

ABSTRAK

Seksi Alur Pelayaran Distrik Navigasi Tipe A Kelas I Palembang merupakan seksi yang bertugas untuk mengelola inventaris alat pengamatan laut untuk mendukung keselamatan pelayaran. Namun, proses pencatatan masih dilakukan secara manual sehingga menimbulkan kendala seperti kesulitan pencarian data, risiko kehilangan dokumen, dan kurang akuratnya informasi kondisi maupun jumlah aset. Kondisi ini menyebabkan proses monitoring dan pelaporan menjadi tidak efektif. Penelitian ini bertujuan merancang dan membangun sistem inventaris berbasis website untuk membantu pengelolaan alat pengamatan laut agar lebih terstruktur, cepat, dan akurat. Sistem dikembangkan menggunakan framework Laravel dan database MySQL sistem yang dibangun menggunakan pemrograman PHP terdapat fitur seperti manajemen data alat, kategori aset, riwayat peminjaman, pemantauan kondisi alat, laporan inventaris, serta pengelolaan pengguna. Hasil implementasi menunjukkan bahwa sistem mampu meningkatkan efisiensi dan akurasi pengelolaan inventaris serta mempermudah proses administrasi. Sistem ini diharapkan dapat mendukung efektivitas kerja dan penyediaan informasi yang lebih valid bagi Seksi Alur Pelayaran Distrik Navigasi Tipe A Kelas I Palembang.

Kata Kunci: Inventaris, Website, Laravel, Pengelolaan aset, Pengamatan laut.

ABSTRACT

The Navigation Flow Section of the Class I Type A Navigation District Palembang is responsible for managing the inventory of marine observation equipment to support navigation safety. However, the current recording process is still conducted manually, which leads to several issues such as difficulty in searching for data, risk of document loss, and inaccurate information regarding asset conditions and quantities. These challenges contribute to ineffective monitoring and reporting processes. This research aims to design and develop a web-based inventory system to improve the management of marine observation equipment, making it more structured, faster, and accurate. The system was developed using the Laravel framework with a MySQL database and PHP as the programming language. The system includes several features such as equipment data management, asset categorization, borrowing history, condition monitoring, inventory reporting, and user management. The implementation results show that the system is able to improve efficiency, accuracy, and administrative processes in inventory management. It is expected that this system can support better workflow effectiveness and provide more reliable information for the Navigation Flow Section of the Class I Type A Navigation District Palembang.

Keywords: Inventory, Website, Laravel, Asset Management, Marine Observation