Course: CSC 400L
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Project Proposal

Food Ordering & Managing System

Abstract

Call it "fast food" or "quick service" – the emphasis is on speed. It's critical when it comes to a company's point-of-sale system. So is reliability, ease of use and flexibility. The proposed software for an *Ordering & Managing System* will provide the tools to effectively and efficiently manage the mission-critical point-of-sale operations. It will be able to optimize the business with fast and easy order processing, manage back-end system and increase customer service.

The software will feature a modular, user-friendly interface and flexible design that will meet *Claudy's* current and future needs – helping to maximize the life and value of their point-of-sale investment. Easy-to-use, custom configurable screens will give *Claudy's* the flexibility to control the look and flow of transactions. That means decreased training time – hours instead of days or weeks – and increased employee productivity.

Sponsor's Background

This state-of-the-art software is specifically being designed for a fast food restaurant called the *Claudy-FRESH Grille on the Beach.* This family owned business is located at the calf pasture beach in Norwalk, Connecticut, and has been in existence since the year of 1983. The *Claudy-FRESH Grille* has been operating for twenty one years without a computerized ordering system. Instead, orders have been taken manually on detachable order sheets. For the past four years, using that strategy, the ordering process at *Claudy's* has been badly backed up, especially in the summer time when it gets real busy. The owner of *Claudy's* have been trying to make a change in the ordering process, but with poor customer service, employee labor and lack of income, was not able to afford a system.

As an ex-employee of *Claudy-FRESH Grille on the Beach*, and knowing their need for a huge step into today's technology, I decided to put together this software that would ease their ordering process and increase their customer service. This software consist of a vast selection of features that will help *Claudy's* shape the way they serve. Without a doubt, their ordering process will be at a new level and will be beneficial for both the employees, customers and also the owner. With this software, employees will no longer need to have stocks of pen and papers around to take orders, and won't have to worry about doing the calculations for change. Managers won't have any problems checking the total sale by the end of the day. Everything will only be one click away.

Introduction

The objective of this software is to facilitate food ordering process, provide good customer service and help increase employee productivity at *Claudy-FRESH Grille on the Beach.* They have been wanted something like this for a long time and their need for this system is enormous. It will really be a dream come true and a huge help for all the staff at *Claudy's.*

Project Description

The *Ordering & Managing System* will be designed using Microsoft Visual Studio .NET 2002. After talking to the owner and receiving all the specifications, the different functionalities and features of the software will be:

- o   User-Friendly Inter-Active Interface
- o   Windows-based Open Architecture
- o   Automatic End-of-Day Process
- o   Built-in Report

o   Order Timing Functionality

o   Multi-Stations Capability

o   Customizable Screens and Screen Flow

o   Front-of House Management Reporting Access

o   Built-in Redundancy

o   Payment Cards History Search

o   Printable Receipt, Report and Credit Slip

In fine points, the different screens and components that this software will include is as follow: (see additional sheet for hierarchy)

Manager / Employee Log In Screen

As any regular system, users or regular employees are restricted to several things and have limited access to some data, while the managers have full access to those restricted data. This log in system will be set up to allow employees and managers to access the system but put some restrictions based on rather an employee or a manager have logged in.

Upon log in, the user will be prompt to enter their username and password. The username will set up to be the manager's or employee's first name (or nick name). And the password can be any combination of any length that they may choose.

The employee or manager will be given three tries to enter their username and password. After every bad combinations, the system will let the user know that the combination is incorrect and try again. After the third try, a message box will let then the user know that the combination entered has not been set up yet and that they should contact the manager to verify or set up the account. If the combination is successful, the username, and the

time and date that they logged in will be sent to the system login database. And the user will then be logged to the system's main screen and a welcoming message will pop up greeting either the employee or manager by name.

Manager's Main Screen

The manager's main screen will set up to be different from the employee's main screen, only by enabling access to the Manager's Menu and the Reports Menu.

- Manager's Menu

The manager's menu is basically the root of the whole system and it contains most of the database processes. From this menu managers can manage the whole system and the different tasks that a manager will be able to do include:

1. Create Employees / Managers Account

This will allow the manager to create (set up) an account for an employee or another manager by recording personal, legal and log in information about the employee or manager and save them to a log in database. The system log in info is then used to log into the system after the account have been created. Based on the type of account set up, the user will be logged as either a manager or an employee.

2. Update Employees / Managers Account

This option will also be managed by a manager and it allow the manager to update employee's/manager's personal, legal or system log in information. If for any reason an employee or a manager has recently moved, changed their phone numbers, replace their social security number, has gotten a raise

or simply just want to change their username or password, this option will allow them to make the necessary changes by accessing the database.

3. Delete Users / Managers Account

    This option will allow the manager to completely remove an employee or manager's information from the system. After doing so, that particular user will no longer be able to log into the system unless his/her account has been re-set up.

4. Update Items Price

    As it is in any business like the *Claudy-FRESH Grille*, items prices are changing daily. And this option will allow the manager to change or update a particular item's price.

5. Add & Assign New Items

    Just like prices are changing, with good customer services and great productivity, new items will be added to menu. And with this option, a manager will be able to add new items and its price to the system and will be able to assign it to a specific empty button from the main menu

-   Reports Menu

    The sale's report screen will be customized to allow a manager to view and print a daily, weekly, monthly and yearly sale's report. The report will specifically show each order for that day with the date, the time, whoever processed the order, the order number, the amount and the type payment.

    Using that same Sale's Report Screen, a credit or debit card and personal check history search will be found for any cards that was ever used at the restaurant. For the credit and debit cards, the search will be done using the last 4 digit of the card,

and the personal check, the search will be done using the customer's last name. If found, the report shows all the transactions that were made with this card, along with the dates that it was used, and the amount. This report will also be printable. If not found, a message box will pop up and let the manager know that the card was not found, which mean that this particular card has not been used.

A System Log In report can also be obtained using that same screen. A manager will be able to see who have logged in and out of the system for the current day and any other days. There will be a search button to search for other days.

Employee's Main Screen

The employee's main screen will have the same functionalities as the manager's except that access to the Manager's Menu will be disabled and the Sale's Report Screen will be replaced by an Employee Menu.

- Employee Menu

The Employee Menu will allow the employees to access the Clock In & Payroll System. For security reasons, the employee will be required to re-enter their username and password before they can access the Clock In & Payroll Screen. Once there, the employee can clock in and out of their shift, and also during brake time. And at the end of the day, the total hours that they have worked will be displayed.

The Payroll System will allow them to view their total hours for the week and their estimated income based on their pay rate and tax filling information which were provided upon setting up their account.

Main Screen Order Process

The main screen order process will be accessible by both managers and employees. It will allow both the managers and employees to process an order. The different tasks that will be involved in the ordering process are:

1. Items Display & Descriptions Screen

This screen will display a picture of each item and a brief description about the item's ingredients and calories information.

2. Discount Menu

The discount menu like it said will have several types of discount given to different types of customers. The different types are: $1, $5, $10 Coupon, 10% Off, Life Guard Discount (20% off), Family Discount (30% off), Special Discount (50% Off), Manager's Meal (FREE).

3. Payment Methods

There will be different types of payment methods acceptable. And they are: Gift Certificate, Cash, Personal Check, Credit Card (VISA, MASTER, AMEX, DISCOVER), Debit Card, and EBT Card.

4. View / Print Receipt

As the order goes, the user will be able to either view and/or the receipt print.

The above description of the project will be provided to the sponsor at the completion of the software along with a user manual which will explain in more specific details about each buttons and screens. This system will also be tested by several colleague for any type of possible error that might occur when it come to using it in the work place. Also I will provided a week of training with the employees, the owner and managers separately, to explain in detail the different features of the system and help set up the accounts. I will also be considered as

the software consultant where the owner can refer to me at any time when something unusual might have happened.

Project Difficulties

I really don't think I will encounter a great deal of difficulties in doing this project. The only thing is that it requires a whole lot of time to put together such a system. With all the classes that I'm taking this semester, it might be a little hard to find the time to really work as much on the project as I should. Also every piece of code has to be tested thoroughly in order to provide a great and efficient software. Therefore, I will implement the system step-by-step, starting with the main access and control pages. When the system works at this simplified level, then I will implement more features as time allows.

Detail Schedule

Below is a detail work schedule of the class proposal and the software project until completion. This schedule may be changed based on how fast and the amount of sufficient time that I can allotted to work on the project.

Project Management

1. Generation of Project	September 16, 2004
2. Final Progress Schedule	September 23, 2004
3. Midterm Progress Report	October 8, 2004
4. Coding	October 22, 2004
5. Detailed Outline	November 12, 2004
6. Milestone Detailed Outline	November 23, 2004
7. Project Presentation	November 9, 2004
8. Optional Draft	November 24, 2004
9. Finalizing Manuscript	December 3, 2004

10. In-class Demos	November 9, 2004
11. Final Manuscript Milestone	December 16, 2004

Software Management

1. Project Creation Begin	September 30, 2004
1.1 Log In GUI's Design	September 30, 2004
1.2 Log In Screen Coding	Sept. 30 – Oct. 3, 2004
2. Main Screen 1 GUI's Design	October 4, 2004
2.1 Begin Screen 1 Coding	October 4 – 7, 2004
3. Main Screen 2 GUI's Design	October 8, 2004
3.1 Begin Screen 2 Coding	October 8 – 12, 2004
4. Order Process Coding	October 13 – 21, 2004
4.1 Process Buttons Coding	October 13 - 14, 2004
4.2 Discount Menu Coding	October 15, 2004
4.3 Items Display Coding	October 16 – 18, 2004
4.4 Tender Screen Coding	October 19 – 20, 2004
4.5 View/Print Receipt Coding	October 20 – 21, 2004
5. Mgr. Menu GUI's Design	October 21, 2004
5.1 Begin Mgr. Menu Coding	Oct. 22 – 26, 2004
5.1.1 Create User Coding	Oct. 22 - 23, 2004
5.1.2 Update User Coding	October 24, 2004
5.1.3 Add/Update Items	October 25, 2004
5.1.4 Assign New Items	October 26, 2004
6. Employee Menu GUI's Design	October 27, 2004
6.1 Begin Emp. Menu Coding	Oct. 28 – Nov. 2, 2004
7. Sale's Report GUI's Design	November 3, 2004
7.1 Report Screen Coding	November 3 – 7, 2004
7.1.1 Sale's Report Coding	November 3 - 4, 2004
7.1.2 Card Search Coding	November 5, 2004
7.1.3 Log Report Coding	November 6, 2004
7.1.4 Check Report Coding	November 7, 2004
8. Begin Software Testing	November 8 – 11, 2004
9. Begin Software Manuscript	November 12 – 18, 2004
9.1 User's Manual	November 12 – 15, 2004
9.2 Programmer's Manual	November 16 – 18, 2004
10. More Software Testing	November 19 – 26, 2004

Conclusion

In conclusion I feel that this software will be a huge step for *Claudy-FRESH Grille.* It has been a while since they've been wanting something like that, but could not afford it. I feel really privileged to help *Claudy's* in advancing their company by using the latest technology gears. It's really a great responsibility but I think I can manage this very well. I feel really great about this project and I'm really looking forward in getting started with the real work behind this proposal.

I am almost certain that my proposal will be approved, and in the future, software upgrade will also be made available to the sponsor.