

Billing System for Grocery Shop

Mr. Ashish Ambi¹, Mr. Afnan Hangad², Mr. Prajwal Misal³, Mr. Digvijay Patil⁴

Prof. Mrs. S. M. Kuwarkar⁵

Students, Department of Computer Engineering^{1,2,3,4}

Faculty, Department of Computer Engineering⁵

Sharad Institute of Technology, Polytechnic Yadrav, Maharashtra, India

Abstract: The project deals with the automation of supermarket. This will help salespersons in managing the various types of records of customer. The product will help the user to work in a highly effective and efficient environment. Salesperson have been recording the customer information in the past and even in the present through their personal manual efforts. In manual system, there are number of inefficiencies that a salesperson faces. The information retrieval is one of the foremost problems. It is very difficult to gather the overall performance reports of the customer. Large record books have to be maintained where relevant and irrelevant information has to be stored. This automation deals with all such problems and tries to remove them in the best suitable fashion. The new system will cater to need of salesperson of any supermarket so that they can manage the system efficiently. The project is developed with the objectives of making the system reliable, easier, fast and more informative.

Keywords: Tkinter, SQLite3

I. INTRODUCTION

The grocery billing system is an open source business solution used by supermarkets, department stores, and more. On the other hand, with this, businesses can do their own repetitive tasks to minimize waste and provide specialized shopping information to customers. In addition to payment, many billing systems in supermarkets also aid in accounting and inventory-related processes. If you are a local supermarket, then this is a good fit for you. As it provides a single interface to manage these different major stores.

Billing system for grocery shop is built to calculate and display bills for different items and serve the customer in a faster and efficient manner. Grocery shop is the place where customers come to purchase their daily using products and pay for that. So there is a need to calculate how many products are sold and to generate the bill for the customer. This system is built for fast data processing and bill generation for customers. It also allows the customer to purchase and pay for the item purchased. The user will consume less time in calculation and sales activity will be completed within fraction of seconds whereas in a manual system will make a user to write it down which is a long procedure and it also consumes a lot of time. Because Only shopkeeper can use this software. The billing system consists of an sql database and effective front end design.

II. LITERATURE REVIEW

While collecting data for grocery shop and grocery material we studied some research papers and some existing systems. There are some billing system apps on internet but they want monthly subscriptions. There is no such on demand for Billing System App which needs monthly subscription. By studying these all systems, we understood that there is no any Billing System for free or one time payment. So to provide this service in local area we are developing this application.

Ansar Ahmad et al [1], this paper explains the significance of Location-Based structure which will set aside our time during multiple tasks like finding specific addresses of some stores, getting and knowing about some good offers on the different items at a time. By using this mobile android application, customers can able to search for different Shops, Stores, Groceries locations.

Priyanka S et al [2], In this paper, an automated shopping trolley can also be said as a smart trolley, which integrates a raspberry pie embedded chip with a bar code scanner and a battery kit to allow the customer to self-checkout at hypermarkets and provisional stores.

Pallav Doshi et al [3], Firstly the paper will initiate the fundamental building blocks and structures of Convolutional Neural Network. Secondly, this paper will get into object detection techniques. Finally, the paper will describe how a robbery can be detected by integrating object detection and object tracking methodologies.

III. METHODOLOGY

3.1 Creating GUI

Creating a GUI application using Tkinter is an easy task. Tkinter is the standard GUI library for Python. Python when combined with Tkinter provides a fast and easy way to create GUI applications. Tkinter provides a powerful object-oriented interface to the Tk GUI toolkit.

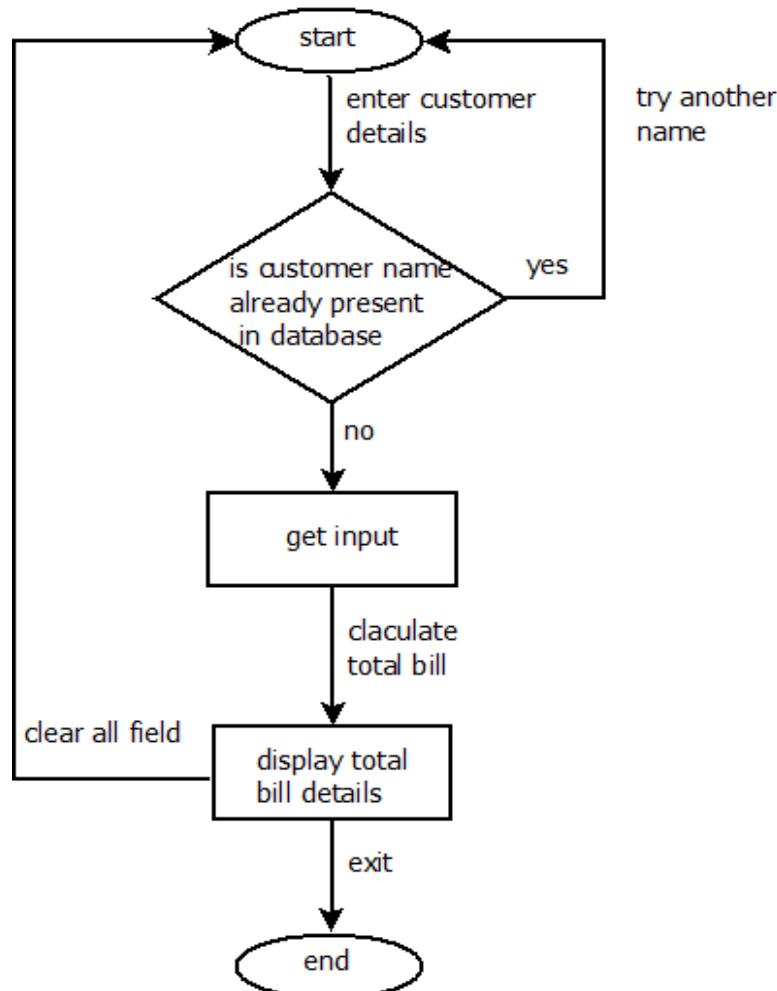
All Tkinter widgets have access to specific geometry management methods, which have the purpose of organizing widgets throughout the parent widget area.

3.2 Creating Database

Python SQLite3 module is used to integrate the SQLite database with python. It is a standardized python DBI API 2.0 and provide a straightforward and simple to use interface for interacting with SQLite database.

Database offer numerous functionalities by which one can manage large amount of information easily over the web and high-volume data input and output over a typical file. SQL is a query language and is very popular in database.

IV. FLOW CHART



4.1 Output

Billing System

Customer Details

Customer Name: kavyashree Contact No.: 9100000000 Bill.No.: 8746

Snacks	Grocery	Beauty & Hygiene	Bill Area																																										
Nutella Choco Spread: 4	Aashirvaad Atta(1kg): 0	Bathing Soap: 0	<table border="1"> <thead> <tr> <th>Product</th> <th>Qty</th> <th>Price</th> </tr> </thead> <tbody> <tr><td>Mutella</td><td>4</td><td>480</td></tr> <tr><td>Noodles</td><td>5</td><td>200</td></tr> <tr><td>Silk</td><td>2</td><td>120</td></tr> <tr><td>Pasta</td><td>2</td><td>240</td></tr> <tr><td>Oil</td><td>6</td><td>678</td></tr> <tr><td>Tea</td><td>8</td><td>3840</td></tr> <tr><td>Lotion</td><td>4</td><td>2000</td></tr> <tr><td>Cream</td><td>2</td><td>260</td></tr> <tr><td>Sanitizer</td><td>2</td><td>40</td></tr> <tr><td colspan="3">Total Snacks Tax : 40.0 Rs</td></tr> <tr><td colspan="3">Total Grocery Tax : 47.58 Rs</td></tr> <tr><td colspan="3">Total Beauty&Hygiene Tax : 230.0 Rs</td></tr> <tr><td colspan="3">Total Bill Amount : 8178.58 Rs</td></tr> </tbody> </table>	Product	Qty	Price	Mutella	4	480	Noodles	5	200	Silk	2	120	Pasta	2	240	Oil	6	678	Tea	8	3840	Lotion	4	2000	Cream	2	260	Sanitizer	2	40	Total Snacks Tax : 40.0 Rs			Total Grocery Tax : 47.58 Rs			Total Beauty&Hygiene Tax : 230.0 Rs			Total Bill Amount : 8178.58 Rs		
Product	Qty	Price																																											
Mutella	4	480																																											
Noodles	5	200																																											
Silk	2	120																																											
Pasta	2	240																																											
Oil	6	678																																											
Tea	8	3840																																											
Lotion	4	2000																																											
Cream	2	260																																											
Sanitizer	2	40																																											
Total Snacks Tax : 40.0 Rs																																													
Total Grocery Tax : 47.58 Rs																																													
Total Beauty&Hygiene Tax : 230.0 Rs																																													
Total Bill Amount : 8178.58 Rs																																													
Noodles(1 Pack): 5	Pasta(1kg): 2	Shampoo(1ltr): 0																																											
Lays(10Rs): 0	Basmathi Rice(1kg): 0	Body Lotion(1ltr): 4																																											
Oreo(20Rs): 0	Sunflower Oil(1ltr): 6	Face Cream: 2																																											
Chocolate Muffin: 0	Refined Sugar(1kg): 0	Shaving Foam: 0																																											
Dairy Milk Silk(60Rs): 2	Daal(1kg): 0	Face Mask(1piece): 0																																											
Namkeen(15Rs): 0	Tea Powder(1kg): 8	Hand Sanitizer(50ml): 4																																											
<p>Billing Summary</p> <p>Total Snacks Price: 800 Rs Snacks Tax: 40.0 Rs</p> <p>Total Grocery Price: 4758 Rs Grocery Tax: 47.58 Rs</p> <p>Total Beauty & Hygiene Price: 2300 Rs Beauty & Hygiene Tax: 230.0 Rs</p> <p>Total Bill Clear Field Exit</p>																																													

V. CONCLUSION

Billing system for grocery shop will help in creating many new opportunities for future research to evaluate new ideas in the field of online shopping as the customer will be able to benefit from these types of applications and purchase items in an efficient manner. Helps in better understanding and decision making.

We explained the technology and method behind it. The reverse smooth experience of this system. Throughout the cycle of trying different objects in this environment. Unlike traditional systems, it offers additional benefits.

Currently, the designed system is limited to simple applications, but the system can be used as a basis for more complex AR systems. We are currently using 3 models; These can also be replaced by inventor.

This type of system can also be developed at various online shopping stores when using a mobile or any other such compatible device. Therefore, at a time when market share is growing and a dangerous virus is spreading around the world, we have realized the importance of online shopping and user experience on the platform

REFERENCES

- [1]. Assist. Prof. Ansar Ahmad, Shakir Khan, Ajay Machhi, Ajay Baria, Akash Sabat "Store Hub an Android App": International Journal of computer science and Technology (IJCT)Mar-Apr 2016 International Journal of Computer Science.
- [2]. Priyanka S. Sahare, Anup Gade, Jayant Rohankar "Automated Smart Trolley System Using Raspberry PI Device "IOSR Journal of Engineering (IOSRJEN) ISSN (e): 2250-3021.
- [3]. Pallav Doshi, Shubhankar Punktambekar, Niraj Kini, Simarjeet Singh Dhami "Theft Detection System using Convolutional Neural Network and Object Tracking" IJARIE-ISSN(O)-2395-4396.
- [4]. <https://www.geeksforgeeks.org/introduction-to-sqlite-in-python/>