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**INTRODUCTION**

The Development of SMART Payment System for University of St. La Salle – Integrated School Cafeteria is a proposed design project which aims to automate the transactions by using RFID and Cloud Computing.

**Background of the Study**

In the University of St. La Salle – Integrated School (USLS-IS), the cafeteria is one of the most visited places by the students. Also, majority of purchases are done here. There is a large of number of sellers but the number of employees under one seller is low, thus, making transactions slower and more tedious. This also leads to congestion while buying food items.

Parents, in one hand, also face the problem of being unassured. Since the parents are not always around their children, they have no means of monitoring what their children are buying or whether the food the children eat is safe.

This design project aims to automate transactions in the USLS – IS cafeteria using Radio-frequency Identification (RFID) in making cashless purchases. It also makes use of Cloud Computing to keep track of the vendor’s list of items that are available for buying along with items’ prices, the number of purchases made by the students and the total revenue that the vendor have accumulated throughout a certain period. This payment scheme also comes with a mobile application which the parents can download in order to monitor the student’s transactions, see the available balance in the child’s account and control the child’s daily expenditure budget.

**MATERIALS AND METHODS**

This section will discuss the methods to be used in this study. This also includes the materials needed for the design.

**Research Design**

The researchers will be doing a developmental research that will utilize a waterfall model. A survey will be conducted to gather data about the insights of the USLS – IS parents on the current transaction system in USLS – IS cafeteria. These results will then be used to come up with solutions to the concerns of the USLS – IS parents. The project will be planned out thoroughly, ensuring that the features of the SMART Payment System will satisfy the objectives of the study and address the concerns of the USLS –IS parents and other stakeholders. The SMART Payment System will also undergo a series of tests to guarantee its functionality.

**Research Instruments**

**Survey**. The researchers will conduct a survey on the insights of the USLS – IS parents about the current transaction system within the USLS – IS cafeteria. This will also include data regarding the daily budget of the student and how important it is to monitor the student’s purchases.

**Test cases**. There are a lot of test cases to be considered in this project. First is the ability of the RFID to store the student’s information and its readability when tapped on the NFC reader. Next, the functionality of the app, whether it updates in real time or if the

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