Ordering system

Science, Computer Science

AUTOMATED ORDERING SYSTEM USING ANDROID APPLICATION WITH BILLING AND INVENTORY SYSTEMS IN A RESTAURANT A Title Defense Presented to The Faculty of Institute of Information and CommunicationsTechnologyWest Visayas State University La Paz, Iloilo City In Partial Fulfillment of the Requirements for Introduction to Research in IICT Ruth Adorable Ma. Rosevelle Cainglet Kristine Genogaling Kasandra Leah Jayne Paniza Mary Joy Petrola Abstract This study focuses on developing an Automated Ordering System using Android Application with Billing and Inventory Systems in a Restaurant.

The main goal of the study is to shorten the time taken during the instance a customer orders. Also, this study wants to track the inventory in an easier and convenient way. The billing system will assist in calculating the total earnings of the restaurant for a day, week and month. The study is expected to optimize Android Application using tablets. It describes the main features of Android for a better understanding of this platform. Java Script was the programming language development technology used in building the system. The system allows the customer to order a menu without calling any of the service crew.

The customer can simply select thefoodto be ordered from the given menu through a tablet that is provided in every table which is embedded with an android application. The billing system is associated with the two other systems, which records the total bills of the customers. In paying the bill, the customer can do it in two ways either it can be cash or credit. The records for the supply goods and the sold products are documented in the inventory

system. Every tablet has a unique code where the server can identify if what table the order is coming from.

The tablet is linked to the counter and also to the server that is located in the kitchen. To sum it up, the three systems are interrelated to help the restaurant in attaining theirgoalsand objectives. Chapter 1 Chapter 1 is composed of six different parts to be discussed namely: (1) Background of the Study, (2) Overview of Related Systems, (3) Objectives of the Study, (4) Significance of the Study, (5) Definition of Terms, (6) Delimitation of the Study. Part One, Background of the Study, discusses the rationale for choosing the problem.

Part Two, Overview of the Related Systems, explains the features, capabilities, and limitations of the related system. Part Three, Objectives of the Study, states the goals that the study needed to accomplish. Part Four, Significance of the Study, enumerates the importance of the study and its beneficiaries. Part Five, Definition of Terms, conceptually and operationally defines important terms used in the study. Part Six, Delimitation of the Study, sets the ranges that are included in the study, as well as the boundaries and scope affected by the proposed system. Background of the Study

Nowadays most of the restaurants are having big problems regarding with their old ordering process. The basic problem in the food service industry is that restaurant is not realizing efficiencies that would result from better applications of technology in their daily operations. After analysing the said situation we've come up to a proposal that can help these problems of restaurants. This system that we've come up can let the costumers order

through simply choosing the menus that they like through a tablet that is in their tables. This tablet has an installed android OS with android applications.

This system can give a lot of benefits. With the new open and comprehensive platform for tablet device called android operating systems and android applications, we come up to extend to proposed automated ordering, inventory and billing system using android application in a restaurant. With this kind of systems, the management can provide immediate help for the customers. Customers won't bother about their tables while they are ordering because in every table there is one tablet embedded with android applications. Overview of Related Literature Objectives of the Study

This study aims to determine the objectives of Automated Ordering System Using Android Application with Billing and Inventory System in a Restaurant. 1. To develop an automated ordering, inventory and billing system using android application. 2. To develop an ordering system that allows customer's entry of orders to be forwarded immediately to the kitchen. 3. To create an inventory system to record the purchased and the consumed supply of products. 4. To develop an inventory system that records the supply goods and the sold products of the restaurant. 5. To design a friendly-user interface system. Significance of the Study

This study will be a significant endeavor in promoting Automated Ordering System Using Android Application in a Restaurant. In this study the costumers can also gain knowledge on how to use an automated ordering system using android application. This study will also help the personnel's to lessen the human work. Restaurant owner will likewise benefit the study. He

can monitor the daily, weekly and monthly income of the establishment. Through the inventory and tally of the supplies per transactions, the proprietor easily forecast on what and how many of the said supply will be ordered and delivered.

Moreover, this study will serve as a future reference for researchers on the field on Information Technology and Management. This kind of project will enhance their knowledge and skills in programming. And importantly, this research will educate clients in deciding on whether or not a food business should automate and utilize an ecommerce in advancing their business. Definition and Terms For the purpose and understanding, the following terms were given their meanings: Automated is to turn a set of manual steps into an electronic operation that runs on its own.

It may also refer to removing certain human interactions with the software in an existing information system to make it operate from beginning to end without intervention. (http://www. thefreedictionary. com/ automated) In this study, Automated refers to the techniques in ordering in afast foodchains. Ordering is to give an authoritative direction or instruction to do something. In this study, Ordering refers to System is a group of interacting, interrelated, or Interdependent elements forming a complex whole. In this study, system refers to the

Android is a software stack for mobile devices that includes an operating system, middleware and key applications. (http://developer. android. com/guide/basics/what-is-android. html) In this study, Android refers to the software that will be used in the system. An application is a program or group of programs designed for end users. In contrast, applications software

(also called end-user programs) includes database programs, word processors, and spreadsheets. Figuratively speaking, applications software sits on top of systems software because it is unable to run without the operating system and system utilities. (http://www. ebopedia. com/TERM/A/application. html) In this study, Application refers to a program designed for end users. Restaurant is defined as a business establishment where meals or refreshments may be purchased. (http://www. merriam-webster. com/dictionary/restaurant) In this study, restaurant refers to where the system is deployed. Billing system is a combination of software and hardware that receives call detail and service usage information, groups this information for specific accounts or customers, produces invoices, creates reports for management, and records (posts) payments made to customer accounts. (http://www. billingdictionary. om/billing_dictionary_billing_system_definition. html)Authors: Mr. Avi Ofrane Mr. Lawrence Harte Copyright: 2006 In this study Billing refers to the record of the sales price from the customer. Tablets are a powerful tool for enhancing your productivity and online experience whether for business use, or life in general. Smaller than a laptop and bigger than a Smartphone, the tablet is perfect to take with you on the go. You can browse the internet, create and share presentations, videos conference with clients, stay connected with corporate email, download books, games and videos, watch movies, share photos and much more with your tablet. http://www. staplesadvantage. com/tablet/choosing-a-tablet-tablet-what-is-it. html) Copyright 2011 Staples, Inc. In this study Tablet refers to the device used by the costumer to order in the restaurant. Inventory are raw materials, work-in-

process goods and completely finished goods that are considered to be the portion of a business's assets those are ready or will be ready for sale. (http://www. investopedia. com/terms/i/inventory. asp#ixz29lQePffp)2012, Investopedia US, A Division of ValueClick, Inc.

In this study Inventory refers to the records of supply goods and the sold products of the restaurant. Java Script A scripting language developed by Netscape to enable Web authors to design interactive sites. Although it shares many of the features and structures of the full Java language, it was developed independently. Javascript can interact with HTML source code, enabling Web authors to spice up their sites withdynamic content. JavaScript is endorsed by a number of software companies and is an open language that anyone can