
POS SYSTEM (POINT OF SALE SYSTEM)

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ABSTRACT

POS stands for a point of sale or purchase, where a transaction takes place once the buyer selects the goods they wish to purchase. Retailers and restaurant owners cannot operate a demanding business without a suitable POS setup. Computer, credit card reader, receipt printer, barcode scanner, cash drawer, and POS software make up the entire POS system configuration. This report includes some observations made while a point of sale (POS) system was being developed. The project is distinctive in that it was originally intended to create standard software that could be customized but was later reorganized to provide a specific project solution. This report describes the circumstances leading up to and following reorganization and talks about the learnings from the ongoing progress. These three areas—software project management, prototyping, and testing—relate to these experiences the most.

Keywords: Point Of Sale, QR Code, Sales, Web Programming.

I. INTRODUCTION

POS refers to a point of sale, when a transaction occurs after the customer chooses the items they want to buy. Without a competent POS setup, restaurant and retail business owners cannot run a demanding operation. The total POS system configuration consists of a computer, credit card reader, receipt printer, barcode scanner, cash drawer, and POS software. The owner of a small firm might get excellent information from a decent POS system. All this data, from daily sales volume to inventory data, aids the small business owner in boosting profitability and lowering stress. There is hardware in POS systems. Point of sale software gives owners an easy way of finding out customers and of recording sales. It can continuously keep a record of the shop inventory, updating it when an order is processed. Manufacturers and sellers can both benefit from a POS system solution, where single transaction entry records, necessary details on the customer, products purchased, price and date while also updating inventory levels. Point of sale software allows users to give input via input devices like keyboard or mouse, and a few even have a touch screen interface. POS software is easy to install and easy to use and understand. You will need to be knowledge of how to update inventory and record a price modification for an item. Point of sale software usually provides an easy-to-use interface to try and do this. It can make the work of the employee a lot easier by automating the routine tasks of the day.

II. METHODOLOGY

Inputs for the system will be product details (name, supplier, price and category) all the details will be input by user and product to be placed. System contains user's admin, employee and shop customer. The administrator uses the administrative backend will add inputs and all the details of product and creates receipt to the customer accordingly. In the generated front end customer can select product and check the appropriate quantity and price. It enables the fully customization of the product and all the views with the customized product with real time rendering system. After selecting the product for buying, all the essential things like generating receipts, generating reports are carried out by the software. Also, it will help Wholesaler and retailer in their particular business growth.

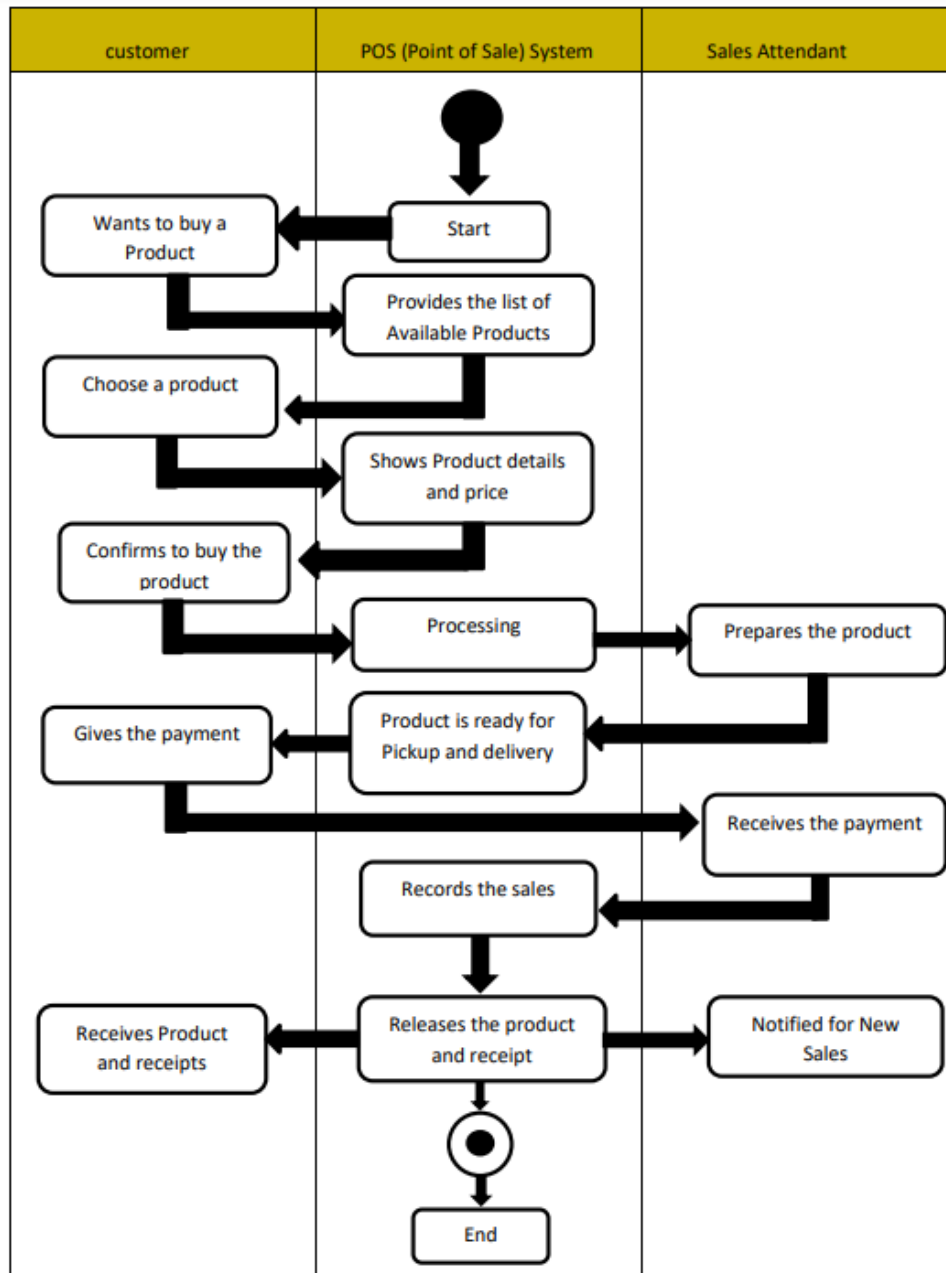


Fig 2.1 Activity diagram of the system

III. MODELING AND ANALYSIS

POS system is a solution that would build a powerful technical foundation for your business operation as a (Wholesaler or retailer). The power of modern POS system will deliver t your business is well known however you must develop an understanding of this power to ensure that your POS solutions meet the specific needs of your business. The POS system had a great a thing is that you can start to make decision around these simply by locking around your business and brainstorming about how each of these advance POS system feature could improve your business operations. Point of sale (POS) are an important focus for marketers because consumes trend to make purchasing decisions on high-margin products or services at these strategic locations. Traditionally, businesses set up POS near store exits to increase the rate of impulse purchase as customers leave. However, varying POS locations can give retailers more opportunities to micro-market specific product categories and influence consumers at earlier point in the sales funnel

IV. RESULTS AND DISCUSSION

In this section, we present the results of the evaluation of the proposed POS system using PHP and web technologies. We are collecting a dataset of various products from our group members to evaluate the performance of the proposed system. This dataset consists of a detail of the product to be purchase and sold by the whole seller or retailers. We use the Graphical interface as an evaluation metric to evaluate the performance of the proposed system. The recognition rate is the percentage of correctly identified individuals in the data set. We evaluated the proposed system using the collected dataset and compared it to traditional manual data-based inventory management systems. The proposed system achieved a speed rate of 96%, compared to 88% achieved by the traditional manual data entry system.

V. CONCLUSION

In this project, we propose an inventory management system using POS technology. The system uses product dataset details processing technology and graphical representation algorithms to display all the results. The proposed system is more accurate and efficient than traditional inventory management systems. In future work, we plan to improve the performance of the proposed system by using more advanced QR code and Barcode recognition algorithms and deep learning techniques. We also plan to integrate the system with existing learning management systems to provide a more comprehensive dataset and result management solution. Additionally, we plan to expand the capabilities of the proposed system by adding features such as cloud integration. The system can be used to monitor product and business behavior at the side of whole seller or retailer and identify any progress behavior. In conclusion, the proposed POS system adopts code detection technology and provides an efficient and reliable way to manage product records. The system has the potential to revolutionize the way professional touch over the traditional inventory management systems.

VI. REFERENCES

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