## **ABSTRACT**

Hawche is a food and beverage business that was founded in 2020. Hawche sells a variety of dishes that focus on dimsum dishes. Hawche in fulfilling the quantity of raw material procurement only by estimating when the amount of inventory stock will be purchased. This causes the ineffectiveness of sales that take place when the stock of raw material supplies will run out. To overcome these problems, this final project designs an inventory forecasting system, so that it can facilitate the process of updating product inventory for the next period.

The design of this forecasting system uses the Double Exponential Smoothing (DES) calculation method. The DES method is used to help recommend the best number of products to update. The website-based system is designed using the Rapid Application Development (RAD) method. The system is tested using blackbox testing and user acceptance test methods to show that the system is running well.

The result of this final project is a system that can provide recommendations on the amount of raw materials that must be updated optimally based on the latest data from previous sales. Users can choose the product to be forecasted according to their needs. The results of the test show that the system can run well and as needed.

The conclusion of this final project is that a forecasting system design is produced to provide recommendations for the amount of raw materials that must be purchased. The system can display the best number of values for each product. Further system development can focus on adding features and methods used.

Keywords — Hawche, Double Exponential Smoothing, Inventory forecasting system