**Chapter 4**

**PERFORMANCE ANALYSIS**

**4.1 Introduction**

The proposed system aims to help the users to be more organized and productive. The proponents determined the different major functions needed by the users and conducted series of test to make sure that everything is being met.

This chapter shows a series of experiments/test conducted by the proponents during the development of the proposed system. This further explains the errors of flaws encountered by the proponents and when they were able to resolve it.

**4.2 Experimental**

In conducting the experiment, the proponents ran each major function and were able to determine the errors and flaws of the proposed system. This was then properly noted and was able to find solutions on how to resolve the errors and flaws.

The table below shows the major functions of the system being run and their parameters.

|  |  |
| --- | --- |
| **Functions** | **Definition** |
| Login | User privilege after login  (admin/cashier/brand partners) |
| Limits controls of different users |
| Transactions | Identify whether product was sold or not |
| Real-time calculations |
| Products | Manage Product |
| Accounts | Manage accounts of each users |
| Reports | Daily, monthly, yearly sales report |

*Table 4.2.1 Functions and Definitions*

**4.3 Result and Analysis**

After the series of tests conducted by the proponents, though errors were encountered, the proponents were able to have satisfying result.

The table below are the lists of the test conducted by the proponents that shows the steps taken, and further discussed the expected and actual results.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test Name** | **Steps** | **Expected Result** | **Actual Result** | **Date Tested** |
| Login (Desktop) | The user chooses if what type of user he/she. After choosing what type, users will fill-out the designated fields according to their username and password. | User will be prompted of his/her status if failed, and directed to main menu if succeeded | All users logged in were always directed to main menu even the credentials are not valid | Aug-18 |
| Login (Desktop) | The user chooses if what type of user he/she. After choosing what type, users will fill-out the designated fields according to their username and password. | User will be prompted of his/her status if failed, and directed to main menu if succeeded | System successfully trapped invalid credentials but does not limit control to users. |  |
| Login (Desktop) | The user chooses if what type of user he/she. After choosing what type, users will fill-out the designated fields according to their username and password. | User will be prompted of his/her status if failed, and directed to main menu if succeeded | Expected result met and all user limitations distributed successfully |  |
| Transaction | System search products first to be transact, then add it to cart and remove it from cart if there’s a mistake taken then purchase and print invoice | Transaction will be added correctly to its designated calculations | Unable to add product to cart |  |
| Transaction | System search products first to be transact, then add it to cart and remove it from cart if there’s a mistake taken then purchase and print invoice | Transaction will be added correctly to its designated calculations | Able to add product to cart |  |
| Transaction | System search products first to be transact, then add it to cart and remove it from cart if there’s a mistake taken then purchase and print invoice | Transaction will be added correctly to its designated calculations | Able to add product to cart but unable to remove it from cart |  |
| Transaction | System search products first to be transact, then add it to cart and remove it from cart if there’s a mistake taken then purchase and print invoice | Transaction will be added correctly to its designated calculations | Able to add product to cart and able to remove it from cart. |  |
| Transaction | System search products first to be transact, then add it to cart and remove it from cart if there’s a mistake taken then purchase and print invoice | Transaction will be added correctly to its designated calculations | Unable to calculate selected items |  |
| Transaction | System search products first to be transact, then add it to cart and remove it from cart if there’s a mistake taken then purchase and print invoice | Transaction will be added correctly to its designated calculations | Transaction successfully added to database, but the designated status and action were not distributed as expected |  |
| Transaction | System search products first to be transact, then add it to cart and remove it from cart if there’s a mistake taken then purchase and print invoice | Transaction will be added correctly to its designated calculations | Calculations were inaccurate |  |
| Transaction | System search products first to be transact, then add it to cart and remove it from cart if there’s a mistake taken then purchase and print invoice | Transaction will be added correctly to its designated calculations | All calculations correctly performed by the system |  |
| Product | The system will add product with designated product code from brand partner | The product that have been added in the database will automatically display in the product table | Product successfully added in database but couldn’t display in product table |  |
| Product | The system will add product with designated product code from brand partner | The product that have been added in the database will automatically display in the product table | Expected result met. |  |
| Account | The system will add cashiers and brand partners account | System will display all accounts both cashier and brand partners | Only brand partners were added and displayed in list view |  |
| Account | The system will add cashiers and brand partners account | System will display all accounts both cashier and brand partners | Both Brand partners and cashiers were added and displayed in list view |  |
| Account | The system will give designated module to where only assigned user can access that module | User can now access their designated module | Users could access modules that they shouldn’t have access |  |
| Account | The system will give designated module to where only assigned user can access that module | User can now access their designated module | Admin user could access the module that only the cashier could access. |  |
| Account | The system will give designated module to where only assigned user can access that module | User can now access their designated module | Brand Partner user could access the module that only the admin could access. |  |
| Account | The system will give designated module to where only assigned user can access that module | User can now access their designated module | Cashier user could access the module that only the admin could access. |  |
| Account | The system will give designated module to where only assigned user can access that module | User can now access their designated module | Expected result now met. |  |
| Reports | System can view report based on daily, monthly, and yearly sales of each brand partner and all sales | The users except the cashier can view report based on the set criteria. And the admin will be only the one to see the result. | Sales viewed of each transaction but cannot viewed total sales of all transaction |  |
| Reports | System can view report based on daily, monthly, and yearly sales | The users except the cashier can view report based on the set criteria. And the admin will be only the one to see the result. | All sales viewed successfully but are unbale to view report based on monthly and yearly |  |
| Reports | System can view report based on daily, monthly, and yearly sales | The users except the cashier can view report based on the set criteria. And the admin will be only the one to see the result. | Reports viewed successfully based on daily, monthly, and yearly and ready for exporting |  |

**4.1 Summary**

The tests and experimentations done were valuable for the realization of the proposed system. The activity helped the proponents measure the system’s milestones and determine the defects enhancements and the overlooked functions that need to be worked on. Trials and errors contributed a lot for its improvement and functionality. These and more made the system essential and its benefits are complimentary.

**Chapter 4**

**CONCLUSION**

By using Microsoft Excel for data entry would lead to an inaccurate sale, and by sending it through email would take a lot more time.