DESIGNING AND DEVELOPING CAMELOT
RESTAURANT INFORMATION SYSTEM IN ORDERING
WITH WEB BASED MOBILE DEVICE

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Abstract
Camelot Restaurant is a restaurant located at Ciputra, Surabaya, which offers western food dishes such as steak and pasta, and also offers Japanese cuisine. In the current manual system is used so that the ordering of food or beverage is still done manually, making it less efficient. Based on background issues, the author designed the information system of reservations that can be opened through a mobile device that has a Wifi connection. Applications are also made at the cashier and the kitchen to be able to accept orders via the web-based mobile devices. Making these applications using Visual Basic programming language in 2005 as a cashier and kitchen, ASP. NET on the web booking restaurants and SQL Server 2005 as its database. Results obtained from applications that have been made, ordering information system that better and more efficient, via mobile device that has Wifi connection, such as Blackberry and Iphone, food stock calculation system based on the available ingredients, cost of sales reports, and statements of income. Based on the experiment, 60% of the correspondence explain features on the application are good to support the company's need, but 40% of the said it adequate.

Keywords: Cost of Goods Sold, Mobile device, WiFi

1 INTRODUCTION
Together with the development of technology, the requirement would information become increasingly high, and this development has been influential to all the fields, both that in the science field, and in the business field. In this time, was needed by the presentation of the data quickly that could help the restaurant in order to be able to compete with the other restaurant.

Therefore, then the Camelot Restaurant needed an application system that could facilitate the restaurant in carrying out the registration against order food, the report on supplies that could help in decisive was not him a food or the drink. The registration order was carried out with mobile device that was based web, that had the superiority multi the platform, or could be undertaken in various sorts of the operation system in mobile device provided that having the Wifi connection. Yang Including mobile device was the mobile phone, smartphone or PDA that had Wifi, and had browser that could be opened web the ordering that dimikili the restaurant. With the existence of this application system was expected to be able to facilitate in carrying out the ordering of food that is could be recorded quickly and the mistake on the ordering for food that was finished not happening but also could monitor stock of the material, food and the drink that were available, so to be commemorated if stock of a material, food and the drink has almost been finished to could do the increase in stock.

2 FOUNDATION OF THEORY
2.1 MOBILE DEVICE
Mobile devices are wireless devices that can be used for data communication, eg, PDAs, and cell phones. Data communication can occur with the help of WiFi or GSM network connection. WiFi is a standard used for Wireless Local Networks (Wireless Local Area Networks – WLANs) based on IEEE 802.11 specification, which allows anyone with a computer with a wireless card (wireless card) or personal digital assistants and smartphones to connect to the internet using access point (otherwise known as hotspots) nearby. While the GSM or stands for Global System for Mobile Communication is a mobile communications technology that is digital. GSM technology widely applied in mobile communications, especially mobile phones. This technology utilizes the microwave and signal transmission is divided by time, so that the signal information sent will arrive at the destination. Used as the global GSM standard for mobile communications as well as mobile technology the most widely used of people around the world. Mobile devices are widely used by businesspeople to help solve their needs such as creating dokuman, email client and also for browsing. Mobile devices can be used as a tool to be used as a device to interact with the Internet (Fitzek, 2007).

2.2 Cost of Good Sold
That was meant by sale cost price to be all the cost that was spent to receive the thing that will be sold (Weygandt, 2008). The benefit from sale cost price: as the standard to determine the selling price and to know the profit that was wanted by the company. If the selling price bigger than sale cost price, then will be received the profit, vice versa if the selling price smaller than sale cost price, then will be received by the loss.

$$\text{Cost of Goods Sold} = \text{beginning inventory} + \text{cost of goods purchased} + \text{ending inventory}$$
THE ANALYSIS AND THE DESIGN OF THE SYSTEM

The steps in the execution of the research (Whitten, 2004):

1. The study of literature
   - Studied the Visual Basic .NET programming language to be integrated with Microsoft SQL Server.
   - Studied the production method web in mobile device.

2. The Technic that was used in gathering the data was:
   - The interview
     Carried out the process of the interview in receiving information concerning the system of the process of process information pengorderan and the material regulation to the Camelot restaurant
   - The documentation
     The data collection by means of seeing and recording the menus to the Camelot restaurant
   - Observation
     Entered to the field and studied the system system that was owned by this restaurant directly.

3. Carried out the Analysis and the design of the Program
   - In this stage will be carried out by the process of the analysis and the design to the database that in part.
   - The structure of the database that was used in the production of the table table, like: the stock table of the material, the table order, the table reservasi, and the other table table that was needed.
   - Carried out the normalisation when necessary, that is did minimalisasi to the database, so that the data that redundancy could be avoided.
   - The development of the program. In this stage, after the process of the analysis and the design were carried out, then the structure of the database that was produced in the process of the analysis and the design were applied in the production of the program, where in this stage the program immediately could access to the table table that was connected with each other available in the database.

4. The testing of the Program
   - In this stage was carried out by the testing towards the program that was made, what was the program that was made could present the data that was needed well and accurately in accordance with this restaurant wish.

The ordering system to this Camelot restaurant was not more maximal and rather cause difficulties for because of the attendant must check whether having the table that was available on the upper floor, if the guest wanted the table that above. In his ordering system, the attendant must go to the kitchen to give the ordering of this guest, afterwards must head the cashier, to be carried out by the registration. If this restaurant in the busy condition, then extravagance of time and the efficient shortage will happen that could cause old or the delay of time in providing food.

Web based on results of the analysis of the problem of the ordering system of the Camelot restaurant, then could be learnt that the attendant needed the better and efficient ordering system. Needed by the system that automatically could give the suggestion and informed the place that was available in choosing the table for the guest in accordance with the floor wish how many and the number of guests. In the ordering, that was needed was the system that directly could distribute the order to the kitchen and at the same time to the cashier, to increase service efficiency, but also to cut time. Also could know how many menus that were available and that not, if being available could know how many of them.

Web based on results of the analysis of the problem of the ordering system of the Camelot restaurant, then could be learnt that the attendant needed the better and efficient ordering system. With the existence of the automation system, then was hoped time that was needed when someone came, ordered food, to food was presented to the guest became shorter.

The Context Diagram design from the system of ordering information to the restaurant camelot could be seen in the Picture 3.2. In context this diagram, was gotten four external entity that gave input and output to the system, that is:

a. Supplier received order the purchase from the Camelot Restaurant. The material that was bought was put into the system.

b. Customer carried out the ordering of the menu was put into the system. But also could do reservasi that was kept in the system.

c. The owner asked for available reports from the system.

The official was responsible to the process of inputing the menu could be seen in the Figure 1.
The Data Flow Diagram design from the system of ordering information to the restaurant camelot could be seen in the Figure 2. In DFD Level 0 this was gotten by four processes, that is: Purchasing, Sales, Add Menu and Creating Report.

Entity Relationship Diagram (ERD) is a method of designing a database that is often used in designing an effective database system. With the ERD made. ERD for Conceptual Data Models can be seen Figure 3.

4 RESULTS AND DISCUSSIONS
This page explained concerning the testing of the system and the operation from the program that was made. The testing was carried out to the page or the available menu to know the appropriateness of the program to be used can be seen Figure 4. Form Login and Figure 5. Form Login Mobile Device to be able to access this application, the user must put the username and password.
After the user succeed in entering, then will enter into Form Main Menu can be seen Figure 6.

To carry out the ordering, ate was chosen the menu add order the purchase, was filled up in accordance with the requirement. The data filling order the purchase could be seen in the Figure 8.

The testing was carried out to the Calamari Rings menu. Calamari Rings had the recipe that consisted of Squid totalling 120 gram, Tar Tar Sauce totalling 50 ml and Steam Rice totalling 1 pax. The Calamari Rings recipe could be seen in the Figure 9, and View Menu Calamari Rings from Mobile Device can be seen in Figure 10.
Cost price could be per the material that was needed to cook Calamari Rings seen in the Figure 11., Figure 12, and the Figure 13.

5 CONCLUSIONS

From the design and manufacture of Camelot restaurant reservation information system with a web-based mobile devices can be drawn some conclusions as follows:

• With this application, can assist in making restaurant reservations food or beverage orders more quickly and efficiently, it takes a little more.
• With this application, the amount of stock foods and beverages can be known easily.

6 REFERENCES


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