



**ERP System for Shuttle Service Management at PT Darpa
Ashiya Manunggal**

UNDERGRADUATE THESIS

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Sarjana Komputer**

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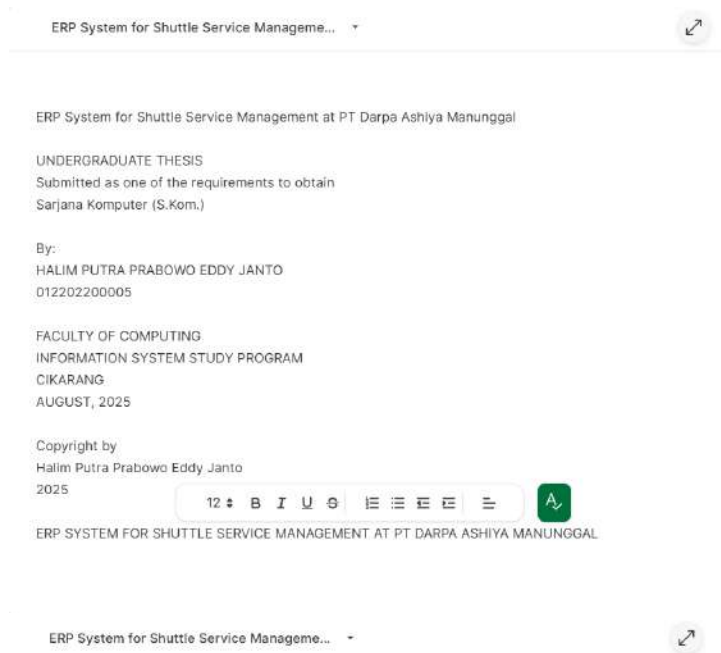
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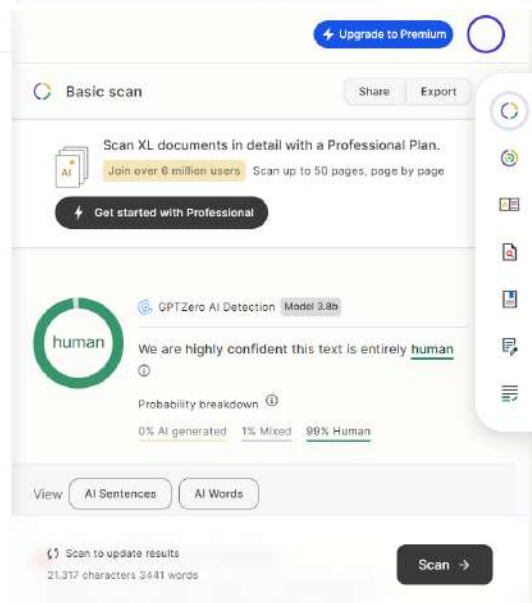
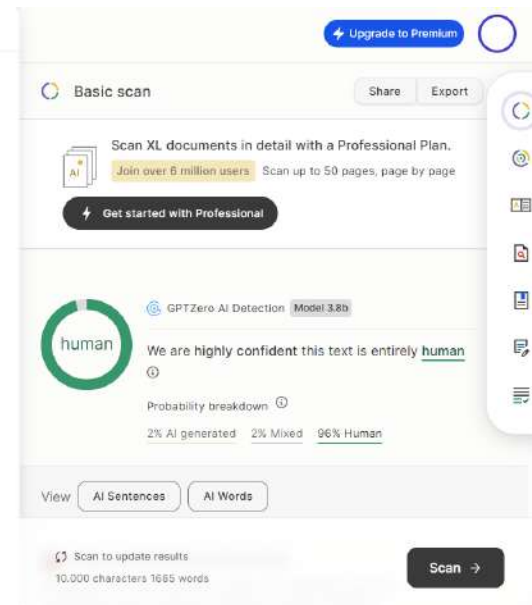
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f. Compatibility - Cross-Browser • Scenario: Use a variety of contemporary browsers (Chrome, Firefox, Edge) to carry out essential functions (login, see lists, and create requests). • Method: Manual Compatibility Testing. • Pass Criteria: The system must work flawlessly and without any layout or functionality problems in all supported browsers. 85 CHAPTER III 3.1. Alternative Solution Designs Basic ERP Component: Every alternative solution has the same concept of ERP in which the components are divided into six modules and each module corresponds to each division accordingly. Each of the module has its own dashboard and each data is integrated with functionality as follows: • Client Module This module is being used to create a new route request from the potential client. After that, the request will be forwarded to the Marketing module alongside with the data. Only registered clients can create the request and the client can be a new or already partnered client. Data that need to be provided are the route pick-up the client wants, duration, details to be contacted, and list of the employees. Clients can know the rough price of the validated route which later on can be the benchmark for further negotiation for the offline meeting. • Marketing Module The purpose of this module is for the Marketing Team to track when there is a new request. This module will give details such as pickup points, the duration of the request, and the distance to the team so later on the data can be used by the team to determine the optimal route for the correlated request to ensure the price can meet the client's demand. After the deal has been made, the Marketing team will input the fixed 86 route and fee and under this step, that means the client has also agreed to the price and will give access for HR. • HR Module This module will give access for HR to manage the routes and drivers. Once a new request is issued by the Marketing team, HR can use this module to check for available drivers



ABSTRACT

This project is about implementing an Enterprise Resource Planning (ERP) system into a small to medium business at PT Darpa Ashiya as a shuttle service provider. Currently this company still doesn't have an integrated system and workflow which causes the need for manual labor and redundant process. Furthermore, seeing the increased demand in the company and limited human resource, maintaining an efficient work will become increasingly difficult due to an organizational structure that has not yet been optimized for efficiency.

Incorporating ERP system for the business means that making sure that everything is being recoded, analyzed, maintained through digital infrastructure in order to make a better centralized system where data creation and retrieval are conducted in the same manner. The development was conducted by using Django web development kit, by introducing six different modules (i.e. client, marketing, human resource, finance, driver, and general manager) with customized features on each module to meet the business needs. Each module represents the stakeholder in the business, including the department, with mainly using a web-based infrastructure.

Testing was conducted with analyzing the performance with and without using ERP system in streamlining the workflow. Surprisingly, although maximum digitalization couldn't be made due to company's constraints, it could help the business's efficiency in a remarkable performance result. Redundant process such as managing new client request could finish within a few minutes whereas before implementation it could take hours. Managing available transportation and assigning driver could also be done in an instance. This includes creating an adjustment in the current business process, designing a connected database for data retrieval and so on. While the ERP system has successfully deployed, but the current system is still far from success due to system integration and the human resource to utilize it need to work hand in hand. Additionally, the features within each module still have room for further optimization and expansion.

Keywords: Enterprise Resource Planning (ERP), Django Web Development, System Integration, Shuttle Service Provider, Centralized Data

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