Submission Report For Java Project

As for mini project work for Course:

Java Programming (CSE310)

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Program: **B. Tech CSE**

Semester: **Fourth**

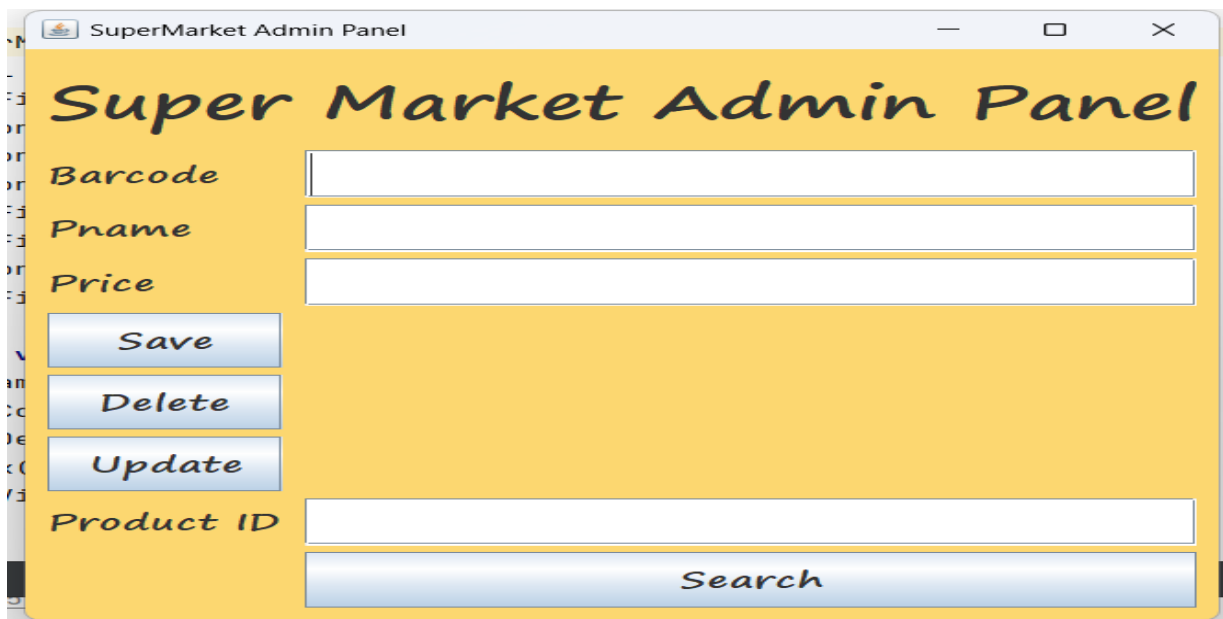School: **School Of Computer Science And Engineering**

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Submitted to: Dr. Bhimsen Moharana
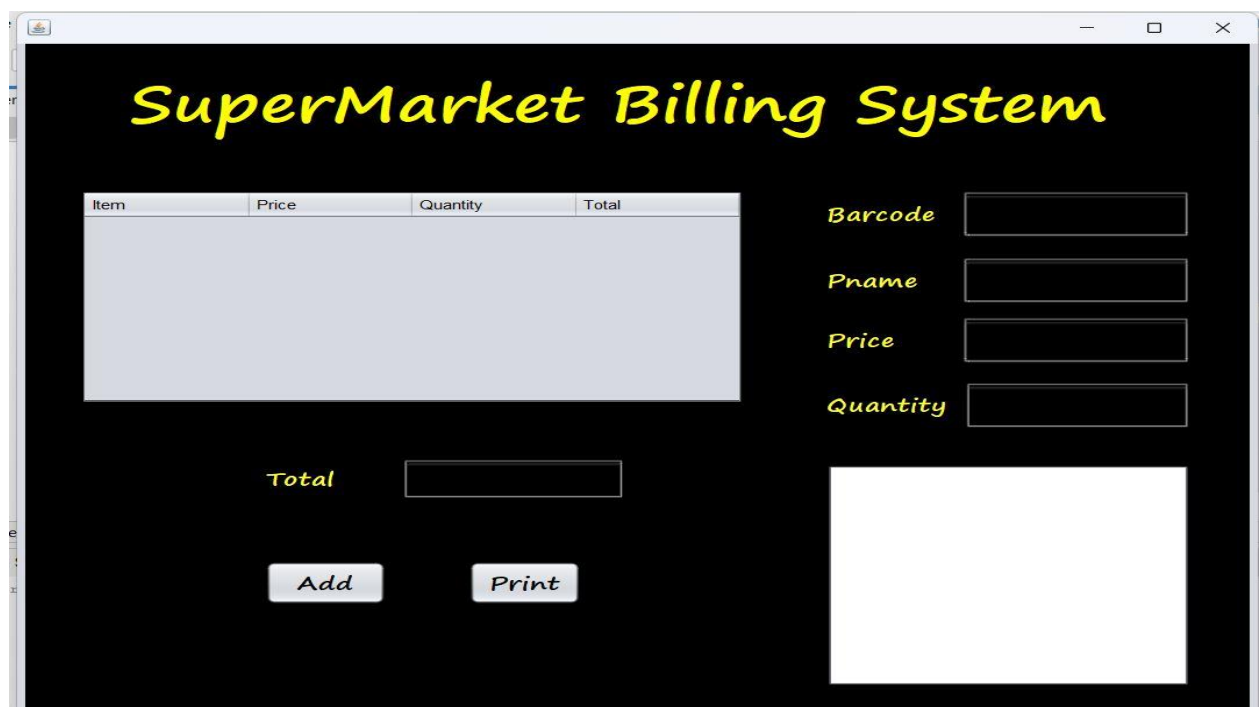
LOVELY PROFESSINOAL UNIVERSITY

Project Title

Develop GUI interface of working process of Super Market Billing System with explanation using Java.

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Responsibilities of each group members in this project:

Reg no.	Name	Responsibilities
12113088	Samriddh Yadav	Create Super Market Billing Customer panel
12113890	Kamal Kishor	Create Super Market Billing Customer panel
12115098	Bhanu Prakash	Create Super Market Billing Admin panel

ABSTRACT:

The Supermarket Billing System is a software application that provides a Graphical User Interface (GUI) to assist in the billing process at a supermarket. The system enables the supermarket staff to create and manage bills for customers easily and efficiently. The GUI interface allows the staff to input items and their corresponding prices, add discounts and calculate the final bill amount quickly. The system also maintains a record of all transactions and generates reports for sales, inventory, and customer purchases. Overall, the Supermarket Billing System streamlines the billing process, reduces errors and provides a seamless shopping experience for customers

ACKNOWLEDGEMENT:

DESCRIPTION:

© Context:

This project has been the part of my course for the CSE at Lovely Professional University. Which is supervised by our respected sir Dr. Bhimsen Maharana**.**

Many Supermarkets use this type of billing system for a decade. It is also improved many times according to requirements of sellers and customers. It does the same work that is calculating the bill, gives it to the customer and maintain proper database. They are accurate in calculation and printing, they also generate records. A new concept is also added in the billing system is that they also maintain relationships with the customers who purchase more products from the store regularly. System also concerns their requirements and gives them more commission. It also shows the overall profit and profit on a particular product and give repots which items are required and which have cross their expiry date.

Requirement Specification

Hardware Requirements

To access this application, you only need a PC/Laptop with Java install on it. Also check if java GUI working on it or not.

Software Requirements

For this system to work you need java compiler to write the code and execute it. You also need to install the necessary package for java GUI to work. After executing you can use this software in new window which will appear after executing the code.

Super Market Billing System Prerequisites:

To build this project, we will need the following Python libraries:

1. package– To create the GUI
   [swing, awt, event]

a. Messagebox – To display boxes showing information or error or asking yes or no.

b. simple dialog – To use pre-defined simple dialog boxes provided by Swing.

2. MySQL -- To connect to the database and perform operations in it

The MySQL library does not come pre-installed so you will need to install it and connect with this project using mysql connector:

2. Intellij Idea IDE we used to create this project

Super market billing System (Working process);

This software project is a traditional supermarket billing system with some added functionality. This system is built for fast data processing and bill generation for supermarket customers. The billing system consists of an SQL database and effective front end designed with the help of java GUI. The billing database is a vast collection of product id, barcode code product name, and price. A product when billed is searched from the database by only putting the barcode in the specific column and after that and after that it will automatically read the product name and price . Now you have to choose that how much product you have to buy . After that you have to just click on the add button so that product should be added in your list and you can also see your billing amount besides the total. And at last but not least there is a print button by which you can generate your whole bills with quantity and product name and total price of the groceries . This is the working of Super Market Billing System Panel.

A new panel that is only for the admin of the super market by which they can Save new product in the database, and update and delete the existing product if there is any price change of product or any mistakes happen. Admin can also search the product with the help

of just product id. There is a product id section where you have to enter the specific id of the product and click on the search button after that it will show the availability of the product, it will show product barcode, name and price of the product and invalid input in case of product is not available.

Introduction

In this modern era, the people have income time to spend and less time to spend. So, they generally opt for supermarkets for groceries. Supermarket is the place where the consumers come to purchase their daily using products and pay for that. So, there is need to calculate how many products are sold and to generate the bill for the customers. We can see that the barcodes are widely used in many grocery supermarkets for billing. These barcodes are placed on each and every product that is available in the supermarket. After picking up the required items the customer goes to the check -out counters, they scan the barcode on the products to calculate the bill for the customers. Every product has to be scanned separately consuming huge time and consumes lots of time of the customers. Particularly in huge stores whenever many customers come for looking in exceedingly a day and thousands of products have to be compelled to be scanned. This makes the task difficult for the human workers and even the long queues of shoppers are seen at the stores. In
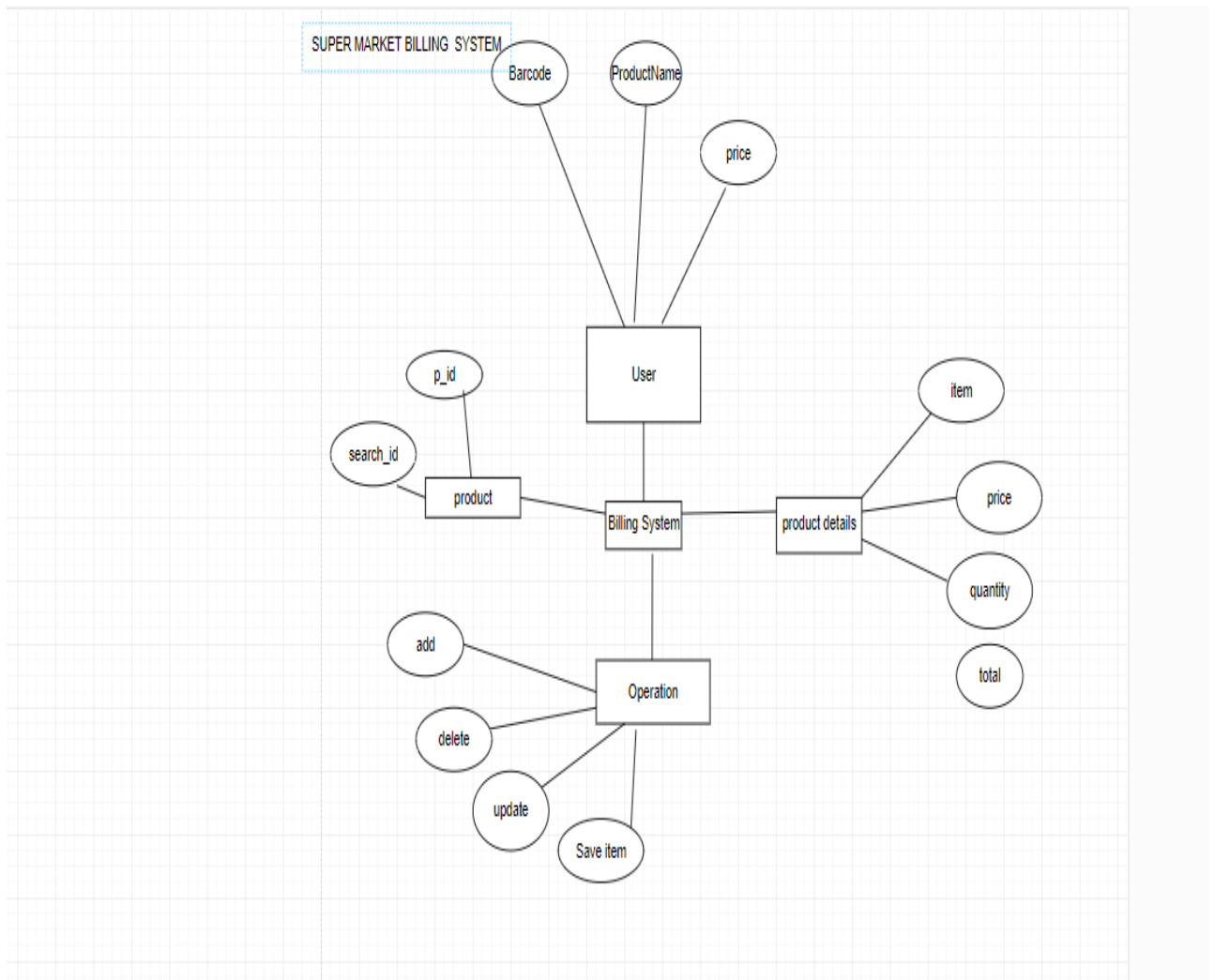
several cases, the barcode is either broken or even there is also downside in reading barcode, because of lighting effects, low resolution etc. A barcode-based billing is also expensive as it requires laser light for barcoding of all the products. Supermarket billing system using webcam deals with the automation of supermarket. This will help user to work in a highly effective and in a friendly environment. The billing consumes considerably less time and energy of the customers. This system is implemented by considering the predefined images of the products that comes to the supermarket and are stored in the local system. Open cv and other python libraries for the identification of images are used in this system. The webcam will capture the images of the products when the customer comes for billing. After capturing the images of products, it will find the objects which are predefined then it compares with the stored images, the software part will calculate the bill
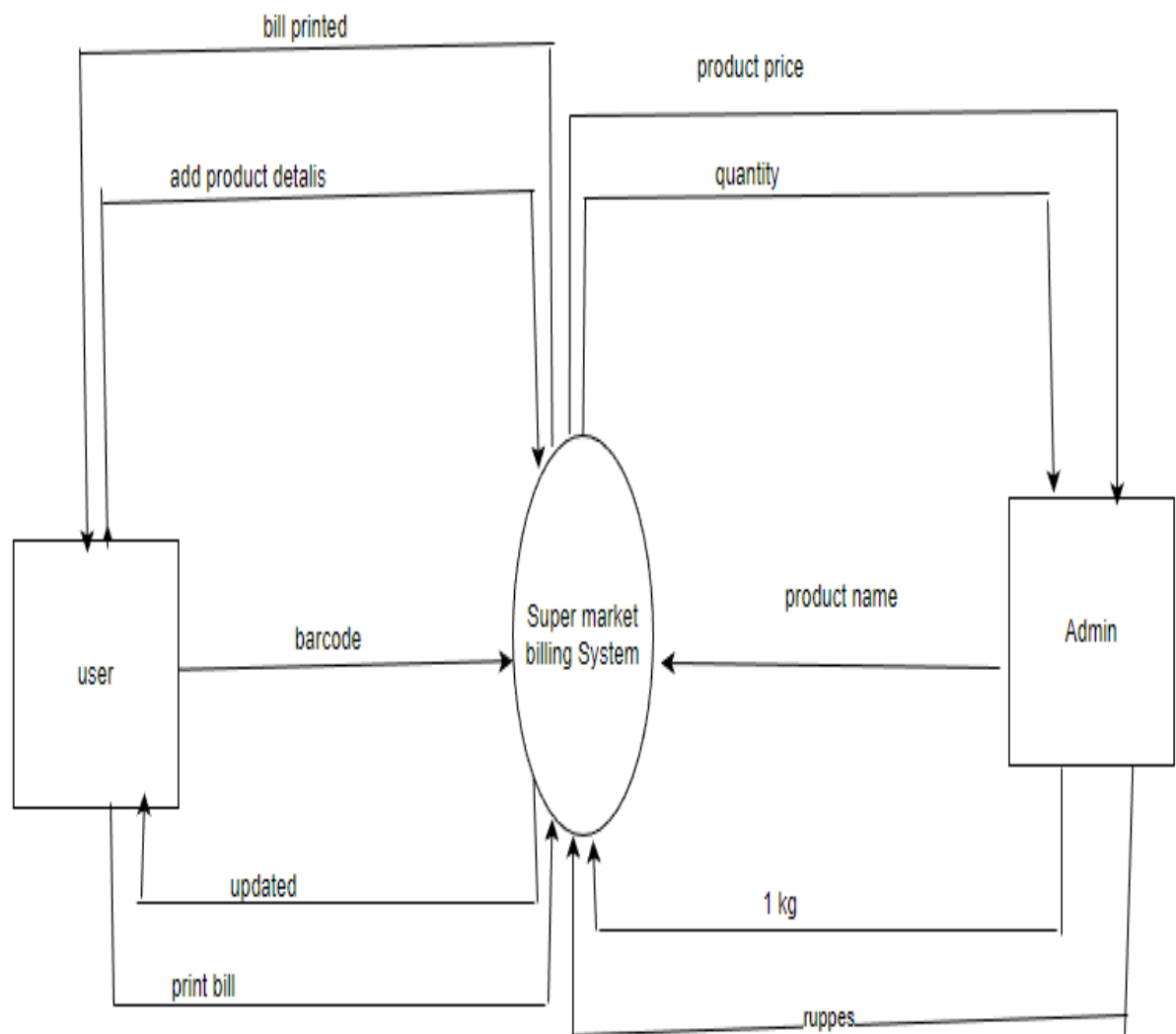
SCOPE

Our project has a big scope to do. We can:

1. Calculate the bill.

2. Give the bill to the customer.

3. Store how many products are sold.

4. Store products and their prices and with other information.

ER DIGRAM

SUPER MARKET BILLING SYSTEM

Barcode

ProductName

price

User

p_id

item

search_id

product

Billing System

product details

price

quantity

total

add

Operation

delete

update

Save item

DFD (DATA FLOW DIGRAM)

CONCULSION:

The supermarket billing system using webcam aim is to make a system that is useful to the retail shop by reducing time consumption in bill counter. No need for specialized hardware for installing the system the classroom. It can be assembled using a camera and computer. This system is advantageous over barcode billing system .This method is accurate enough and reliable. In this project with the tremendous use of TensorFlow, the object detection is done. And every method has its own advantage and disadvantage. But in this we tried to overcome the existing system problems. When compared to the other system the proposed system has more advantages and secure as we make change only in the billing process. Using this system both costumers and management will get a better shopping experience. The experiment results can be shown that the system can achieve high precision counting and high recognition accuracy. A. Conflict Of Intrest The authors declare that they have no conflict of intrest to report regarding the present study.

The supermarket billing system has proven to be a reliable and efficient way to manage sales transactions and inventory. The system

tracks sales in real-time, provides accurate inventory data, and generates detailed reports that help managers make informed decisions.

The supermarket billing system has proven to be a valuable tool for managing sales and inventory in supermarkets. With its ability to provide real-time data and detailed reports, the system has helped supermarket owners and managers make informed decisions that have led to increased profitability and customer satisfaction.

Thank you