



A FRONT OFFICE INFORMATION SYSTEM
FOR ARISTON HOTEL BANGKOK

by
Ms. Kanokporn Boonpayont

A Final Report of the Three-Credit Course
CE 6998 Project

Submitted in Partial Fulfillment
of the Requirements for the Degree of
Master of Science
in Computer and Engineering Management
Assumption University

July 2003

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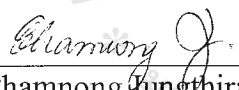
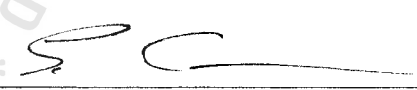
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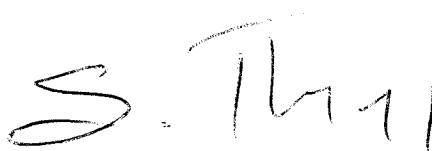
Project Title	A Front Office Information System for Ariston Hotel Bangkok
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Academic Year	July 2003

The Graduate School of Assumption University has approved this final report of the three-credit course, CE 6998 PROJECT, submitted in partial fulfillment of the requirements for the degree of Master of Science in Computer and Engineering Management.

Approval Committee:

The seal of Assumption University of Thailand is a circular emblem. It features a central shield with a cross, a star, and a book. The shield is flanked by two figures, and the entire emblem is surrounded by a wreath. The text "ASSUMPTION UNIVERSITY OF THAILAND" is written in a circle around the emblem. Below the emblem, there is a banner with the text "LABOR OMNIA VINCIT".

 (Dr. Chamnong Jungthirapanich) Dean and Advisor	 (Prof. Dr. Srisakdi Charmonman) Chairman
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(Assoc. Prof. Somchai Thayarnyong)
MUA Representative

July 2003

ABSTRACT

Front Office Information System for Ariston Hotel Bangkok is developed from a manual system to a computerized one. The existing system in which processing, handling and filling are done manually causes many problems that are associated with manual operations. The proposed system is developed to eliminate all those problems.

This project mainly focuses on computerization in the reservation process, check in process, change room, check out process, and generate report process all of which are the Front Office Operations, the existing system is studied and analyzed. The proposed system is designed to solve and minimize the problems in the existing system and provide accurate and timely information to the top executives to make decisions. The proposed system is designed to use LAN for network architecture and RDBMS for database architecture. The hotel needs one computer for the server, four computers for the workstation and some other necessary peripherals.

The proposed system is expected to take about 1.70 years for the benefit to overtake the cost and the hotel will get tangible benefit 2,218,593.34 bahts and intangible benefits for providing a new customer service, improving a decision making process, etc. Additionally, the hotel can reduce the total processing time from 3 hours and 53 minutes to 23 minutes.

During the system implementation, a new database designed will be built and tested, the input and output are constructed and the new program will be written by using Microsoft Visual Basic for Application in Microsoft Access. The programmer must write and test the programs carefully and it will take a month to carry out these activities.

ACKNOWLEDGEMENTS

In preparing this project, the writer would like to express her appreciation to her project advisor and Dean, Dr. Chamnong Jungthirapanich, who has contributed suggestions and recommendations to make this project a success.

The writer greatly appreciates the time, experience, and expertise provided by several prominent personnel from Ariston Hotel Bangkok for their great efforts and contributions.

The writer would also like to thank Assumption University for handling and arranging the Computer and Engineering Management Program to help the students understand more about computer technology and to apply the studied concept in the working environment today.

Finally, the writer would like to express her gratitude to her family and colleagues for their inspiration and continuous encouragement throughout the course of this project.

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I. INTRODUCTION

1.1 Background of the Project

Hotel business is a major business in supporting the rapid growth of travel industry. This project is developed to replace the hotel front office reservation process of Ariston Hotel Bangkok with an equivalent computerized system including enhanced functions and features. Hotel business comprises businesses that provide service, primarily accommodations, food and beverages, not only to those who travel for pleasure, but also the business travelers. Travelers can use more time for relaxing at hotel, which has good environment and with the best view of Bangkok.

Regardless of how the hotel is organized, front office is always an essential focal point or the nerve center of any hotel operation. Being the nerve center of a modern hotel, front office must be aware of what is happening at virtually every level of the hotel's organization structure. One of the negative aspects is that the front office also serves as a point for guest complaints. One of the major sources of complaints related to the front office is from those who have to deal with the accurate information on the guests and details of the attendants.

Controlling an accurate front office record on any scale is extremely difficult. It is necessary to automate the front office process, so that the front office can be managed and controlled effectively. The automated system will ensure that all the no important information is missing. At the same time, a high level of accuracy of front office record is also maintained.

The front office is not only responsible for the reservation and registration but also for other functions that are the responsibilities of the front office include providing information on hotel service, coordination of guest services, charting of room status reports, maintenance of guest accounts and settlement and collection of guest accounts.

By analyzing the process of front office information system at the hotel's front office that is done manually, the hotel found that the current manual system is adequate for small processes; however, could no longer keep up with the speed of growth. This is clearly noticeable when the hotel increased the number of rooms for customers. The problems arose when guests changed their reservations. The staffs have to keep up with the rapid change, and confusions are likely to occur often. The numbers of potential customers of the hotel have dramatically been growing and the number of competitors has also been increasing. The necessary functions in the front office, which are done in manual ways, seem to be improper because of the repetitiveness, the functions overloaded and being time consuming. Since the information is kept in paper, it takes time to search, correct, or change, and sometimes the information is lost.

By making use of a computer-based information system, the difficulty in controlling and operating those tasks can greatly be reduced. Instead of having to handle a massive paperwork, perform repetitive and tedious tasks which can be very fastidious with the task of room assignment, a well-designed computer information system can be replaced to handle the problems.

The system presented in this project is not designed for a specific organization on hotel. It rather aims to serve the common functions of hotel activities at the front office. The information processed in those activities tends to be almost the same for medium sized hotels.

1.2 Objectives of the Project

The main objective of the project is to develop a computerized system for the guests of Ariston Hotel Bangkok because the numbers of guests are great while the overall processes are done manually.

This system is aimed to support the front office information system. The objectives of the project are as follows:

- (1) To analyze the existing system and design the new computerized system for more effective works.
- (2) Determine and analyze business and user's requirement in front office hotel management system.
- (3) Design an information system to assist the front office operations in hotel business.
- (4) Develop effective for low cost application software to operate on low cost computer hardware.
- (5) Estimate and compare cost and benefit between manual and computerized system.
- (6) To improve hotel profitability.

1.3 Scope of the Project

This project focuses only on front office management; therefore the project covers the major part of front office management and operation as follows:

- (1) To check the room status for availability.
- (2) To manage and keep the guests' information who check-in and out for the hotel.
- (3) To keep information of the guests who made reservations.
- (4) To support information to front office management.

- (5) To develop the system documentation.
- (6) To develop a new database system, this can be used for keeping.
- (7) To develop a new user interface for more users friendly.

1.4 Deliverables

The deliverables for the front office information system are as follows:

- (1) Front Office Information System
- (2) Project Report

1.5 Project Plan

This project plan of Ariston Hotel Bangkok : Front Office Information System is given in Figure 1.1.



No	Task Name	June			July		August	
		1	2	3	4	5	6	7
1	III. Implementation of the Proposed System							
2	Coding							
3	Testing							
4	Hardware Installation							
5	Software Installation							
6	Train Users							
7	Conversion							

Gantt Chart for System Development. (Continued)

II. THE EXISTING SYSTEM

2.1 Background of the Organization

Ariston Hotel Bangkok was established in Bangkok in 1977 on Sukhumvit 24 Road, one of the best locations in Bangkok; Ariston Hotel is located in the heart of the business area, which is surrounded with famous shopping, entertainment centers, Queen Sirikit National Convention Hall, and Queen Sirikit Park. The hotel is organized according to the functional areas based on the services the hotel provides. The organization chart of Ariston Hotel Bangkok shown in Figure 2.1:

- (a) Revenue centers generate income for the hotel through the sale of services or products to guests comprising:

- (1) Room division is the major division and the largest source of revenue.

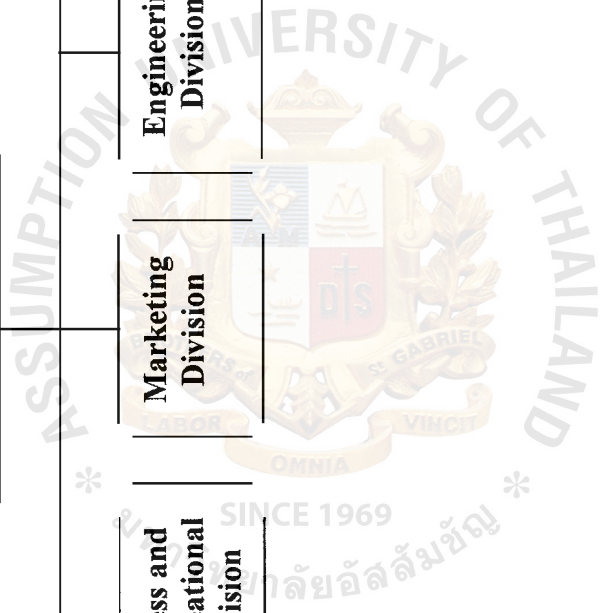
- The rooms division has two functions.

- (a) Front office department is to accept reservations over the phone, answer questions about the hotel and its facilities, registry guests, changing rooms, settling guest accounts (cashiering), check out guests, and also handle the distribution of guestroom keys and mail, messages, or other information for guests. The largest percentage of reservation comes into hotel from the hotel's own reservation system, travel agents and hotel representatives.
 - (b) Housekeeping department is responsible for cleaning the hotel's guestrooms and public areas. Additionally, housekeepers have to carry out not only cleaning and maintenance task, but also control large inventories of linens, supplies and equipment.

- (2) Food and Beverage division offer a variety of different kinds of restaurants and bars, with their own unique decor, menu and service style.
- (3) Fitness and Recreational Facilities division. It organizes and provides workout facilities and an outdoor swimming pool.

(b) Cost centers do not generate revenue directly; instead, they support the proper functioning of revenues centers.

- (1) Marketing division is to identify prospective guests for the hotel, shape the products and service of the hotel as much as possible to meet the needs of those prospects, and persuade them to become guests.
- (2) Engineering Division is responsible in physical plant and controlling energy costs including heating and air conditioning systems and the systems that distribute electricity, steam, and water throughout the property.
- (3) Accounting Division is responsible for keeping track of the many business transactions that take place in the hotel. Additionally, the responsibilities of the accounting division include forecasting and budgeting, managing the money due to the hotel guests, controlling cash, controlling costs in all areas of the hotel, and preparing the financial statements and daily operating reports to management level.
- (4) Human Resources Division is responsible for recruiting, hiring, orienting, training, evaluating, motivating, rewarding, disciplining, developing, promoting and communicating with all the employees of the hotel.



Organization Chart of Ariston Hotel Bangkok.

2.2 The Existing Front Office Business Function

The front office officers are the public's main contact with the hotel. The officers handle registration of new guests, greet guests on arrival, dispense keys, handle incoming and outgoing mail, take messages for guests, provide information, listen to complaints, and handle checkout procedures when guests depart. The organization chart of front office department is shown in Figure 2.2. The following personnel may be employed in the front office department:

The Front Office Manager

The front office manager has a wide range of responsibilities. A front office manager must maintain the capacity of a high level of efficiency for the front office officers; make effective decisions regarding reservation policies and room assignments, and handle guest problems and complaints. The main duty of a typical front office manager is to define reservations policies and set quotas, with the goal of maintaining maximum room occupancy. To perform this duty, the manager must continually monitor the arrivals, departures, and cancellations of the guests.

The front office manager confers regularly with the sales and marketing department to update special group reservations, billing agreements, potential peak periods, and general forecasts. The manager must also maintain close communication with the house keeping division about room status and check regularly with the account department for information on special billing requirements and problems.

The Assistant Front Office Manager

The assistant front office manager who is responsible for coordinating front office operations may aid the department. The assistant manager also monitors guest accounts and payments, and authorizes cheques and special credit procedures. Other duties of an assistant manager include reviewing reservations for the current day.

Front Office Officers

When a guest arrives at the hotel, the front office officers are responsible for verifying reservation information, checking credit identification and authorization, assigning rooms, and dispensing room keys.

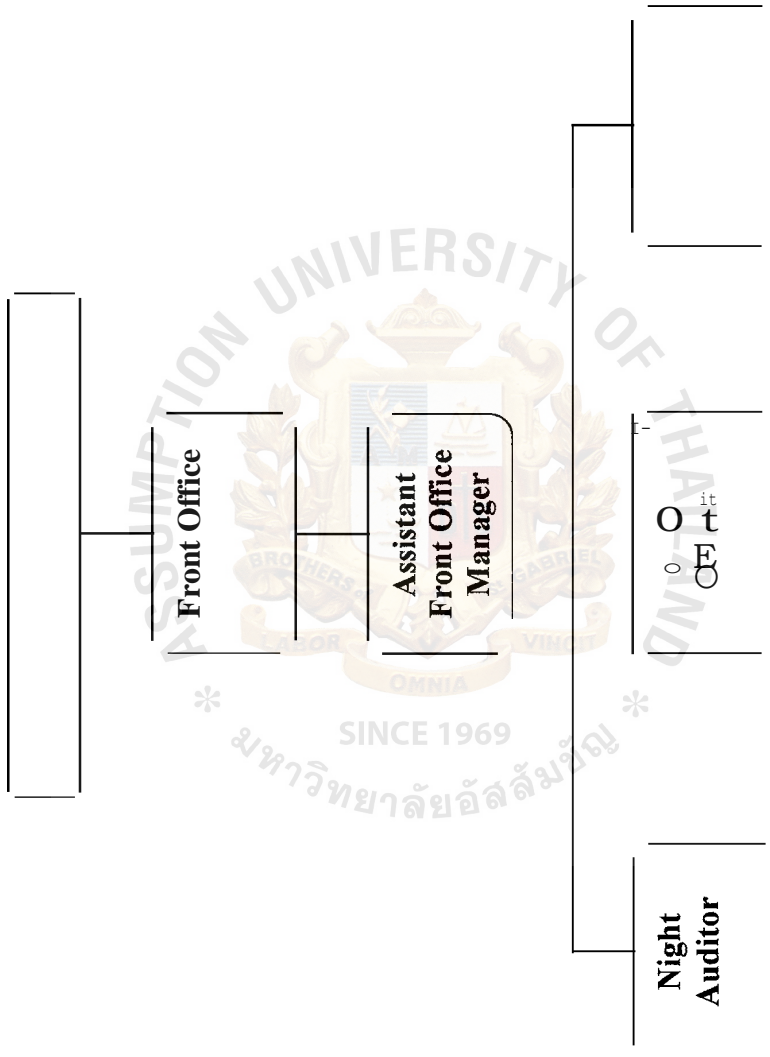
When a guest is ready to depart, the front office representative must prepare, verify, and arrange the guest check. Other duties may include checking the room rack at the beginning of the shift, reviewing reservations for the current date, and communicating with housekeeping division regarding occupancy forecasts and room needs.

The Night Auditor

The night auditor must perform the duties of a front office officer at night and the bookkeeping function; for example prepares the machine balance report. When front office officers' activities slacken, the night auditor begins to audit, or trace the posting of the previous day's transactions to verify their accuracy. The night auditor calculates the total charges owed to the hotel and incurred by guests during the previous business day. Total payments received from guests during the day are subtracted from the total charges to determine the daily balance. The balance represents the amount that is still owed to the hotel for the previous day's transactions.

The Cashiers

The cashiers are responsible for checking out departing guests, posting charges, verifying the guest check, and handling payments. The cashiers may be responsible for calculating the charges.



The Organization Chart of Front Office Department.

The Ariston Hotel provides 149 standard guestrooms and 3 deluxe rooms with the 40 working hours which is the typical workload of front office employees in the hotel. Federal and state wage and hour laws apply to the front office; in addition, some properties are bound by union contracts and rules. A front office employee may be assigned to any one of the property's work shifts, depending on the needs of the front office and the staff member's availability. Traditional front office work shifts are:

Day shift	7.00 a.m. - 3.00	p.m.
Evening shift	3.00 a.m. - 11.00	p.m.
Night shift	11.00p.m. - 7.00	a.m.

The majority of Ariston Hotel Bangkok's guests are Thai people and foreigners that come to do business in Bangkok. The room rates of Ariston Hotel Bangkok are as follows:

- (1) Standard single 1,400 Baht

Room specification

The standard room with one bed has air conditioning, satellite and cable TV, pay-view movies, safety box, mini bar, telephone, hair dryer and private bathroom.

- (2) Standard twin 1,600 Baht

Room specification

The standard room with two beds has air conditioning, satellite and cable TV, pay-view movies, safety box, mini bar, telephone, hair dryer and private bathroom.

- (3) Deluxe room 2,500 Baht

Room specification

The deluxe room is bigger than the standard room in size. This room has a living room, air conditioning, satellite and cable TV, pay-view movies, safety box, mini bar, newspaper delivered, complimentary in-room coffee, iron and ironing board available, telephone, hair dryer and private bathroom.

2.3 Current Problems and Areas for Improvements

2.3.1 Current Problems

After discussions and interviews have been performed with the personnel involved, the current problems of the existing front office information system can be identified as follows:

- (1) Inaccuracy and unavailability of information needed

If timely and accurate information cannot be provided to top management for decision making, the decision may then be full of mistakes. With the current system, it is very difficult to provide all information within the time frame. Sharing information with several users at the same time is impossible in the current system.

- (2) Excessive paper work

Mostly, the information concerning the employees are recorded on paper. The large volume of personnel information can cause the hotel to waste space in keeping those papers. The work may be loaded at somebody's department in the processes.

(3) Repetitive work

Some work may be done repetitively which creates inaccurate information and some data can get lost in the process.

(4) Unsmooth workflow

The workflow may be interrupted when some personnel are not available at that time. Then, the work may be done inefficiently.

(5) Insufficient facilities to support workflow

Due to the manual operation, all the work are done very slowly. It is very difficult and takes much time in filing and searching for the information needed. There is no convenient equipment to increase the work speed.

(6) Lack of security control

The existing system still does not have a good measure to perform security control. The information can be damaged and lost easily.

(7) Human error

Front office staff can make mistakes while recording guest's information or making reports. Poor handwriting can make big trouble.

2.3.2 Areas for Improvements

The existing front office information system is still a manual system. It is not suitable for updating reservation and guest records. When people deal with a great deal of information, it is very likely to make errors.

Furthermore, the speed is quite slow in processing as well. It is very difficult to improve the consistency. Information and reports with errors can cause a great deal of damages to the hotel.

Front office department needs to improve its inputting information system, which will facilitate employees' performances, evaluation, planning and managing. The new way of inputting information should reduce the amount of paperwork in order to reduce the operating cost spent on storing and maintaining data.

Usually, the hotel has training programs, seminars, or projects several times a year. The filing of such information is still not good. It takes much time in finding some needed information. The filing information system should also be considered.

New facilities and hardware and software should be introduced to the front office department. Therefore, the front office staff must learn to use them effectively. This can reduce the human errors and smooth the workflow as well. With the new tools, the security control will be better and guaranteed. The chance of losing data in the process will be decreased.

2.4 Existing Front Office Information System

The areas which are under the study of this project cover all the functions of the front office information system including check in, check out and creating the summary report to the accounting department. The business functions of the existing front office information system are as follows:

- (1) Collect reservation information for all guests when they reserve rooms or other facilities.
- (2) Collect information of all guests when they check in.
- (3) Check available rooms for the guest and if they are guests on the reservation list, front office will check the name from the reservation list.
- (4) Give the information on the types of room, room's rates and ask the guest for their length of stay and types of payment, in cash, credit card, or city ledger.

- (5) Check the information of guests and all activities that the guests use when they stay in the hotel, when the guests check out.
- (6) Calculate the payment that includes the room rate, and other charges for laundry, food and beverage, telephone and etc. which may have been used by the guests during their stay.



HI. THE PROPOSED SYSTEM

3.1 User Requirement

According to the analysis of the existing system, all processes are done manually. Therefore, the new front office information system should be computerized. This includes reservation, guest registration, room management, check-out, and guest accounts. The main requirement for the proposed system is to have all the processes related to front office functions automated. The desired reports can be produced, and information of the system can be viewed through the enquiry screen. The context diagram of the proposed system is shown in Figure 3.1 and the data flow diagram level 0 of the proposed system is shown in Figure 3.2. The processes of the proposed system are described as follows:

(1) Reservation Process

For the reservation process, the front office officer handles the communication and correspondence with the guests regarding reservations at the hotel. Those contacts with potential guests can be made through correspondence in the form of mail, telephone or facsimile. The front office officer can easily check the types and availability of the rooms from the database of the hotel directly and inform guests immediately. On the basis of this information, the officer can create and maintain reservation records for all advanced reservations in the hotel. Once the information has been collected, front office officers produce the appropriate confirmations and/or guarantees to the guests. Finally, they track room availability and may initiate the forecast of room's sales and occupancy.

(2) Check-in Process

When guests arrive at the hotel, the front office officer inquires whether the guests have made a reservation; he locates the reservation record and reviews it. If the response is negative, he checks room availability. A registration form is presented to the guests for signatures. The officer confirms the information in the reservation record, including the number of persons in the catering, the estimated departure date, room type or rate requested, and any extras room or options. And then the method of payment is determined. After approving the method of payment, the officer locates an available room with the proper rate, room type, and location and makes a room assignment.

(3) Change Room

When guests are not pleased with the room that the hotel provides, they can make a request for a room change at front office counter.

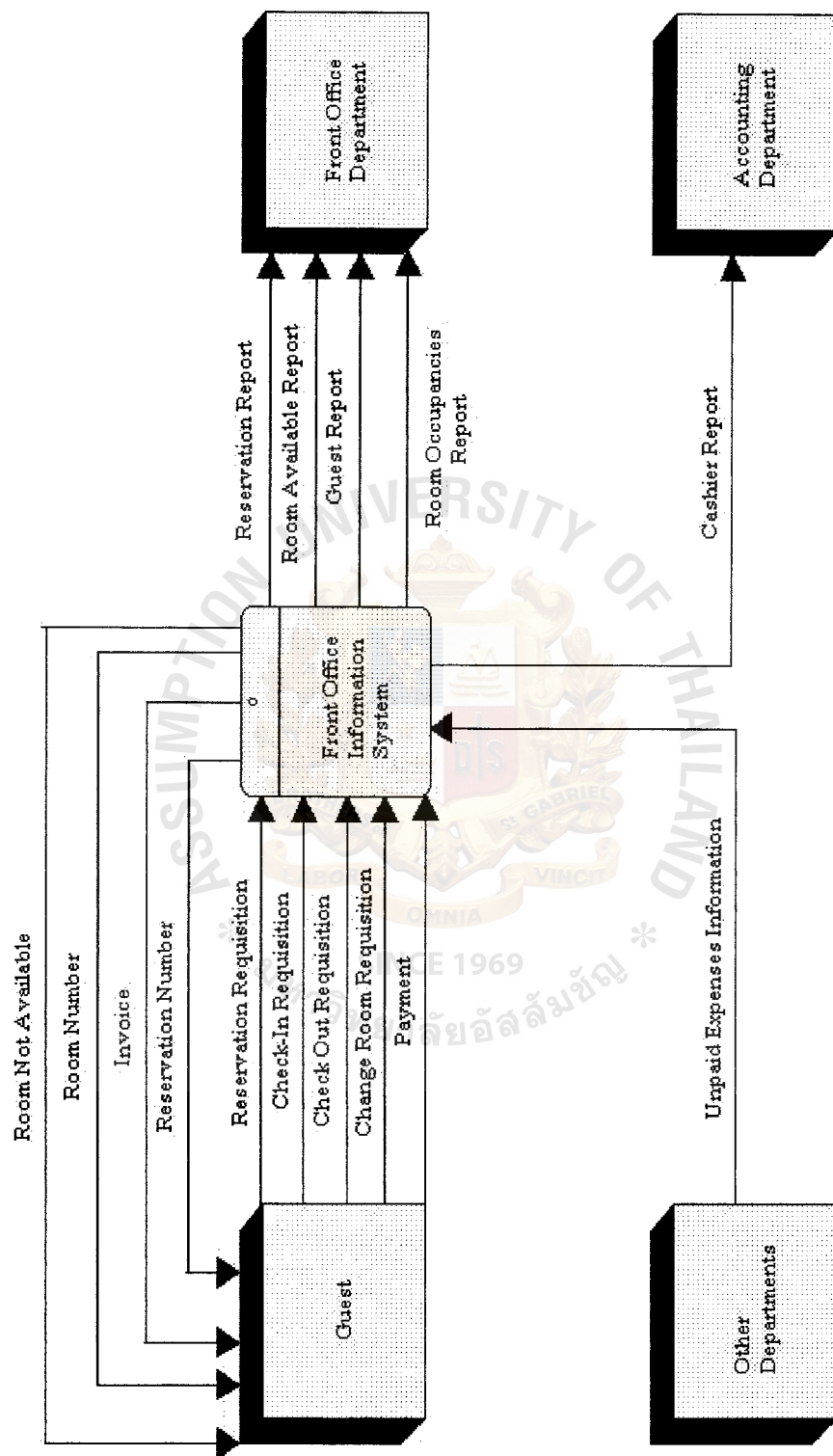
(4) Check-out process

When guests check out, guest folio is retrieved, the length of the guests' stay is verified, and the officer should confirm that all charges for telephone, food and beverage service and so forth have been posted to the guest account. If any last minute charge is made, the amount should be posted to the guest account. On the bill presented to the guest or guest check, the amount of any advanced deposit, prepayment is subtracted from the charges to determine the balance due. The cashier handles the guest's payment. When payment is received, a paid invoice is produced. If the charged are billed to a corporate account, the guests check must be signed by the guest to verify the amount.

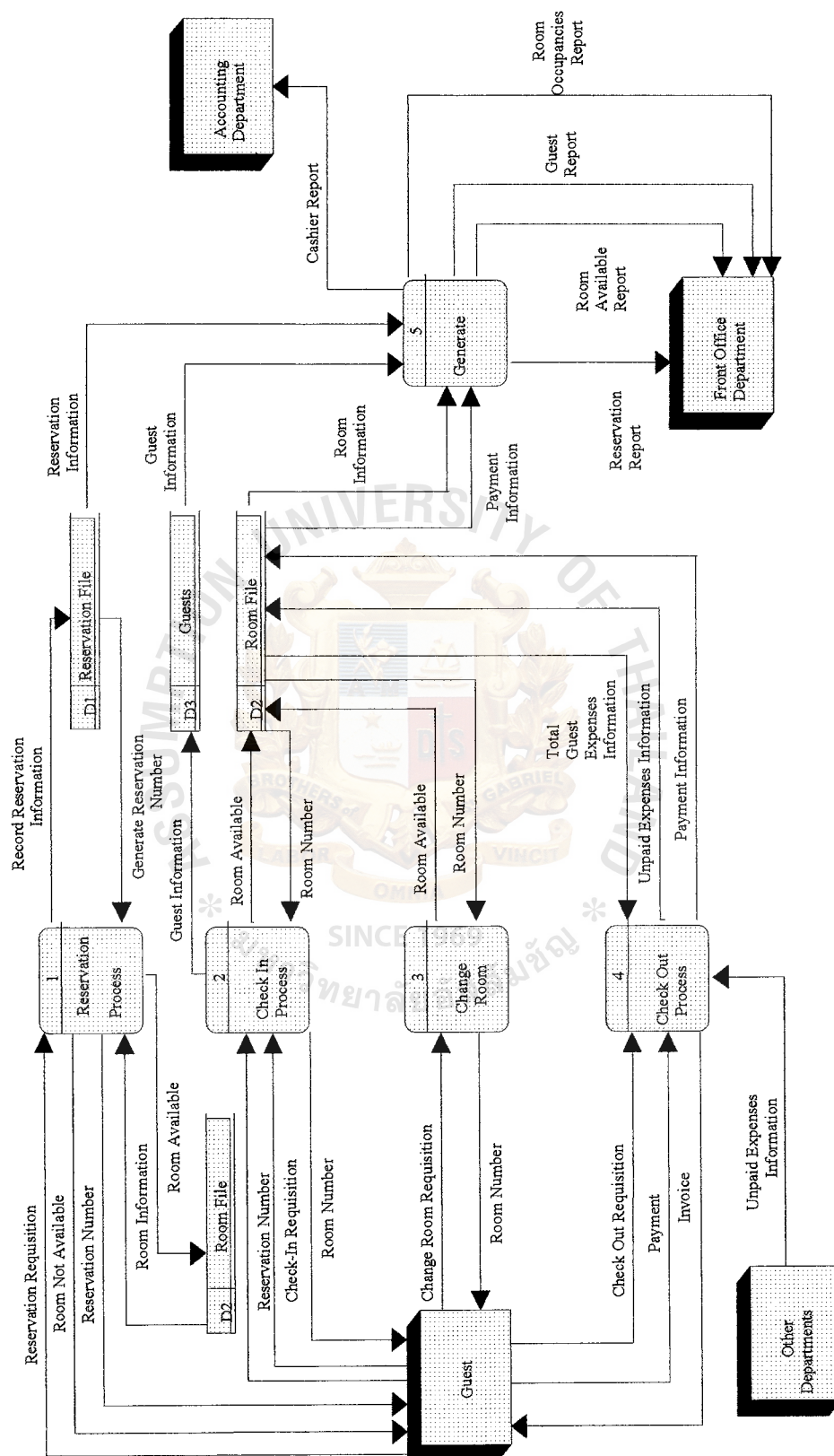
(5) Generate report process

This process can generate all kinds of reports that exist in the database, for example, reservation report, room availability report, guest arrival list report, guest departure list report including cashier report.





The Context Diagram of the Proposed System of Front Office Information System.



Level 0 Data Flow Diagram of the Proposed System of Front Office Information System.

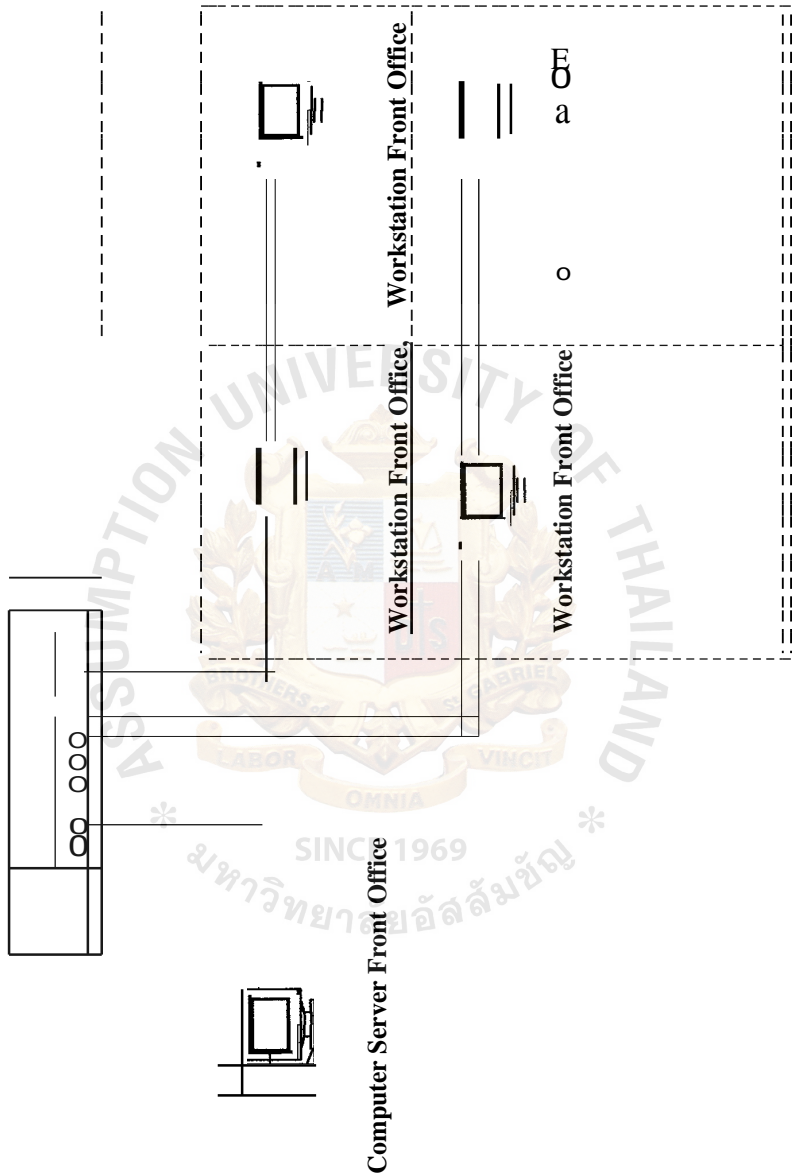
3.2 System Analysis and Design

3.2.1 Application Architecture

(1) Network Architecture

In the information system's database, software, and interfaces are distributed across the network of clients and servers that communicate and cooperate to achieve system objectives as follows:

- (a) Local Area Network (LAN) is designed to allow resources to be shared and communicate between each work station and personal computer and the server (two-tiered Client/Server). This LAN, which is set up in one building of the hotel, links a work group of task-related computers.
- (b) The system uses a LAN, which is based on a Bus Topology to share resources such as hardware (e.g., a printer), software (e.g., an applicant program), and data of each department. By installing the system with bus topology, its backbone cable can easily add other PCs in the system. However, the bus topology itself does not ensure that the transmission medium is accessed and used in a fair way of connection. Thus, with the use of a control (permission) token, the data are transmitted in controlled access way to a defined set of rules understood and adhered to by all personal computers or workstation connected to the medium. This is technically called Tenbase T. The Tenbase T combines the physical configuration of Ethernet (a bus topology) and the collision — free (predicable delay) feature of token ring. Network configuration of proposed system is shown in Figure 3.3.



Local Area Network of Front Office.

(2) Database Architecture

The hotel uses **RDBMS** or Relational Database Management System (Microsoft SQL Server) as a database server that can control the access and the maintenance of the data stored. The feature of this system is that it can guarantee high security and integrity. The users can backup and recover the data easily.

(a) Interface Architecture

Now that all the interfaces of new OS such as Microsoft Window XP or Windows NT are all GUI or Graphic User Interface. Therefore it is easy for the user to communicate with the applications in the computer.

Because of the Client/Server technology, the interface of the system is on-line processing. It is easier to detect errors and correct those errors than batch processing which requires more human interaction.

(b) Process Architecture

The hotel chooses SDEs for Two-tier Client/Server application composed of a client based programming language with built-in SQL connectivity to database server of the hotel.

3.3 Hardware and Software Requirements

3.3.1 Hardware Requirement

(1) Computer for server

1 Unit

- (a) Pentium IV 2.2 GHz
- (b) Memory 256 MB SDRAM
- (c) Hard Disk 80 GB (UDMA) ATA 100

- (d) Floppy Disk Drive 1.44 MB
- (e) VGA Card TNT2 16 MB
- (f) Monitor 17"
- (g) 50X CD ROM
- (h) Mouse, Keyboard 108 keys

(2) Computer for workstation

4 Units

- (a) Pentium Celeron Processor 1.8 GHz
- (b) Memory 256 MB SDRAM
- (c) Hard Disk 80 GB (UDMA) ATA 100
- (d) Floppy Disk Drive 1.44 MB
- (e) VGA Card TNT2 16 MB
- (f) Monitor 17"
- (g) Mouse, Keyboard 108 keys
- (h) Printer
 - (1) Epson (Dot Matrix printer)
 - (2) Hewlett Packard (Laser printer)
- (i) Scanner
- (j) Time recording machine for telephone
- (k) Network interface card
 - (1) Linksys NC 100
- (l) **Hub**
 - (1) Linksys 24 ports
- (m) UPS, 1000 VA
- (n) Category 5 UTP cable
- (o) RJ45 Connector

3.3.2 Software Requirements

(1) Operating System

- (a) Microsoft Windows NT server 4.0
- (b) Microsoft Window XP

(2) Document Preparation Software

- (a) Visible Analysis

(3) System software

- (a) Microsoft Office 2000

3.4 Security and Control

3.4.1 Operational Security

This type of security protects hardware and software from either intentional or inadvertent threats. At this level of security, three more security can be classified as follows:

(1) Password security

- (a) Before entering the system the users need to login with their usernames and passwords. The users name can identify the status of the users as to what data they can read, what data they can write or what data they can do both read can write. Unauthorized persons are not allowed to enter into the system. Mostly, the users are the front office officers.
- (b) The users should change their passwords frequently and do not let others know their passwords.

(2) Hardware security

- (a) The computer should be turned off after use.

- (b) Always keep the doors locked after use and restrict visitor's access to front office room.
- (c) UPS are used in order to smooth the system and prevent the damage occurring from electricity problems.
- (3) Software security
 - (a) Always keep the system programs in a safe place in order to protect from unauthorized access or modification.

3.4.2 Data Security

- (1) Backup data everyday in order to prevent data loss and to make a recovery when data are damaged.
- (2) Restrict accesses to certain data items such as read only data access.
- (3) Security logs of all changes made to data items.

3.4.3 User Security

- (1) Front office officers should be trained about the skill in using some hardware in order to prevent human errors.
- (2) Inform users to know the danger of computer viruses and the procedures to manage and prevent them.

IV. SYSTEM EVALUATION

Ariston Hotel Bangkok uses more transaction processions when guests arrive at front office until the room number is assigned. It costs much in the existing system. Therefore, in the new proposed system this problem will be solved by using the computer system to manage hotel, data collection, input data and generate reports. To compare cost benefits of this proposed system, the hotel needs more resources such as hardware, software, implementation cost, training course for their employees. In the long term, the benefits will be higher than the costs.

4.1 Cost Analysis

To invest in the proposed system, the cost of the proposed system will include the cost of system development (analysis, design, and implementation), the cost of hardware and software used, operation cost (for examples: labor cost, maintenance cost, and so forth), and other related expenses. Thus, the hardware devices and software costs should be estimated before making the comparison and break-even analysis.

(1) Hardware Cost, Baht

(a)	Pentium IV 2.2 GHz	1 unit	25,000
(b)	Pentium Celeron Processor 1.8 GHz	4 units	60,000
(c)	Dot Matrix printer	1 unit	5,000
(d)	Laser printer	1 unit	8,000
(e)	Scanner	1 unit	2,500
(f)	Network interface card (Linksys NC 100)	5 units	4,000
(g)	Hub (Linksys 24 ports)	1 unit	15,000
(h)	UPS	1 unit	3,000
	Category 5 UTP cable	5 units	2,000

(j)	RJ45 Connector	10 units	500
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Total			150,000
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(2) Software Cost

(a)	Microsoft Windows NT server 4.0		20,000
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(b)	Microsoft Window XP		17,000
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(c)	Visible Analysis		1,000
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(d)	Microsoft Office		4,000
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Total			42,000
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(3) Cost of the Existing System

Table 4.1. The Existing System Cost Analysis, Baht.

Cost items	Years				
	1	2	3	4	5
Fixed Cost					
Typewriter units @ 8,500 2	17,000.00	—	—	—	—
Telephone Set units @ 2000 2	4,000.00	—	—	—	—
Calculator units @ 2,150 5	10,750.00	—	—	—	—
Total Fixed Cost	31,750.00	—	—	—	—
Operating Cost					
Salary Cost:					
Front Office Manager 1 units @ 30,000	30,000.00	33,000.00	36,300.00	39,930.00	43,923.00
Assistant Front Officer Manager 1 units @ 20,000	20,000.00	22,000.00	24,200.00	26,620.00	29,282.00
Front Office Officers 5 units @ 10,000	50,000.00	55,000.00	60,500.00	66,550.00	73,205.00
Night Auditor 1 units @ 10,000	10,000.00	11,000.00	12,100.00	13,310.00	14,641.00
Cashier 2 units @ 8,500	17,000.00	18,700.00	20,570.00	22,627.00	24,889.70
Total monthly salary Cost	127,000.00	139,700.00	153,670.00	169,037.00	185,940.70
Total Annual Salary Cost	1,524,000.00	1,676,400.00	1,844,040.00	2,028,444.00	2,231,288.40
Office Supplies & Miscellaneous Cost:					
Stationary Per Annual	5,000.00	5,100.00	5,202.00	5,306.04	5,412.16
Paper Per Annual	50,000.00	51,000.00	52,020.00	53,060.40	54,121.61
Utility Per Annual	10,000.00	10,200.00	10,404.00	10,612.08	10,824.32
Miscellaneous Per Annual	2,000.00	2,040.00	2,080.80	2,122.42	2,164.86
Total Annual Office Supplies & Miscellaneous Cost	67,000.00	68,340.00	69,706.80	71,100.94	72,522.95
Total Annual Operating Cost	1,591,000.00	1,744,740.00	1,913,746.80	2,099,544.94	2,303,811.35
Total Manual System Cost (A)	1,622,750.00	1,744,740.00	1,913,746.80	2,099,544.94	2,303,811.35
Total Accumulated Manual System Cost (B)	1,622,750.00	3,367,490.00	5,281,236.80	7,380,781.74	9,684,593.09
Present Value of Manual System Cost (C)	1,614,676.62	1,727,422.59	1,885,325.29	2,058,073.72	2,247,070.02
Accumulated Present Value of Manual System Cost (D)	1,614,676.62	3,342,099.21	5,227,424.49	7,285,498.1	9,532,568.23

Inflation rate = 2 % is from Inflation Report Press Release April 2003 and forecasted by Bank of Thailand.

Interest rate = 0.5 % is corporate saving interest rate of Siam Commercial Bank which is effective since July 3, 2003.

Table 4.1. The Existing System Cost Analysis, Baht. (Continued)

Cost items	Years				
	1	2	3	4	5
Deposit at Bank @ Interest = 0.5 % (E)	1,630,863.75	1,753,463.70	1,923,315.53	2,110,042.66	2,315,330.41
Accumulated Deposit at Bank (F)	1,630,863.75	3,384,327.45	5,307,642.98	7,417,685.64	9,733,016.06
PV of Deposit at Bank @ Interest = 0.5 % (G)	1,622,750.00	1,736,059.70	1,894,751.91	2,068,364.09	2,258,305.37
Accumulated PV of Deposit at Bank (H)	1,622,750.00	3,358,809.70	5,253,561.61	7,321,925.70	9,580,231.07
Difference PV of Manual System (A) - (C)	8,073.38	17,317.41	28,421.51	41,471.22	56,741.33
Difference of Accumulated of PV of Manual System (B) - (D)	8,073.38	25,390.79	53,812.31	95,283.52	152,024.86
Difference of Deposit at Bank and Investment in Manual System (E) - (A)	8,113.75	8,723.70	9,568.73	10,497.72	11,519.06
Difference of Accumulated of Deposit at Bank and Invest in Manual System (F) - (B)	8,113.75	16,837.45	26,406.18	36,903.91	48,422.97
Difference PV of Deposit at Bank (G)- (C)	8,073.38	8,637.11	9,426.63	10,290.37	11,235.35
Difference Accumulated PV of Deposit at Bank (H) - (D)	8,073.38	16,710.50	26,137.12	36,427.49	47,662.84

Inflation rate = 2 % is from Inflation Report Press Release April 2003 and forecasted by Bank of Thailand.

Interest rate = 0.5 % is corporate saving interest rate of Siam Commercial Bank which is effective since July 3, 2003.

(4) Cost of Proposed System

Table 4.2. The Proposes System Cost Analysis, Baht.

Cost items	Years				
	1	2	3	4	5
Fixed Cost					
Hardware Cost:					
Computer Server Cost	25,000.00	25,000.00	25,000.00	25,000.00	25,000.00
Workstation Cost	125,000.00	125,000.00	125,000.00	125,000.00	125,000.00
Total Hardware Cost	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00
Maintenance Cost:					
Maintenance Cost				30,000.00	30,000.00
Total Maintenance Cost	—	—	—	30,000.00	30,000.00
Software Cost:					
Computer Server Cost	20,000.00	30,000.00	30,000.00	30,000.00	30,000.00
Network Cost	22,000.00	12,000.00	12,000.00	12,000.00	12,000.00
Total Software Cost	42,000.00	42,000.00	42,000.00	42,000.00	42,000.00
Implementation Cost:					
Advanced Training Cost	50,000.00	—	—	—	—
Basic Training Cost	50,000.00	—	—	—	—
Set up Cost	200,000.00	—	—	—	—
Total Implementation Cost	300,000.00	—	—	—	—
Office Equipment Cost:					
Calculator 5 Units @ 2,150	10,750.00	—	—	—	—
Telephone Set 2 units @ 2000	4,000.00	—	—	—	—
Total Office Equipment Cost	14,750.00	—	—	—	—
Total Fixed Cost	506,750.00	192,000.00	192,000.00	192,000.00	192,000.00
Operating Cost					
People-Ware Cost:					
Front Office Manager 1 units @ 30,000	30,000.00	33,000.00	36,300.00	39,930.00	43,923.00
Assistant Front Officer Manager 1 units @ 20,000	20,000.00	22,000.00	24,200.00	26,620.00	29,282.00
Front Office Officers 3 units @ 10,000	30,000.00	33,000.00	36,300.00	39,930.00	43,923.00
Night Auditor 1 units @ 10,000	10,000.00	11,000.00	12,100.00	13,310.00	14,641.00
Cashier 1 units @ 8,500	8,500.00	9,350.00	10,285.00	11,313.50	12,444.85
Total monthly salary Cost	98,500.00	108,350.00	119,185.00	131,103.50	144,213.85
Total Annual Salary Cost	1,182,000.00	1,300,200.00	1,430,220.00	1,573,242.00	1,730,566.20

Inflation rate = 2 % is from Inflation Report Press Release April 2003 and forecasted by Bank of Thailand.

Interest rate = 0.5 % is corporate saving interest rate of Siam Commercial Bank which is effective since July 3, 2003.

Table 4.2. The Proposes System Cost Analysis, Baht. (Continued)

Cost items	Years				
	1	2	3	4	5
Office Supplies & Miscellaneous Cost:					
Stationary 300 per month	3,600.00	3,672.00	3,745.44	3,820.35	3,896.76
Paper 2,500 per month	30,000.00	30,600.00	31,212.00	31,836.24	32,472.96
Utility 1,000 per month	12,000.00	12,240.00	12,484.80	12,734.50	12,989.19
Miscellaneous 500 per month	6,000.00	6,120.00	6,242.40	6,367.25	6,494.59
Annual Office Supplies & Miscellaneous Cost	51,600.00	52,632.00	53,684.64	54,758.33	55,853.50
Total Operating Cost	1,233,600.00	1,352,832.00	1,483,904.64	1,628,000.33	1,786,419.70
Total Computerized System Cost (A)	1,740,350.00	1,544,832.00	1,675,904.64	1,820,000.33	1,978,419.70
Total Accumulated Computerized System Cost (B)	1,740,350.00	3,285,182.00	4,961,086.64	6,781,086.97	8,759,506.67
Present Value of Computerized System (C)	1,731,691.54	1,529,498.77	1,651,015.38	1,784,050.82	1,929,692.54
Accumulated Present Value of Computerized System (D)	1,731,691.54	3,261,190.32	4,912,205.69	6,696,256.51	8,625,949.05
Deposit at Bank @ Interest = 0.5 % (E)	1,749,051.75	1,552,556.16	1,684,284.16	1,829,100.33	1,988,311.80
Accumulated Deposit at Bank (F)	1,749,051.75	3,301,607.91	4,985,892.07	6,814,992.41	8,803,304.21
PV of Deposit at Bank @ Interest = 0.5 % (G)	1,723,076.16	1,514,317.74	1,626,495.75	1,748,811.39	1,882,165.51
Accumulated PV of Deposit at Bank (H)	1,723,076.16	3,237,393.90	4,863,889.65	6,612,701.04	8,494,866.55
Difference PV of Computerized System (A) - (C)	8,658.46	15,333.23	24,889.26	35,949.52	48,727.15
Difference of Accumulated of PV of Computerized System (B) - (D)	8,658.46	23,991.68	48,880.95	84,830.46	133,557.62
Difference of Deposit at Bank and Investment in Computerized System (E) - (A)	8,701.75	7,724.16	8,379.52	9,100.00	9,892.10
Difference of Accumulated of Deposit at Bank and Invest in Computerized System (F) - (B)	8,701.75	16,425.91	24,805.43	33,905.43	43,797.53
Difference PV of Deposit at Bank (G) - (C)	8,615.38	15,181.04	24,519.63	35,239.43	47,527.04
Difference Accumulated PV of Deposit at Bank (H) - (D)	8,615.38	23,796.42	48,316.04	83,555.47	131,082.51

Inflation rate = 2 % is from Inflation Report Press Release April 2003 and forecasted by Bank of Thailand.

Interest rate = 0.5 % is corporate saving interest rate of Siam Commercial Bank which is effective since July 3, 2003.

Table 4.3. Cost Comparison between the Existing System and the Proposed System.

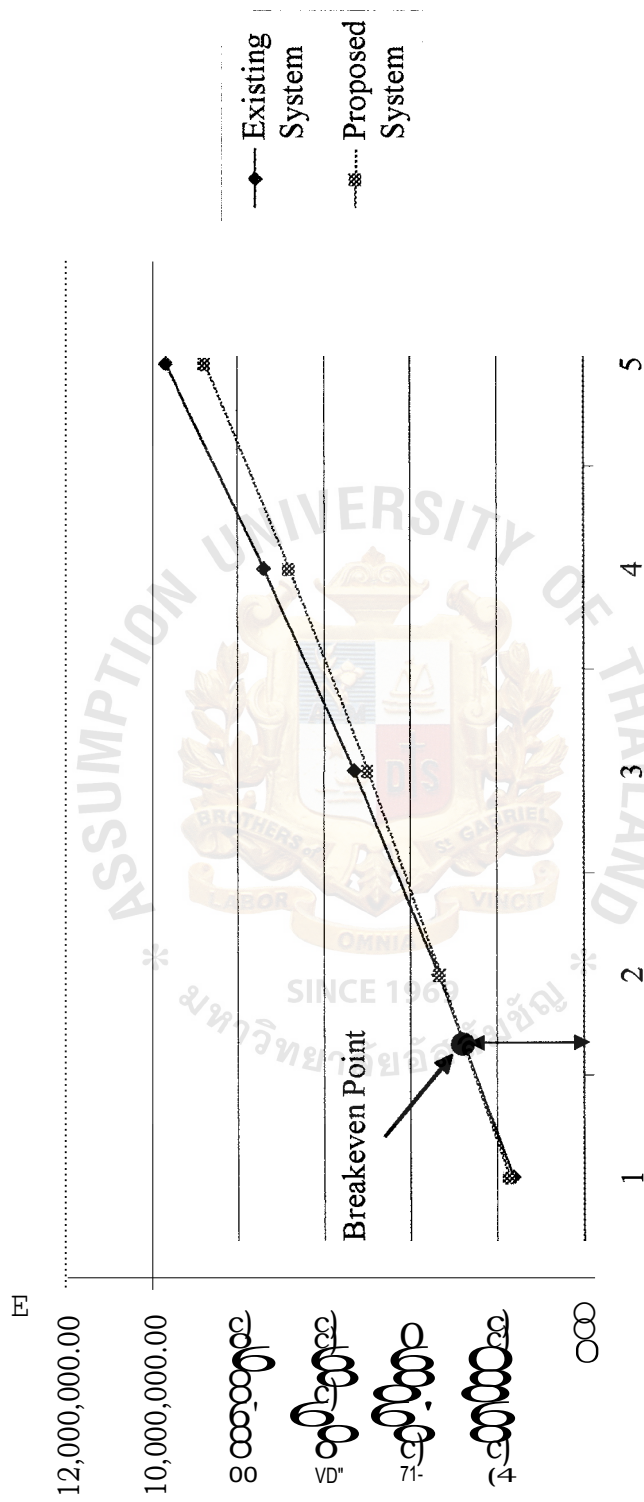
Year	Accumulated Existing Cost	Accumulated Proposed Cost
1	1,622,750.00	1,740,350.00
2	3,367,490.00	3,285,182.00
3	5,281,236.80	4,961,086.64
4	7,380,781.74	6,781,086.97
5	9,684,593.09	8,759,506.67

Table 4.4. Cost Comparison Present Value between the Existing System and the Proposed System.

Year	Accumulated Existing Cost	Accumulated Proposed Cost
1	1,614,676.62	1,731,691.54
2	3,342,099.21	3,261,190.32
3	5,227,424.49	4,912,205.69
4	7,285,498.21	6,696,256.51
5	9,532,568.23	8,625,949.05

4.2 Breakeven Analysis

Breakeven analysis is a technique, which is used to find the period that accumulative cost of current system is equal to accumulate cost of new system. The point that they are equal is called breakeven point. The comparison of the system costs between computerized cost and existing cost is shown in Figures 4.1 and 4.2.



Cost Comparison between Existing System and Proposed System.

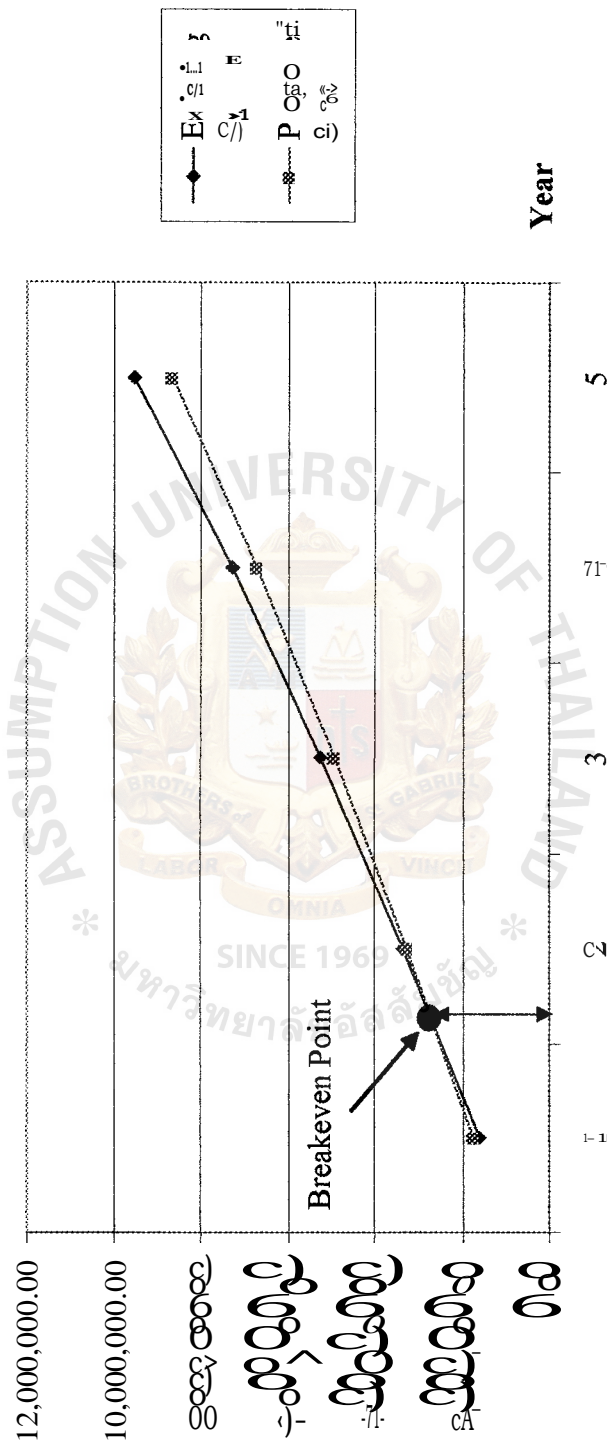


Figure 2. Cost Comparison Present Value between Existing System and Proposed System.

4.3 Benefit Analysis

(1) Tangible Benefit

This kind of benefit is a measurable advantage in value. The expected benefits the implementation of the new system for Ariston Hotel Bangkok, is as follows:

(a)	Reduction in people-ware	2,087,944.20	Baht
(b)	Reduction in paper	122,102.00	Baht
(c)	Reduction in Stationary	8,547.14	Baht
	Total Reduction	2,218,593.34	Baht

(2) Intangible Benefits

- (a) To provide a new customer service; which will make customers feel more comfortable and high impression with this service.
- (b) To forecast and improve management planning activities.
- (c) To provide high level security of data.
- (d) To ensure job satisfaction for employees by eliminating tedious task.
- (e) To get the current and most accurate information for operation and management levels for future plans.
- (f) To improve decision making.
- (g) To reduce the volume of paper work.

4.4 Degree of Achievement of the Proposed System

Mean or average technique is the important measure of quantity data for a variable. The mean provides a measure of central location. If the data are from a sample, the mean is denoted by x bar.

Mean

$$\bar{x} = \frac{\sum E_n}{n}$$

Sampling Data

The collecting data method is stop time watching method which is time measurement for each process and each activity from both the existing method and the proposed method by using the same data in Tables 4.5 and 4.6, respectively.



Sampling Data Collection for Each Process of the Existing System.

Processes (mins)											Total	Σ
Reservation Process	20	100	14	14	14	14	14	14	14	14	100	14
Customer Check-In Process	100	14	14	14	14	14	14	14	14	14	152,00	14
Change Room Process	14	14	14	14	14	14	14	14	14	14	138.00	14
Customer Check-Out Process	20	20	14	14	14	14	14	14	14	14	100	14
Generate Report Process	10	100	100	100	100	100	100	100	100	100	171000	171.00

Table 2. Sampling Data Collection for Each Process of the Proposed System.

Processes (mins)	1	2	3	4	5	6	7	8	9	10	Total	Cost
Reservation Process	1	1	1	1	1	1	1	1	1	1	9000	11.00
Customer Check-In Process	1	1	1	1	1	1	1	1	1	1	8000	10.00
Change Room Process	1	1	1	1	1	1	1	1	1	1	7000	9.00
Customer Check-Out Process	1	1	1	1	1	1	1	1	1	1	6000	8.00
Generate Report Process	1	1	1	1	1	1	1	1	1	1	100.00	0.00

Table 4.7. The Summary for Degree of Achievement of the Proposed System.

Process	Existing System	Proposed System
Reservation Process	15.40 mins.	3 mins.
Customer Check-In Process	15.20 mins.	3 mins.
Change Room Process	13.80 mins	2 mins
Customer Check-Out Process	17.60 mins.	5 mins.
Generate Report Process	171.00 mins.	10 mins
Total	3 hrs. 53 mins	23 mins.

(1) Reservation Process

When officers receive a reservation request from customers or agencies, they will check room availability and consider which matches the criteria requisitions. When it is done, they will assign a room as blocked or reserved, and wait for proper confirmation to be made.

(2) Customer Check-In Process

This process will accept customer information that has been made in the process reservation. Guests will write their information in guest registration form; the officers will electronically keep these data in database for later processing needs.

(3) Change Room

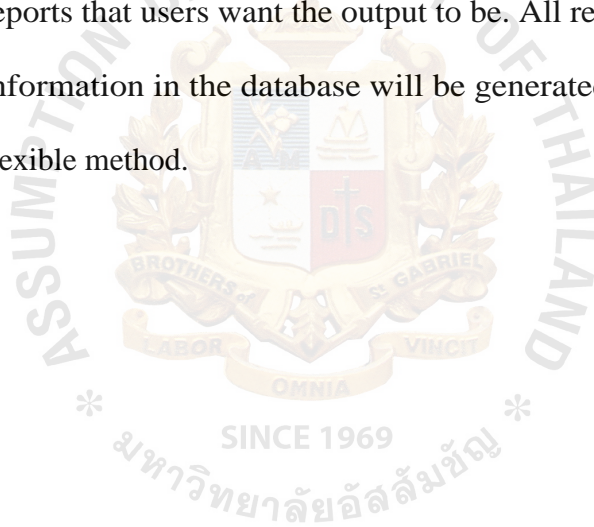
When guests are not satisfied with the existing room that the hotel provides, they can make a request for room change.

(4) Customer Check-out Process

After guests request for checking out, officer will make a calculation for all the guests' expenses including room expense, items used, etc. Then, the officer will inform the customers of their expenses and extra charge if applied. After all the calculations have been made, an invoice or receipt is issued to the guests.

(5) Generate Report

There are many combined ways to generate reports by extracting all required data from the database. This process will generate any kind of reports that users want the output to be. All reports based on the existing information in the database will be generated with a fast, reliable, and flexible method.



V. PROJECT IMPLEMENTATION

5.1 System Programming

As a consultant, the officers could be called in to complete the design, help prepare the forms, or help plan, conduct, and evaluate the system implementation, particularly when the front office information system is being implemented. The officers could be the project team leader and have control over the final design, testing, and acceptance of the new system. The officers might be system users, and thus there would be plans and conversions test results and they would review system development documentation for completeness and conformity to organization standards.

The new proposed system is developed by using Microsoft Visual Basic for Application in Microsoft Access, which provides many facilities and is easy to use. It can be applied for the users requirement. There are tools for developing queries, screen templates and reports.

During the system implementation, a new database design will be built and tested, the input and output are constructed and the new program will be written by using Microsoft Visual Basic for Application in Microsoft Access. The programmer must write and test the programs carefully. It may take the programmer a month to do them.

5.2 System Testing

After programming, the whole system needs to be tested. The test is to ensure that all programs are free of errors. The steps of the test are as follows:

(1) Program Testing

- (a) Test program logic.
- (b) Test program with sample data and invalid data.

- (c) Test how easy to use the interfaces.
- (d) Test linking between programs.

(2) System Testing

- (a) Integration test is to ensure that application written can work well with the total system.
- (b) Test concurrent use is to see whether data has integrity under data sharing.

(3) Hardware Testing

- (a) Test hardware compatibility.
- (b) Test hardware working under normal event and peak workload to estimate their highest capacities.

(4) Security and Control Testing

- (a) Test user login and the system authentication.
- (b) Test backup and recovery control.

5.3 System Installation

After the program in the system has been stated and passed as a whole, the next phase is to convert the existing system to the proposed system. The proposed system will be installed for the test version and the system starts to be tested.

Conversion Plan

For preparing the conversion plan, a strategy, called parallel conversion, is used. It means that the existing system continues to run alongside the proposed system until users and management are satisfied that the new system is effectively performing its duties and the proposed system can be turned off. All of the work done by the existing system is concurrently preformed by the proposed system. Outputs are compared to help determine whether the proposed system is performing as well as the existing

system. Errors discovered in the proposed system do not cost the organization much. Any as errors can be isolated and the business can be supported with the old system.

As the existing system of this hotel is still using a manual system, some unexpected problems may occur in changing the existing system into the computerized system immediately. This strategy reduces the high risk of damage occurred in a sudden conversion because both the existing system and the new proposed system are executed at the same time.

In fact, this strategy is time-consuming, costly and requires additional personnel. The benefits and results of the complete system after completing the changeover are much more than that of the existing system. The estimated time for the completion of the conversion plan is about one month.

5.4 Training Plan

After installing the proposed system, the hotel needs to train front office officers and manager and end users. The training period can be divided into four phases.

- (a) Training and giving knowledge to the users so that they can run the system without any problem in using the new system.
- (b) Starting to use the new system in a full-scale run.
- (c) Giving the practices with sample data and observing their learning progress.
- (d) Checking feed back and evaluating the effectiveness of the training.

VI. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

The existing front office information system is studied by analyzing the current problems and user requirements, interviewing the officers from the front office department and reviewing the existing forms and documents.

In order to meet the user requirements which usually emphasize on reducing processing time and accurate information, it is difficult to get all the work done with the existing system. The study of the existing system has portrayed the weaknesses and areas to be improved.

The proposed system is designed and implemented to replace the manual operation in the area of the front office department. The manual operations take a high cost and yield unsatisfactory productivity. The computerized system is expected to improve the efficiency while reducing operation costs. Therefore, the conclusions concerning the development of the system are as follows:

(1) Cost-benefits analysis

It is expected to take about 1.7 years for the benefit to overtake the costs. After that, all benefits gained from the system will totally be the surplus for the hotel. The lifetime of the system is estimated to be 5 years.

(2) Cost reduction

Computerization will help reduce work force normally required by the manual operation. The hotel will need fewer people to do the jobs because of the use of computers.

(3) Employees' satisfaction

There are other benefits derived from the system other than the benefits that can be measured in terms of money. The employees are satisfied with the proposed system and this increases the productivity of the employees.

(4) Improvements in decision making and planning

With computer technology involved, the mistake from human errors and inaccurate information are decreased. The top management can use the accurate and timely information in decision making and planning.

6.2 Recommendations

The Front Office Information System is developed under Microsoft Visual Basic for Application in Microsoft Access. Even though this new system has been designed and developed for handling current business user requirements in the Front Office Department, it is expected that the new computerized system can meet the business requirements at least for the next 5 years (estimated from expected business growth).

Some information cannot be automated and shared. When other departments want to know some information, the reports must be printed out from the Front Office Department. Then, further development should take place and become on — line and link to other departments as well.

At presently, the proposed system has been developed and can serve the workload of the hotel. In the future, if the users need the fully computerized system in every department, this system cannot handle the workload. Then, it will be necessary to upgrade the system or buy another CPU for a faster processing.

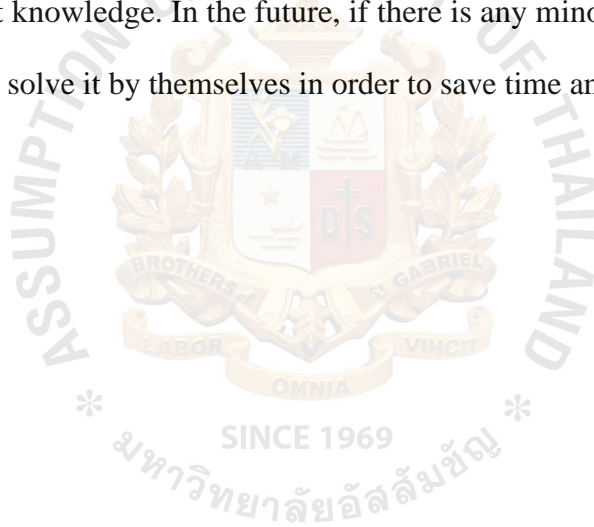
The hotel should have a plan for future system upgrade or even developing the new system. Before the new system becomes operational, the hotel should train its

employees to become analysts or at least computer literate. These people will become the persons who know both business requirements and technical solutions.

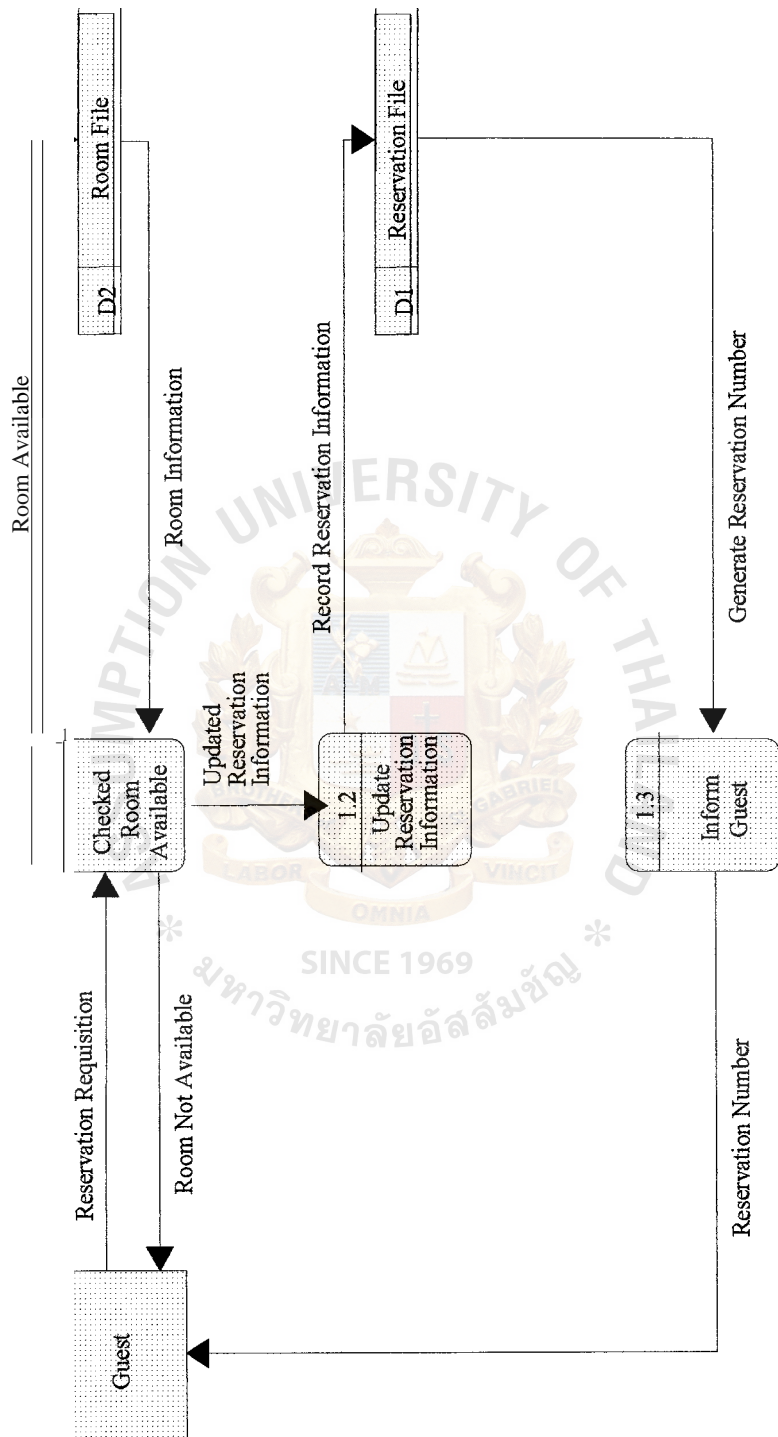
The application architecture of this system is not suitable for a large system. Such a system that covers large geographical areas or handles high transaction rates. In order to cover wider and bigger geographical areas, the system should be redesigned.

The hotel should employ a full time staff who can afford to take care of the system and hold the responsibility of help-desk. The system will become a core of the business. It requires considerable attention.

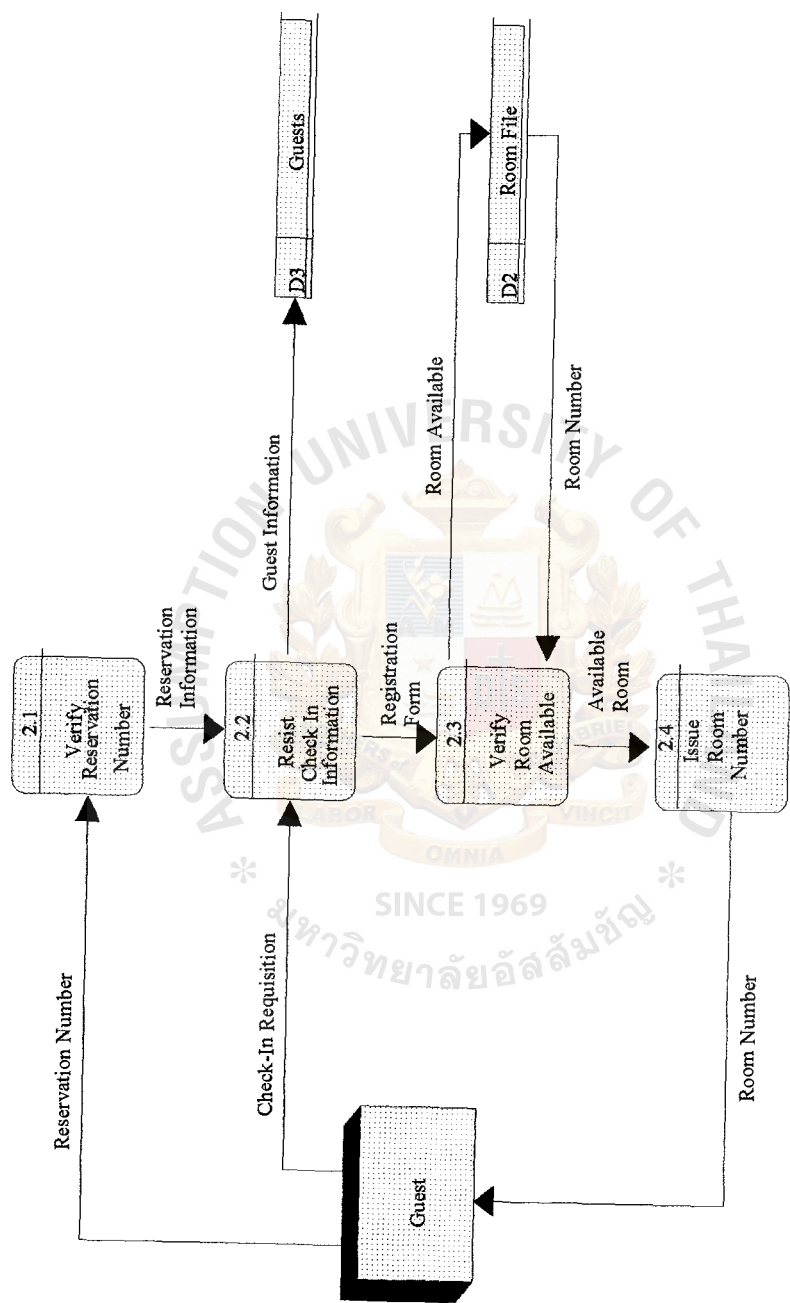
The hotel should train the user to know some basic computer and software development knowledge. In the future, if there is any minor problem with the system, the users can solve it by themselves in order to save time and cost.







Level 1 Data Flow Diagram for Reservation Process of the Proposed System.



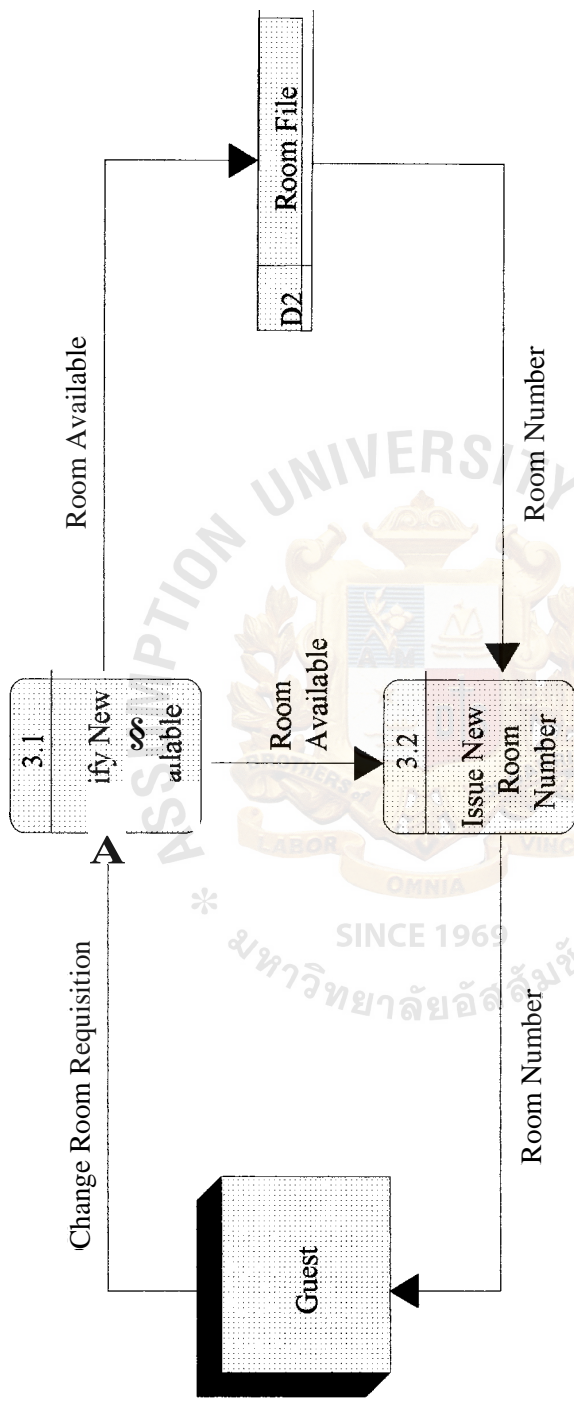


Figure A.3. Level 1 Data Flow Diagram for Change Room Process of the Proposed System.

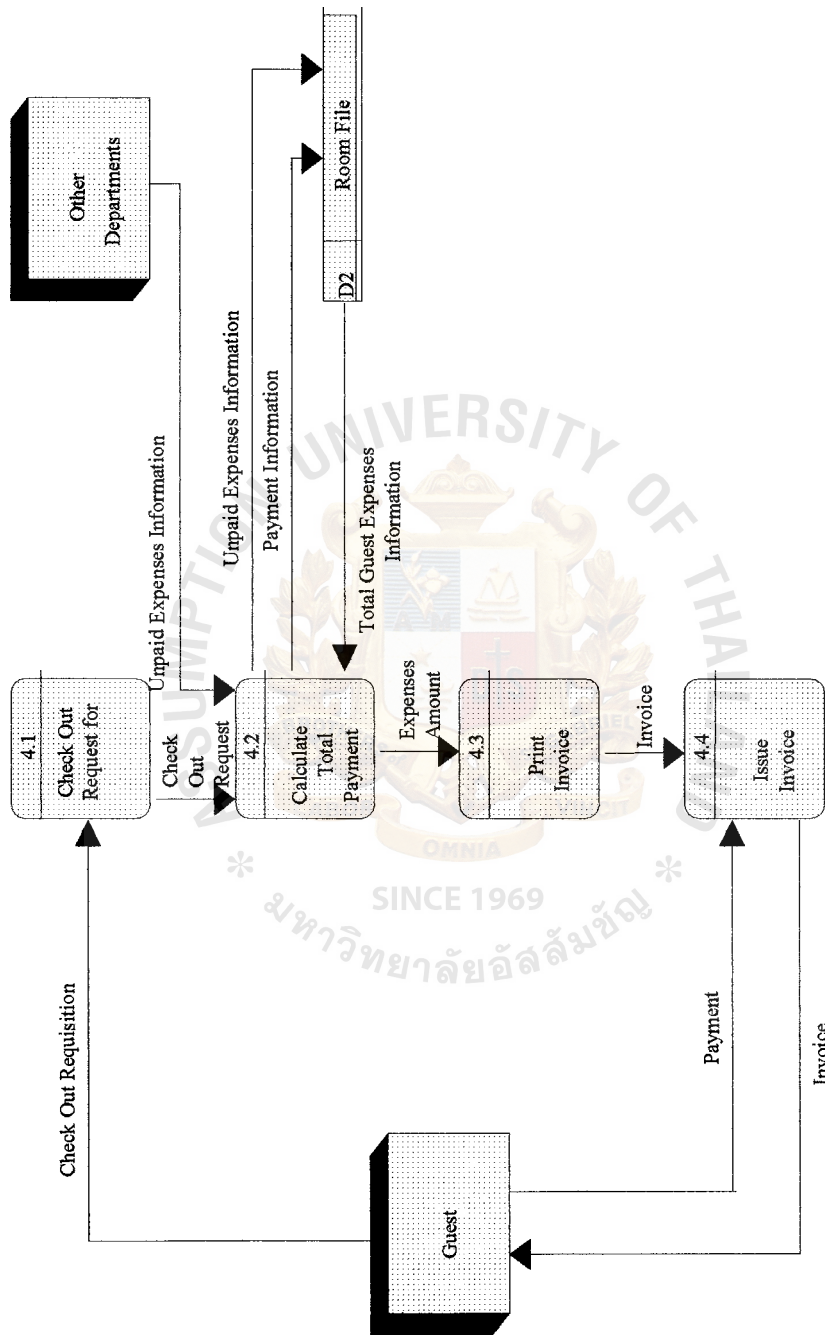
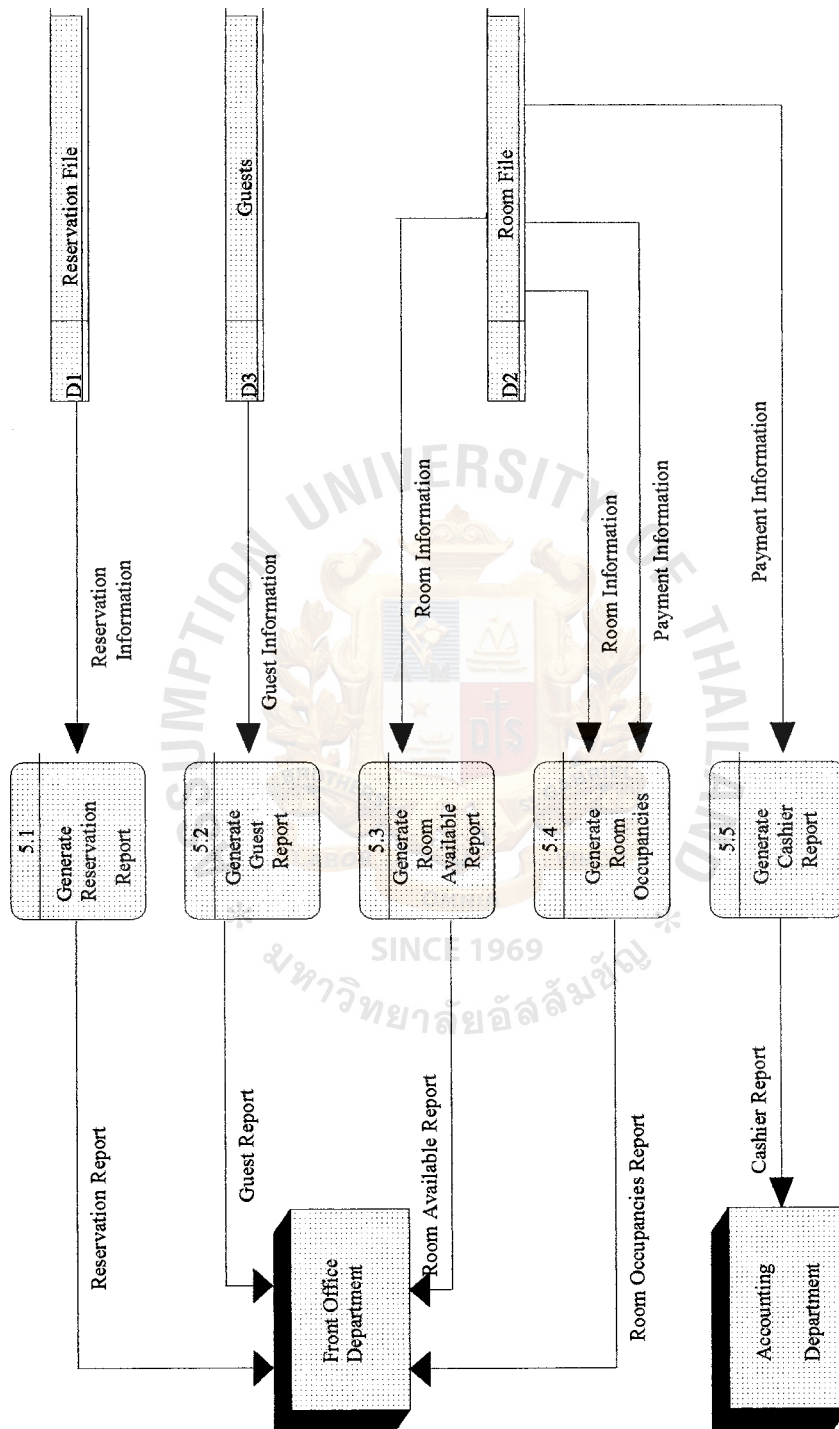


Figure A.4. Level 1 Data Flow Diagram for Check out Process of the Proposed System.



Level 1 Data Flow Diagram for Generate Report Process of the Proposed System.



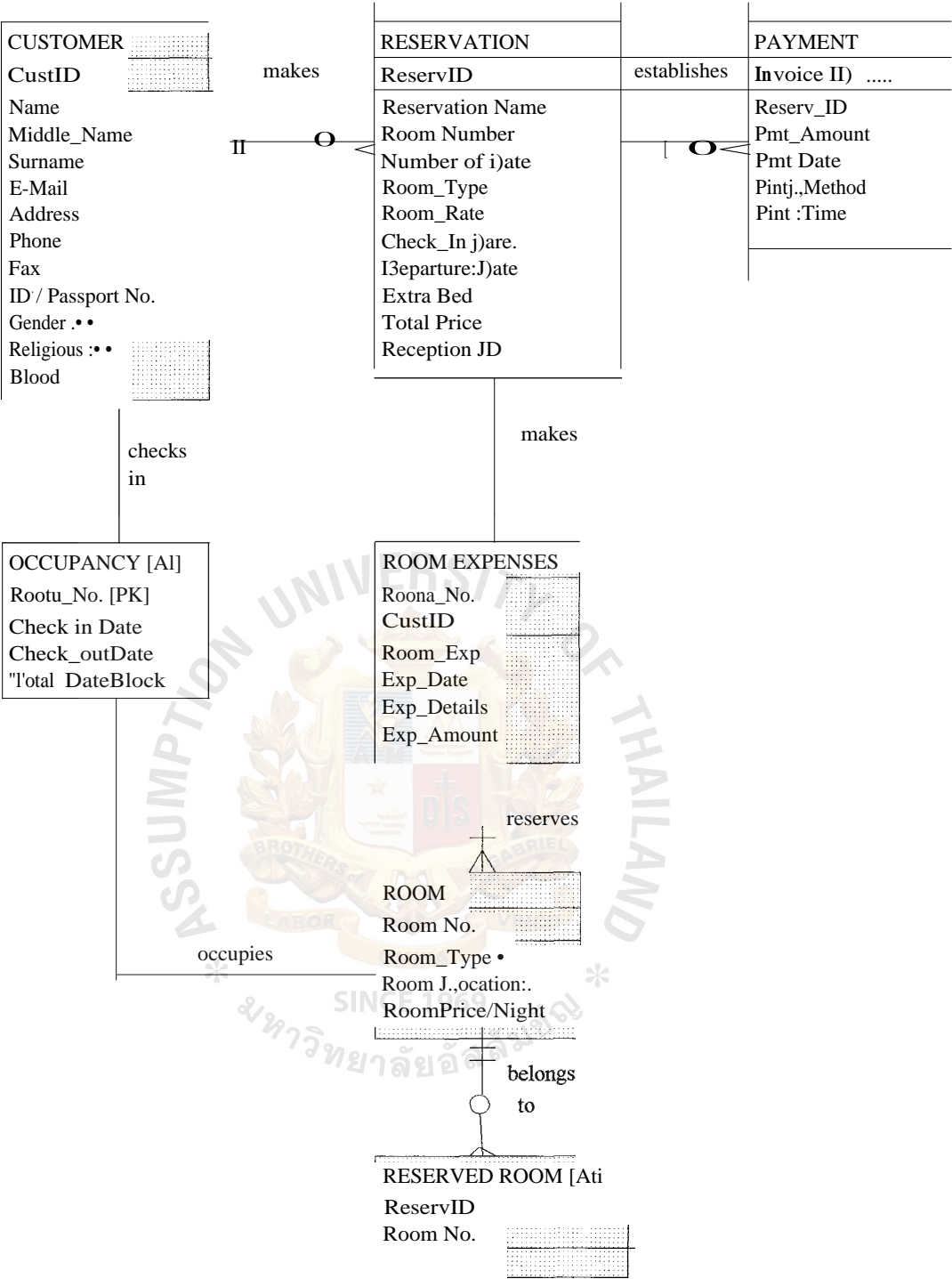


Figure B.1. Entity Relationship Diagram of Ariston Hotel Bangkok.



APPENDIX C
DATABASE DESIGN

Ariston Hotel Bangkok Database

Guest Table.

ID	Field Name	Field Type	PK	Unique	Nullable	Foreign Key to Table	PK
1	Room No.	int				Room Expenses	Primary Key
2	Name	varchar (20)					Attribute
3	Middle_Name	varchar (10)					Attribute
4	Surname	varchar (20)					Attribute
5	E-Mail	varchar (30)					Attribute
6	Address	varchar (30)					Attribute
7	Phone	varchar (15)					Attribute
8	Gender	varchar (15)					Attribute
9	ID / Passport No.	longinteger (20)					Attribute
10	Gender	varchar (5)					Attribute
11	Religion	varchar (15)					Attribute
12	Blood	varchar (2)					Attribute

Occupancy Ta

NO	Field Name	Field Type	PK	Unique	Nullable	Foreign Key to Table	Key Type
1	Order No			Yes			Primary Key (FK)
2	Room No.			Yes			Primary Key (FK)
3	Check_in_Date	datetime					Attribute
4	Check_out_Date	datetime					Attribute
	Total_Date_Block	varchar (30)					Attribute

Payment Table.

NO	Field Name	Field Type	PK	Unique	No Null	Foreign Key to Table	Key Type
	Invoice ID						Primary Key (FK)
	Invoice	int *4					Primary Key (FK)
	Pmt Amount	largeinteger (8)					Attribute
	Pmt_Date	date					Attribute
	Pmt_Method	varchar (5)					Attribute
	Pmt Time	time					Attribute

a) Reservation Table.

Field Name	Field Type	Unique	PK	FK	Foreign Key to Table	Key Type
Room_ID	int		Yes		Payment Reserved Room	Primary Key
Reservation Name	varchar (10)					Attribute
Room Number	number					Attribute
Number of Date	number					Attribute
Room_Type	varchar (10)					Attribute
Room Rate	int					Attribute
Check_In_Date	date					Attribute
Check_Out_Date	date					Attribute
Extra_Bed	varchar (10)					Attribute
Total Price	int					Attribute
Reception_ID	int					Attribute

Table 1

Field Name	Field Type	Unique	Foreign Key to Table	Key Type
Room No.	varchar (5)	Yes	Room_Expense	Primary Key
Room_Type	varchar (5)			Primary Key
Room_Location	longvarchar (20)			Attribute
Room_Price/Night	largeint			Attribute

Table 2

Field Name	Field Type	Unique	Foreign Key to Table	Key Type
Room No.	varchar (5)	Yes	Room Expense	Primary Key
Cust_ID	varchar (5)			Attribute
Room_Exp_Item	varchar (5)			Attribute
Room_Location	longvarchar (20)			Attribute
Room_Price/Night	largeint			Attribute

Table 1. Reserved Room Table.

No	Field Name		a.)	a)	Foreign Key to Table	Primary Key (FK) Primary Key
	ชื่อ	*				
				>4		



APPENDIX D
DATA DICTIONARY

DATA DICTIONARY

Table D.1. Data Dictionary of Ariston Hotel Bangkok Database.

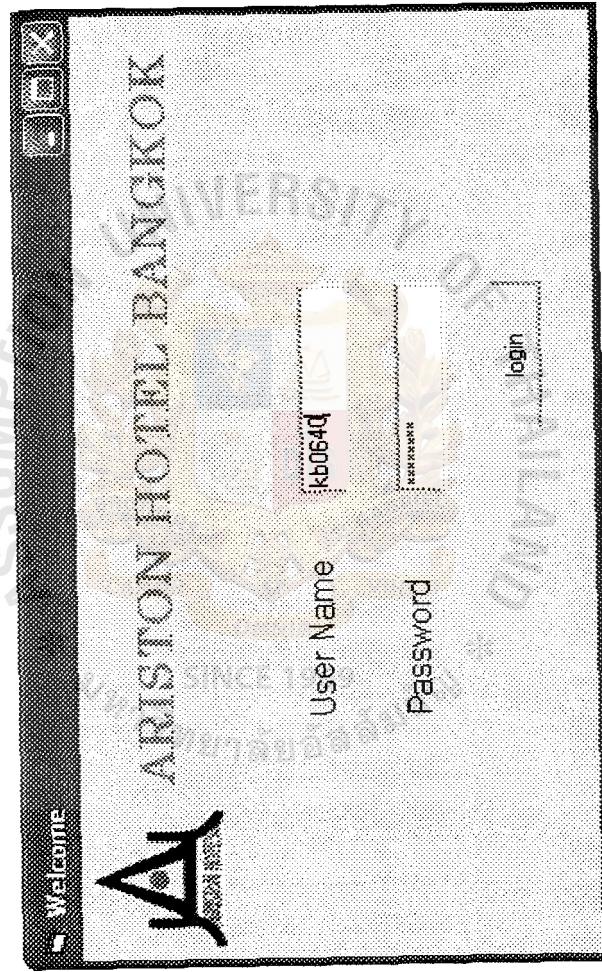
Field Name	Meaning
Address	Guest's address
Blood	Guest's blood
Check In Date	The date that guest checks in
Check out Date	The date that customer checks out
Cust_ID	Unique Guest identification
Departure Date	The date that guest checks out
Exp_Amount	Total amount of room expenses
Exp_Date	The date that the expenses occurred
Exp_Details	Details of the expenses for each room
Extra Bed	A bed is added in room
E-Mail	Guest's e-mail
Fax	Guest's fax number
Gender	Guest's gender
ID / Passport No.	Guest's identification card number or passport number
Invoice ID	Unique invoice identification number
Middle Name	Guest's middle name
Name	Guest's first name
Number of Date	Number of days are reserved
Phone	Guest's telephone number
Pmt_ Amount	The total amount of payment

Table D.1. Data Dictionary of Ariston Hotel Bangkok Database. (Continued)

Field Name	Meaning
Pmt Date	Payment date
Pmt Method	Method of payment
Pmt_Time	Payment time
Reception_ID	Reception identification that records transaction
Religion	Guest's religion
Reservation Name	Reservation name
Resery_ID	The unique identification of reservation
Room Exp_Item	The lists of items in each room that have been used
Room Location	Location of each room
Room_No.	Room's number
Room Number	Room's number
Room Rate	Price of room per night
Room Type	Type of room
Surname	Guest last name
Total Date Block	The total amount of date the room has been used
Total Price	The total amount that customer will be paid



APPENDIX E
USER INTERFACE DESIGN



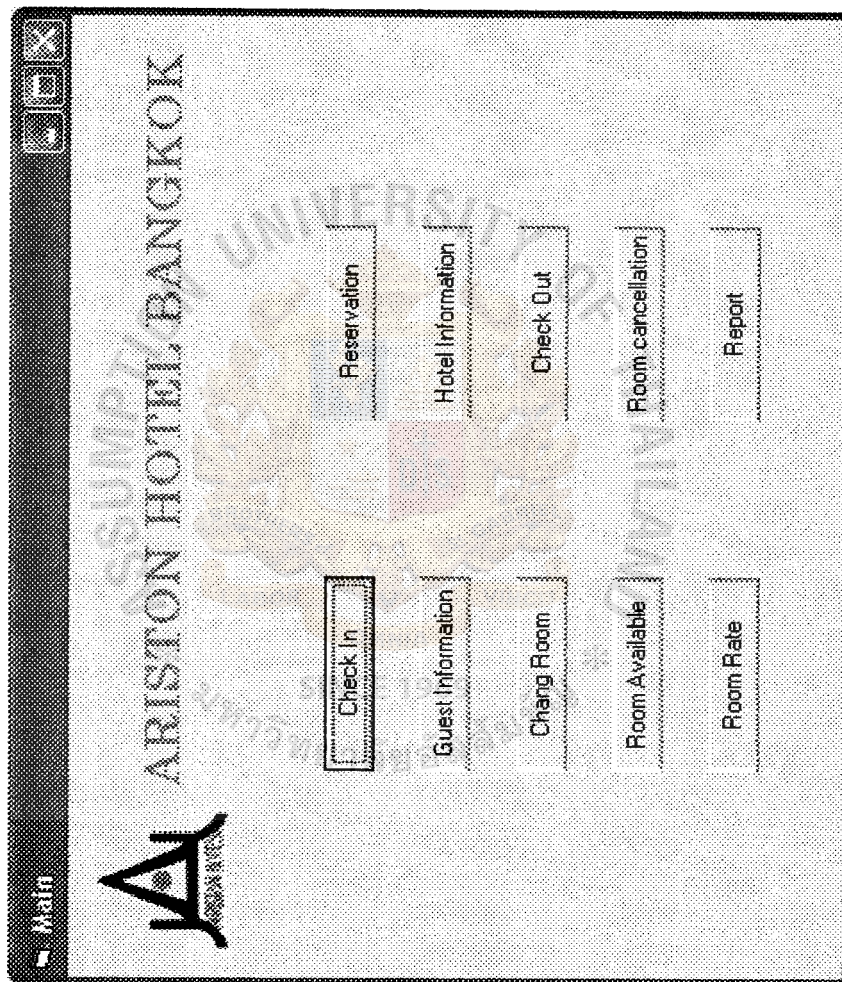
User Logon Screen.



Login and/or Password Wrong.



nu.
Me
er
Us
New
Up
n
to



Front Office Main

Check In

Room Number	901	Confirmation No.	01-02-0202
Guest Name	Aram Limsakul		
Room Rate	2,500	Number of Person	1
Check In Date	30	June	2003
Departure Date	4	July	2003
Extra Bed	No!!		
Total Price	10,000		

Check-In Information.

Reservation Information					
Reserv_ID	01-02-0302				
Reservation Name	Korawan Techapelalboon				
Room Number	501	Number of Date	1		
Room Type	Standard Single Inc BF	Room Rate	1,400		
Check In Date	5	September	2003		
Departure Date	6	September	2003		
Extra Bed	Yes!		400		
Total Price	1,800				
Reception ID	kayl				
<div> Main Menu Add Edit Search Clear Check Cancel </div>					

Reservation Information.

Hotel Information

Room Number	901
Room Type	Deluxe
Room Rate	2,500

Add Clear Search Main Menu

Hotel Information.

Change Room

Search

Room Number

509

Guest Name

Willaporn Kranjana

Room Type

SIG

Rate

1400

Check In Date

30

June

2003

Check Out Date

4

July

2003

Changing Date

1

July

2003

Remark

Swimming Pool View

New Room

Room Number

510

Room Type

SIG

Room Rate

1400

Change

Clear

Main Menu

Change Room Requisition.

77

Check Out

Room Number	501
Guest Name	Yupa Tapasert
Check In Date	20 June 2003
Departure Date	30 June 2003
Total Price	17,600
Payment Method	Cash

Main Menu Search Clear Check Out

Figure E.11 Check-Out Record.

Room Available

Date

From 1 July 2003

To 14 July 2003

Room Type

Main Menu Search Clear

Figure E.12. Room Available Report Screen.

Room Cancellation

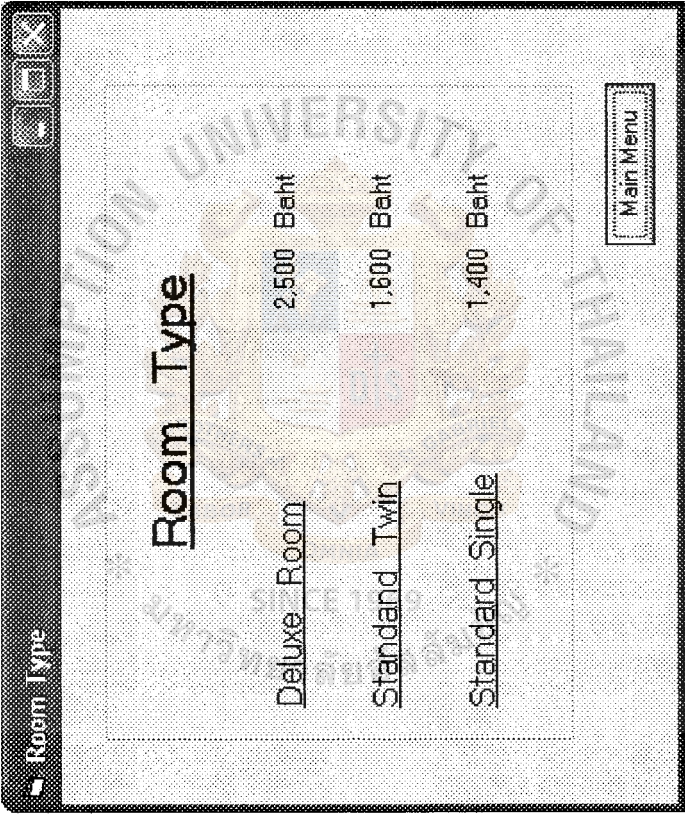
Confirm No. 02-02-0015 Search

Cancel No. 0101 Room No. 602 Cancellation Reason Don't come to Thailand

Cancellation Date 1 August

Main Menu Cancel Room Clear Back

Figure E.13. Room Cancellation Screen.



ao
Plq

Room Type and Room Rate Information Screen.

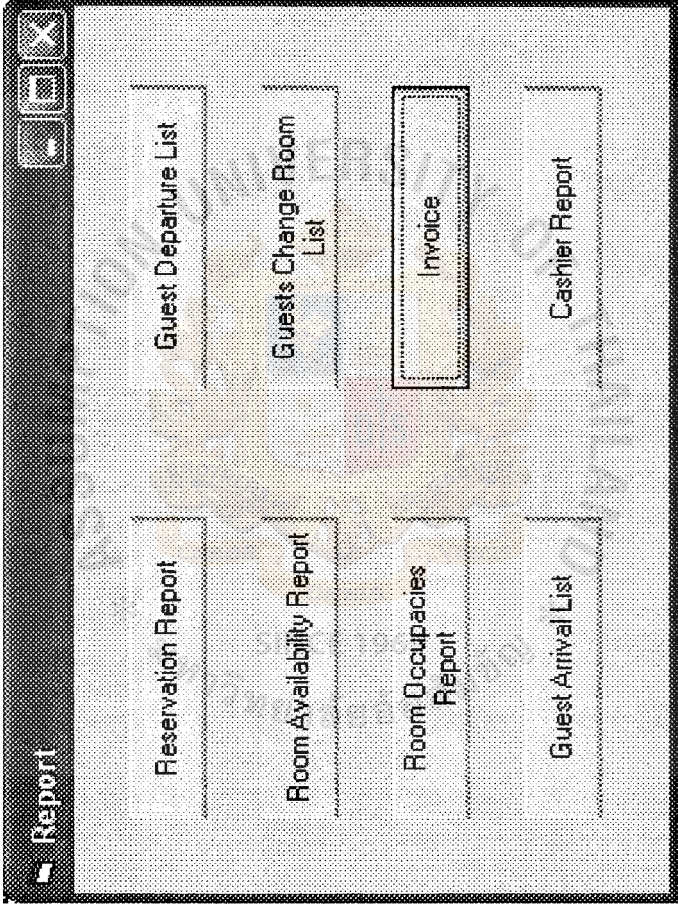


Figure E.15. Report Screen.



APPENDIX F
REPORT DESIGN


<div>  <div> <div>Ariston Hotel Bangkok</div> <div> 19 Sukhumvit Soi 24 Sukhumvit Road, Bangkok 10110 Thailand </div> </div> </div>									
<div> <div>Reservation Report</div> <div> <div>From</div> <div>To</div> </div> <div> <div>26-Jul-03</div> <div>26-Jul-03</div> </div> </div>									
Reserv ID	Cust ID	Check In	Check Out	Name	Number of Date	Rate	No. of Room	Room Number	Note
03-07-0019	00-12-0012	Aug 20,2003	Aug 21,2003	Christopher O. Lambert	1	1,600.00	1	904	
03-07-0020	00-12-0099	Aug 1,2003	Aug 20,2003	Sharnon Chamber	19	1,400.00	1	505	
03-07-0021	00-12-0013	Aug 30,2003	Sep 5,2003	Kramke Gudrun	6	2,500.00	1	1010	
03-07-0022	02-01-0118	Aug 14,2003	Aug 30,2003	Payao Yingmas	15	1,400.00	1	607	
03-07-0023	02-03-0802	Aug 10,2003	Aug 13,2003	Kittima Sertiakrising	2	1,600.00	1	809	
03-07-0024	03-01-0033	Aug 12,2003	Aug 14,2003	Dujdao Hamwongjirawat	2	1,400.00	1	410	

Figure F.1. Reservation Report.

Ariston Hotel Bangkok

19 Sukhumvit Soi 24 Sukhumvit Road,
Bangkok 10110 Thailand

ROOM AVAILABILITIES REPORT															
Room	Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Month	July' 03	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon
501	SIG					(-----)									
502	SIG	-----)													
503	SIG			(-----)							(-----)				
504	SIG				(-----)										
601	TWN						(-----)								
602	TWN		(-----)												
603	TWN						(-----)								
901	DEL	-----)									(-----)				
902	DEL	(-----)				(-----)									
903	DEL	(-----)													

Figure F.2. Room Availabilities Report.


<div>  <div> Ariston Hotel Bangkok 19 Sukhumvit Soi 24 Sukhumvit Road, Bangkok 10110 Thailand </div> </div>						
GUEST ARRIVAL LIST						
Resev ID	Room	Code	Name	Date	Time	Note
00-01-0002	501	SIG	Hoffmann, Fritz Hoffmann, Gisela		20.00	
00-01-0005	502	SIG	Bauche, Frank Bauche, Petra		13.00	
01-02-0026	503	SIG	Ziegler, Adrian Jerusalem, Sabine		15.00	
01-02-0118	601	TWN	Sikkel, Marinus Wilhelmus		14.00	
01-02-0200	602	TWN	English, Michael-John		17.00	
01-02-0202	901	DEL	Limsakul, Aram		16.00	
01-02-0222	902	DEL	Hall, Melinda Anne		21.00	

Figure F.3. Guest Arrival List Report.


<div>  <div> Ariston Hotel Bangkok </div> </div> <div> 19 Sukhumvit Soi 24 Sukhumvit Road, Bangkok 10110 Thailand </div>					
GUESTS DEPARTURE LIST					
			Date	June 30, 2003	
Cust#	Room	Code	Name	Time	Note
00-01-002	501	SIG	Hoffmann, Fritz Hoffmann, Gisela	15.30	
01-02-026	503	SIG	Ziegler, Adrian Jerusalem, Sabine	17.50	
01-02-113	504	SIG	Muller, Andreas	13.30	
01-02-200	602	TWN	English, Michael-John	16.50	
01-02-202	902	DEL	Limsakul, Aram	15.00	
01-02-222	903	DEL	Hall, Melinda Anne	19.00	

Figure F.4. Guest Departure List Report.


<div>  <div> Ariston Hotel Bangkok 19 Sukhumvit Soi 24 Sukhumvit Road, Bangkok 10110 Thailand </div> </div>					
<div> GUESTS CHANGE ROOM LIST Date June 30,2003 </div>					
Cust#	Existing Room	New Room	Code	Name	Note
02-04-010	509	510	SIG	Wilaiporn Kranjana	
01-02-211	605	902	DEL	Issariya Kongkrai	

Figure F.5. Guests Change Room List Report.



Ariston Hotel Bangkok

Invoice

Customer No.03-06-003
Date
30-Jun-03

Yupa Tapasert
Room No.
501

398 Soi TherdThai 23 TherdThai Road
Payment Method
Cash

Bukkalo Thonburi

Bangkok 10600

Tel. 0-2476-1716

Fax. 0-2476-5050

Date	Description	Amount
30-Jun-03	Room Charge	16,448.60
Total		16,448.60
Discount	0%	
VAT	7%	1,151.40
Grand Total		17,600.00

Figure F.6. Guest’s Invoice.

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