

ABSTRAK

Nama : Muh Jadid Taqwa
NIM : 41520120026
Program Studi : Teknik Informatika
Judul Proposal Penelitian : Implementasi Streamlit untuk Pembuatan *Dashboard* Analisis Penerimaan Pajak Harian: Studi Kasus di Kantor Pelayanan Pajak.
Pembimbing : Anis Cherid, SE, MTI

Penelitian ini berfokus pada implementasi Streamlit untuk pembuatan dashboard analisis penerimaan pajak harian, dengan studi kasus di Kantor Pelayanan Pajak. Tujuan utama penelitian ini adalah mengembangkan dashboard interaktif dan user-friendly menggunakan framework Streamlit, serta mengevaluasi kinerja algoritma Random Forest, XGBoost, dan Regresi Linear dalam memprediksi penerimaan pajak harian. Metodologi yang digunakan meliputi studi literatur, perumusan masalah, pengumpulan data penerimaan pajak harian, analisis data menggunakan algoritma machine learning, dan pembuatan dashboard Streamlit. Hasil penelitian menunjukkan bahwa Streamlit efektif dalam visualisasi dan analisis data penerimaan pajak harian. Algoritma XGBoost menunjukkan kinerja terbaik setelah dilakukan tuning hyperparameter. Penelitian ini memberikan kontribusi dalam menyediakan alat analisis dan prediksi yang membantu pengambilan keputusan di bidang perpajakan.

Kata kunci: Streamlit, Dashboard, Random Forest, XGBoost, Regresi Linear.

ABSTRACT

Name : Muh Jadid Taqwa
NIM : 41520120026
Study Program : Informatics Engineering
Title Research Proposal : Implementation of Streamlit for the Creation of
Daily Tax Revenue Analysis Dashboard: A
Case Study at the Tax Service Office.

This research focuses on the implementation of Streamlit to create a dashboard for analyzing daily tax revenue, using a case study at a Tax Office. The main objective of this study is to develop an interactive and user-friendly dashboard utilizing the Streamlit framework, and to evaluate the performance of Random Forest, XGBoost, and Linear Regression algorithms in predicting daily tax revenue. The methodology includes literature review, problem formulation, daily tax revenue data collection, data analysis using machine learning algorithms, and the development of the Streamlit dashboard. The results of the study indicate that Streamlit is effective in visualizing and analyzing daily tax revenue data. The XGBoost algorithm demonstrated the best performance after hyperparameter tuning. This research contributes by providing an analytical and predictive tool that aids decision-making in the field of taxation.

Kata kunci: Streamlit, Dashboard, Random Forest, XGBoost, Regresi Linear.

UNIVERSITAS
MERCU BUANA