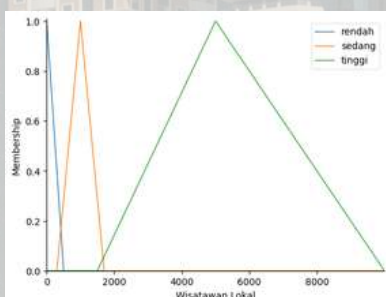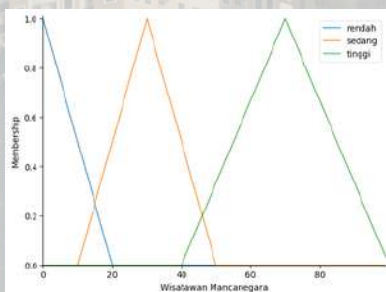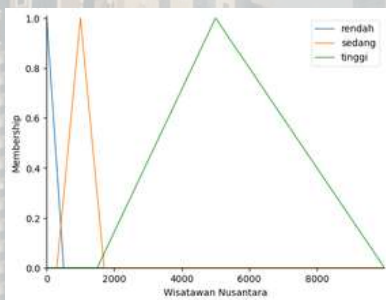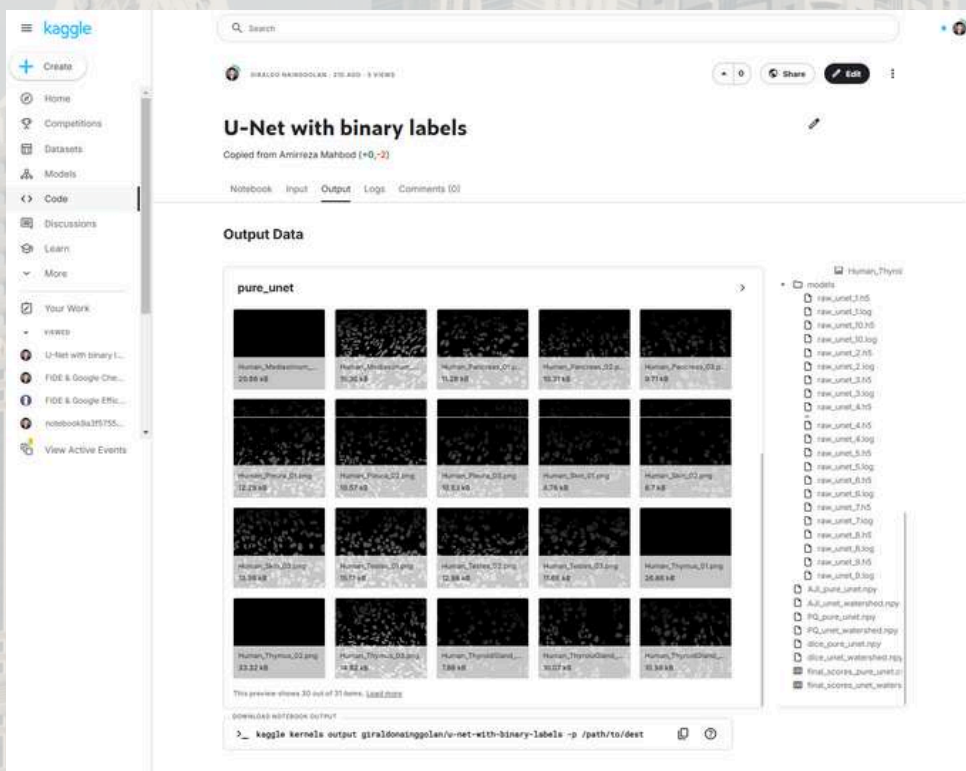
U-Net with binary labels

Dataset properties:

This notebook demonstrates the use of the U-Net architecture for image segmentation with binary labels. The goal is to classify each pixel in an image into two categories: the target object and the background.

Technologies Used:

Deep Learning Framework: TensorFlow/Keras, Model Architecture: U-Net, Programming Language: Python, Data Handling Libraries: NumPy, Pandas, Visualization Tools: Matplotlib, Experiment Platform: Kaggle Notebook


https://www.kaggle.com/code/giraldonainggolan/u-net-with-binary-labels

FIDE & Google Chess AI

Dataset properties:

The "FIDE & Google Chess AI: Thinking Smarter, Not Hard" project explores AI technology in chess by developing a more strategic and efficient system beyond brute-force calculations. By integrating optimized search algorithms like Monte Carlo Tree Search (MCTS) and Alpha-Beta Pruning with Google's AI technology, the project enhances move analysis and game strategy. Leveraging FIDE's chess database, the AI adapts to Grandmaster play patterns in real-time, making its decision-making process more intelligent and dynamic.

Technologies Used:

Python, TensorFlow & PyTorch, Stockfish & AlphaZero, Google Cloud AI, FIDE Chess Database, Monte Carlo Tree Search (MCTS), Alpha-Beta Pruning, Jupyter Notebook.

https://www.kaggle.com/code/giraldonainggolan/fide-google-chess-ai-thinking-smarter-not-hard
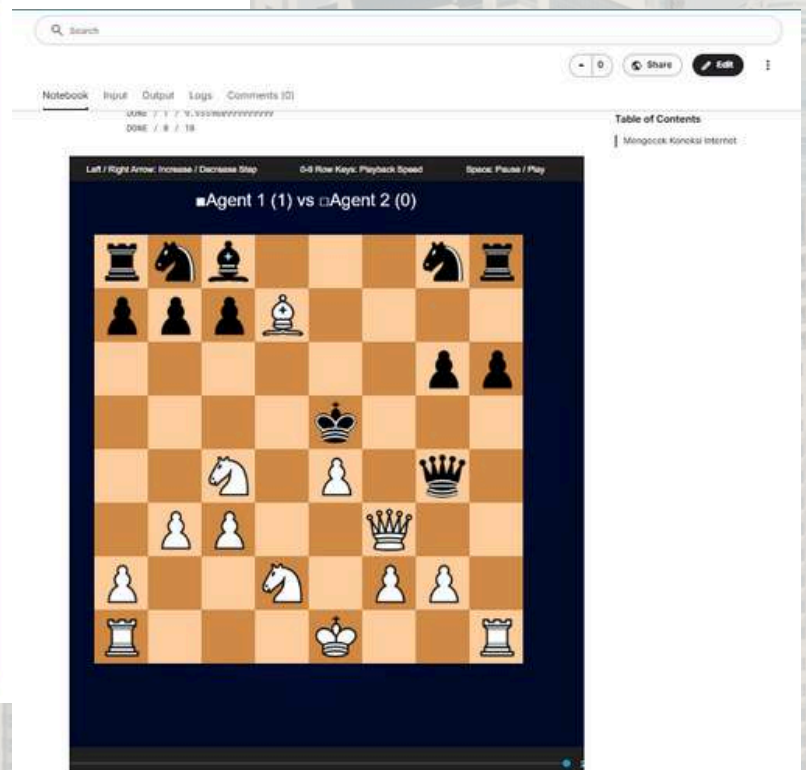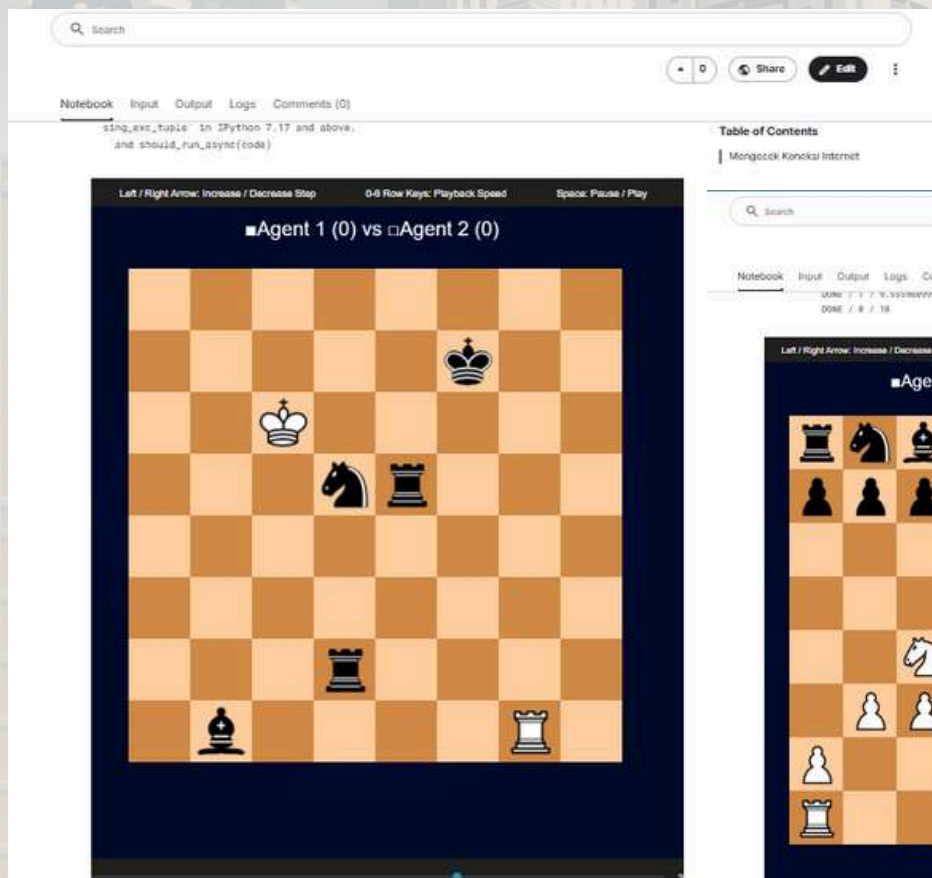
# Machine Learning Regression

Dataset properties:

This dataset is designed to explore various regression methods in machine learning, including Linear Regression, Polynomial Regression, Ridge Regression, Lasso Regression, and Decision Tree Regression. It is suitable for training and experimenting with different regression models.

Variables in the dataset:

- *input1 → The first numerical variable used for prediction.*
- *input2 → The second numerical variable used for prediction.*
- *output → The target variable to be predicted.*

Technologies Used:

Python, Pandas , NumPy , Exel, Matplotlib & Seaborn, Scikit-Learn, Jupyter Notebook

https://www.kaggle.com/code/giraldonainggolan/machine-learning-regression
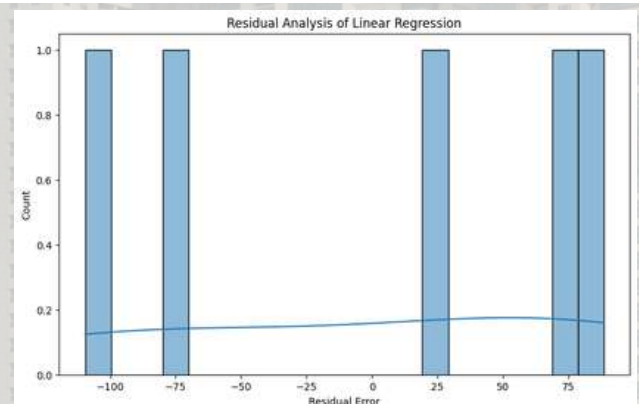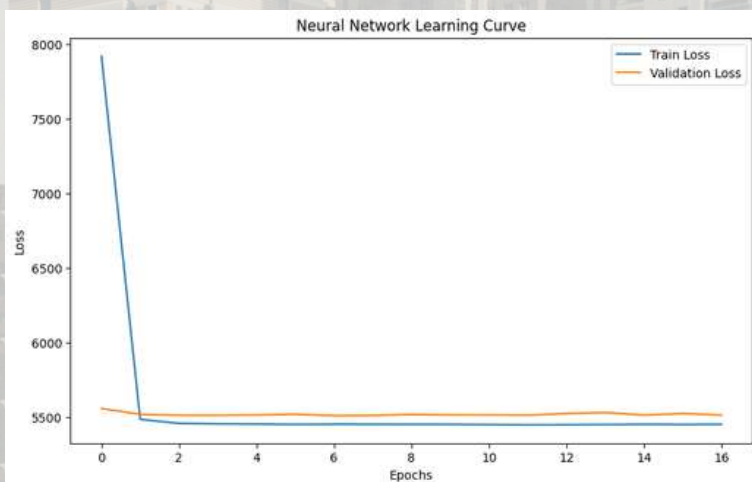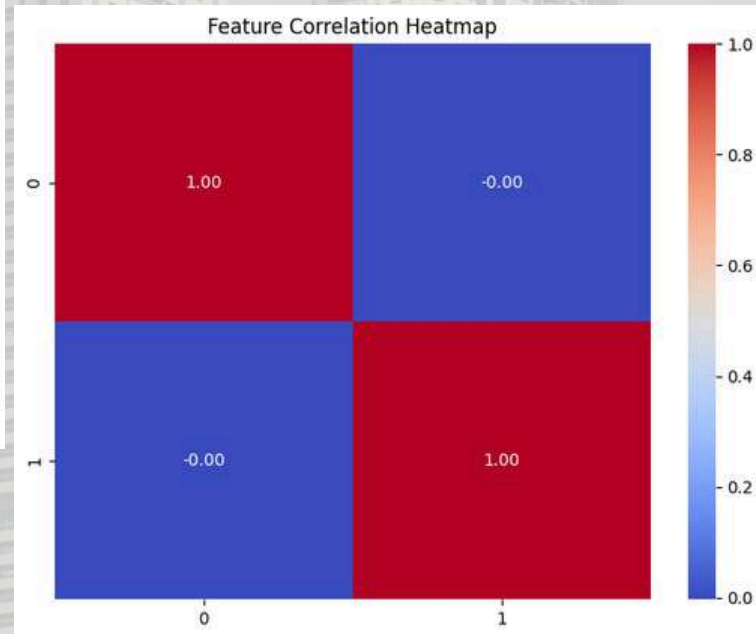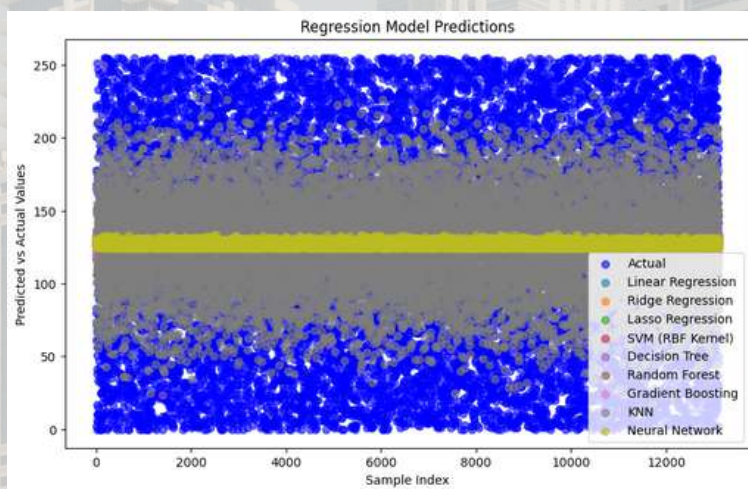
Data-Driven Rainfall Prediction

Dataset properties:

It includes Date & Time (YYYY-MM-DD HH:MM:SS) to track temporal patterns, Temperature (°C) representing the daily average temperature, and Humidity (%), which indicates moisture levels in the air. Additionally, Air Pressure (hPa) is included to analyze atmospheric conditions, along with Wind Speed (km/h) and Wind Direction (°) to assess air movement patterns. The dataset also records Rainfall (mm) as the primary target variable, measuring the amount of precipitation per day. Lastly, Weather Conditions provide categorical data on the general state of the weather (e.g., Clear, Cloudy, Rainy), further enhancing the prediction model's accuracy.

Technologies Used:

Data Preprocessing & Analysis, Machine Learning Model, Deployment & Tools, Output / Goals

https://www.kaggle.com/code/giraldonainggolan/data-driven-rainfall-prediction
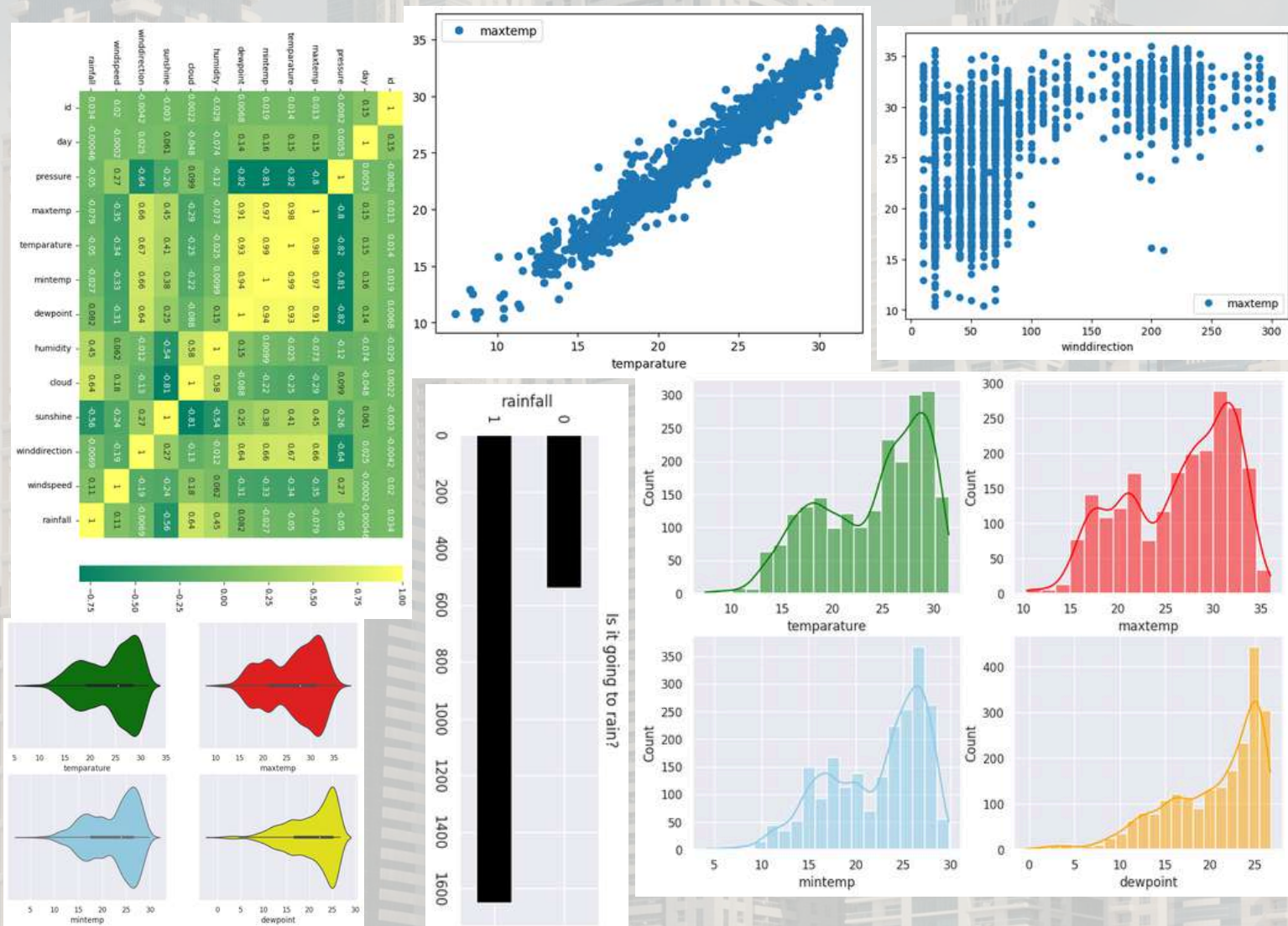
FINANCIAL REPORT & AUDIT

2025-2026

Giraldo Nainggolan

Audit & Governance Report of PT Bukit Darmo

Dataset properties:

Data entry in the IT governance audit using COBIT 19 involves collecting, verifying, and recording information related to IT Processes, GAMO, and corporate compliance over a three-month period. This process includes inputting data from audit reports, IT policies, risk assessments, system logs, and governance documents into structured databases or spreadsheets. Each entry is carefully validated to ensure accuracy and consistency with COBIT 19 standards. Additionally, data cleaning is performed to remove errors and duplicates, ensuring a reliable dataset for audit analysis. The final dataset helps auditors evaluate compliance, measure IT efficiency, and recommend governance improvements based on structured, data-driven insights.

Technologies Used:

Microsoft Excel / Google Sheets, MySQL, COBIT 19 Framework, Microsoft SharePoint / Google Drive, Notion, Trello, Python (Pandas, NumPy)

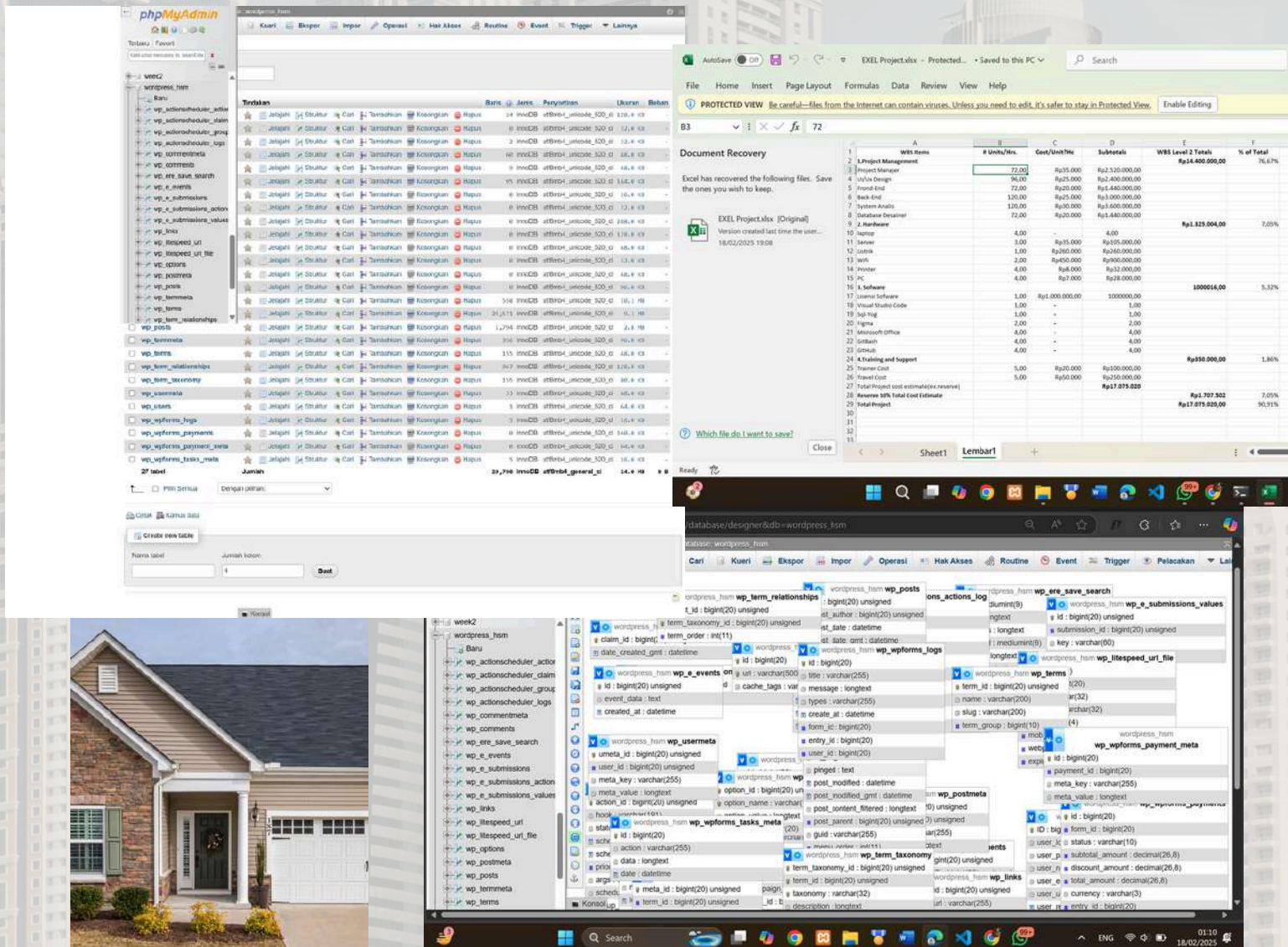https://github.com/GiraldoNainggolan/AUDIT-TKTI-PT-Bukit-Darmo-TBK

Project Management IT Real Estate in Surabaya

Describtion:

Website ini akan menyediakan platform untuk memudahkan pencarian, pembelian, penyewaan, serta manajemen properti secara efisien. Fitur utama yang akan diterapkan di website ini meliputi pencarian properti berdasarkan kategori, lokasi, harga, dan spesifikasi lainnya, serta sistem pendaftaran pengguna untuk memungkinkan interaksi antara pembeli, penyewa, dan agen properti. Website ini juga akan dilengkapi dengan fitur untuk mengelola listing properti, pembaruan status properti, serta integrasi dengan sistem pembayaran untuk transaksi yang aman.

Technologies Used:

Microsoft Excel / Google Sheets, MySQL, ISO 9001, Microsoft SharePoint / Google Drive, Notion, Trello, Six-sigma, Library Project, Jirra,

FAUGET

Buku Pedoman Pegawai