HOTEL RESERVATION SYSTEM
(MALAYSIA HOTEL)

by

MR. PASAKORN NETPRASAT

Final Report of the Three - Credit Course
CS 6998 System Development Project

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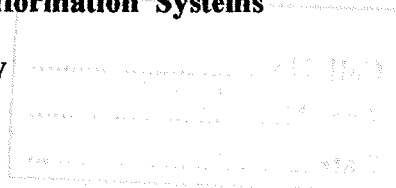
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Final Report of the Three-credit Course

CS 6998 System Development Project

Submitted in Partial Fulfillment

of the Requirements for the Degree of

Master of Science in Computer Information Systems

Assumption University

December , 1997

Project Title : Hotel Reservation System.

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Academic Year : 1997

The Graduate School of Assumption University had approved this final report of the Three-credit course, CS6998 System Development Project, submitted in partial fulfillment of the requirements for the degree of Master of Science in Computer Information Systems.

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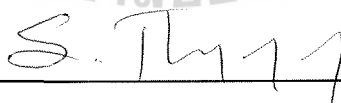|	
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December, 1997

ABSTRACT

Nowadays, there is more competition for hotel-service business. So each hotel try to change their service or management system for this. To reduce cost and more efficiency work are major policies for each hotel.
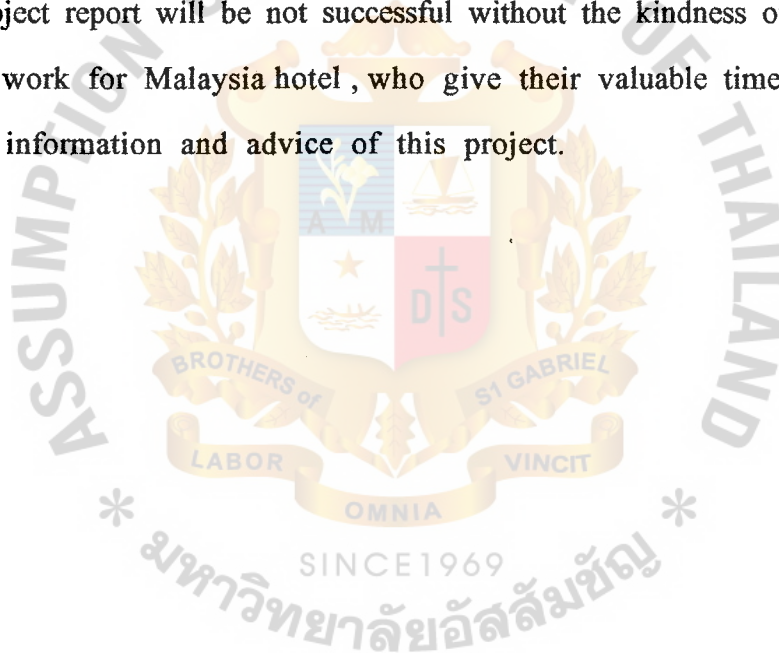
Malaysia hotel is also in this competition so they try to change their management and their service processing in each parts such as personal system, purchase, inventory system and hotel reservation system.

Hotel reservation system is one system that is necessary for each hotel, front desk, to service to customer or guest, to make more comfortable service and more efficiency work.

ACKNOWLEDGMENTS

Table of Contents

List of Tables

List of Figures

1. Introduction

1.1 Project Background

Hotel reservation is system that is developed for Malaysia hotel. This hotel has 120 rooms so it is a middle - size hotel.

For the old system, there are front desk officers to operate all the process that occurred when guests come in. Every steps of the process are manual system.

For effective operation of the front disk is major concern to management. To handle guest check In / Out and special services. The front desk is responsible for processing billing and payment.

The process for guest check-in is as follow :

All guest check in are handled at the front-desk. Some guests have already made reservation, someone did not. When a guest arrives, the front disk will ask whether the person has a reservation. So checking in the list of guest reservation.

To determine which room has been reserved for the guest. Someone may have problem about their reservation. The front disk should help them and search for available room for them.

Each room has a specified rate group assign to it. The extra rate depends on the number of persons who will be occupying the room.

After the guest completes the registration information the front desk can give the exact room rate to them .The front desk asks for the planning length to stay and how to pay and write all to information on register - form.

1

The process for guest Check - out is as follow:

Guest check out are handled by the front desk. The information of all activities will be added. Include room rate, other charges that have been occurred at hotel in that period such as telephone, laundry, food. Payment are usually made by cash or credit card. At end of each day, Report will be generated and send to accounting department and report for front desk will be generated.

1.2 Project Objectives.

The objective of the project on the hotel reservation system are as follow:

1. To study the existing system of the hotel reservation system.
2. To identify the real problems and user.
3. To establish the hotel reservation system.
4. To utilize the use of Database - approach to generate the efficient design and generate information report.

1.3 Scope of the project

The project will cover major topics of hotel reservation system which includes.

1. Check - in System.

  - To fill information of each guest who check - in.

    - Guest information.

    - Room Rate and planning length to stay.

    - Payment method (Cash / Credit Card).

    - Control or manage the room that available for ever guest.

2. Check - out System.

  - Addition all of information for guest that occurred at hotel.

  - Calculate payment of guest.

3. To keep hotel information.

  - All detail of hotel.

    - Number of room.

    - Type of room.

    - Room rate.

  - Special service information.

4. To keep reservation information.

  - All information for guest who made reservation.

5. To generate Month - end, daily report.

2 . Existing System

2.1 Background of Malaysia hotel.

Malaysia hotel established in 1967. The location is on Rama 4 Road, Bangkok Thailand. There are 120 rooms, 6 floors. The ground floor is hotel - lobby, restaurant, swimming - pool, coffee shop and Thai traditional massage. The second floor is hotel office, meeting - room and the other floors are hotel room. There are special services that are provided for guests are as follow:

- Luggage storage
- Room services and Laundry
- International Fax and telephone
- Tour desk for local and international travel arrangements
- Thai traditional massage

The guests are European or Western - foreigner a few Asia foreigner. The management of this hotel us family - management system so the operation of each system are as old - management system, almost are manual.

2.1.1 Tariff of Malaysia hotel are as follow.

1) Standard Room Rate   baht

- Single room	490
- Twin or double room	580
- Extra bed	100

* Room Specification

The room completely air - condition, private bath / shower with hot and cold water.

2) Superior room Rate   baht

    - Single room   540

    - Twin or double room   650

    - Extra bed   100

* Room Specification

    The room are equipped with refrigerator, video and TV.

3) Deluxe room Rate   baht

    - Single room   700

    - Twin or double room   840

    - Extra bed   100

<u>Note</u> The above - mentioned rate are include with 10 %

service charge, not include 10 % VAT

4) Meal Rate   baht

    Continental breakfast   70

    American breakfast   100

    Lunch buffet   140

    Dinner buffet   180

<u>Note</u> Not include service - charge 10 %, Not include 10 % VAT

5
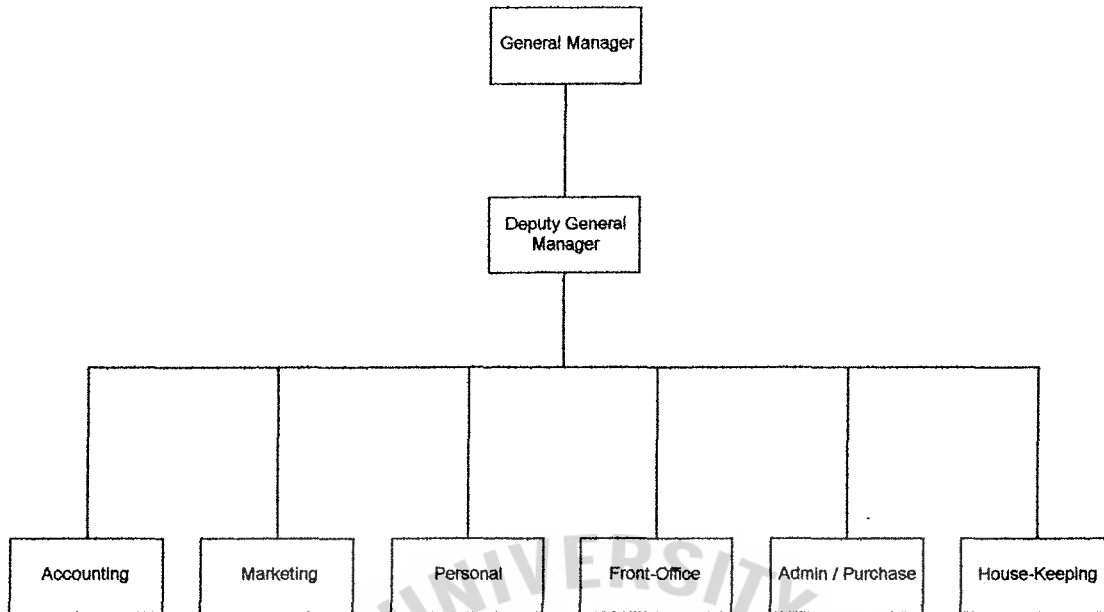
Figure 1 : Organization Chart.

2.1.2 Organization

Description of each department in Malaysia hotel follow as :

1) Accounting : Department of Accounting control and manage about Budget of hotel , do accounting

2) Marketing : Department of Marketing makes market plan of hotel and provide tourists

3) Personal : Department of Personal manages about Tax , employee , law and searching employee.

4) Front-office : Department of Front-office manages about reservation , check-in and check-out processing.

5) Administration : Department of Administration manage general works.

6) House-keeping : This department manage about hotel services.

2.2 Area of studying identification

Reservation system is an important system for each hotel. It is the first department that communicate with guests or customers who come in. Because the existing system is manual system. For more efficiency and comfortable of operation. We use computer system to manage or operating for this system (Hotel reservation) and make report to summary or analyze report.

The area cover check - in system, check out, create summary - report and make reservation system. This system is one part of Hotel management system.

2.2.1 Current Problem.

1) The existing system is manually system so every data should be collected in document form (paper). We have many problem to manage data or searching some data.

2) Accuracy, we should update data whole time so we should spend a long time to accurate data or because of careless of employee for updating data may be occurred.

3) Report, by manually, it use a long time to summary or create report. For each department we need to create summary report for them so we try to reduce time for reporting process.

4) Updated data , for your data base design , it will have about redundancy problem so we try to correct this problem by use computerize system to manage and design data base in the correct way.

5) Inventory , is the major problem to stock paper or document form . For each year , the organization cost or managed cost is high value for our budget. So we try to reduce about this.

6) Not comfortable , for the manual system when guest come in and wait for service. They use a long time for this so some guest feel unhappy.

7) Competition , In the same area of Malaysia hotel , there are many hotels which have same group of guests. So we try to take care guest the best for their impression. , they will come back more.

8) Provide for new technology , for future plan ,they try to provide E-mail service to the guest . So they need new computer system instead of the old computer which cannot support for this service.

9) Reduce increasing employee in each year. For the future plan , If this hotel grow in the high-rate. There are more guest come in so we need more employees to service. It will have more management cost. This problem is major concern for their planning. (To increase profit but reduce cost)

This existing system can be written into Data Flow Diagram as below . This DFD displayed about transaction flow for each department to connect to each other and about document or data that they provide for each department. The old system for hotel reservation compose of Input guest process , Reserve room process , Check-in process , Check-out process.

2.2.2 Data Flow Diagram of Existing System.
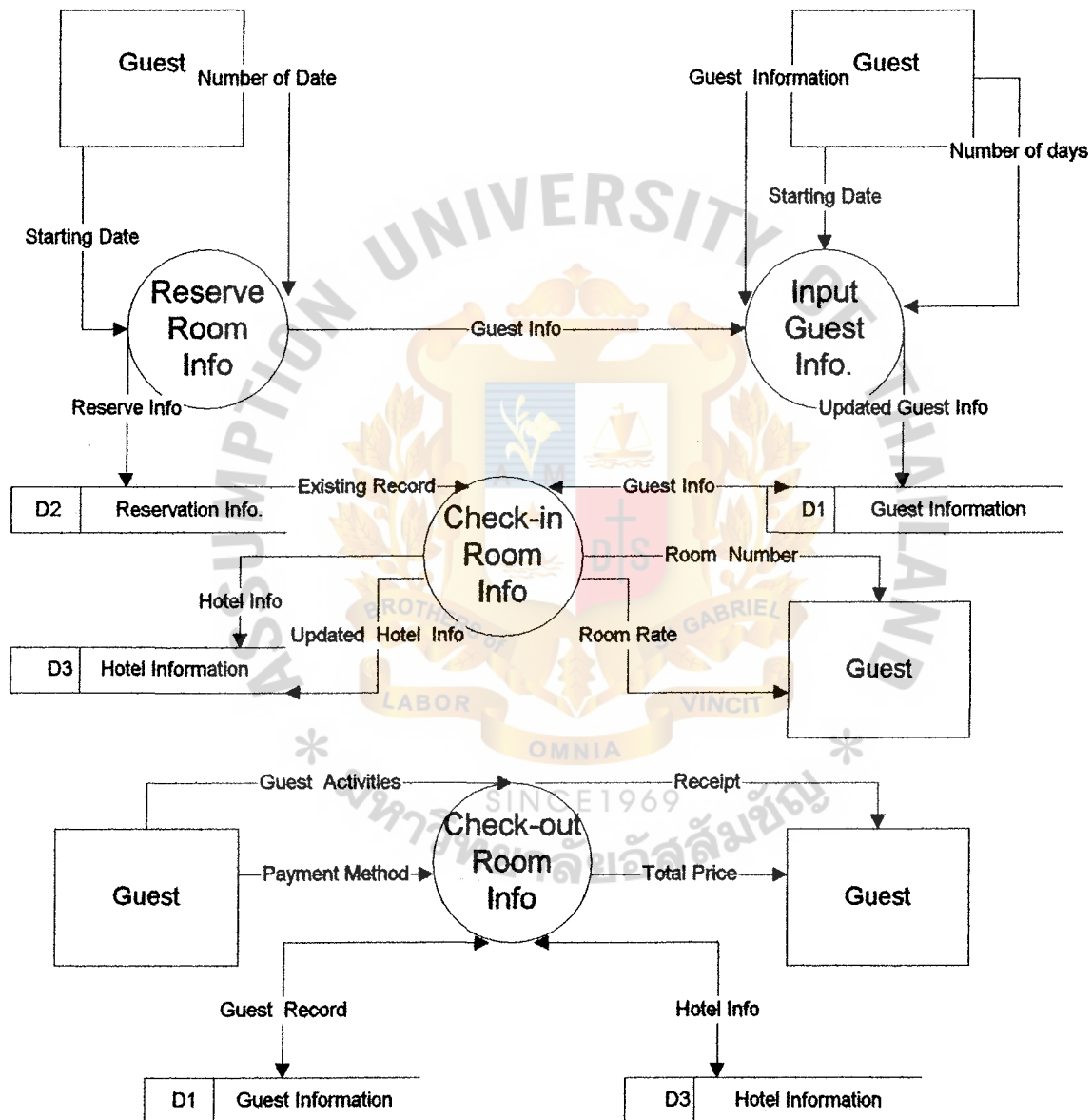
Figure 2 : (DFD) : Level 0 : Existing System

9

3. Proposed System

3.1 User Requirement

For the problem that is found for the existing system that are major concern for Malaysia hotel. They try to solve these problem. And nowadays , there is more competition in the hotel service. To reduce cost of organization is one policy for them to select. To use computer system instead of manual system which can reduce cost of salary for employees. These below are summary of user requirement follow as :

1) Accuracy data, to manage data base to be accuracy and easy to manage.

2) Reduce documentation, paper less, to radure cost for stock paper or documentation.

3) Reporting, Save - time to create or sumary report.

4) For efficiency work, All process of front - desk should be more efficiency and more comfortable.

5) To provide the best service for customer.

3.2 Context Diagram and Data Flow Diagram.

The next part show about analysis and design for new system. The last chapter that present you the existing data flow diagram which is the old system for hotel reservation. For this part will show you the new system for this hotel.

10

To display about context diagram of the new system is shown in figure 3, to display about overall hotel reservation is shown in figure 4 (DFD level 0), to display about input guest information is shown in figure 5 (DFD level 1), to display about reservation room record is shown in figure 6 (DFD level 1), to display about check in processing is shown in figure 7 (DFD level 1), to display about check out processing is shown in figure 8 (DFD level 1).
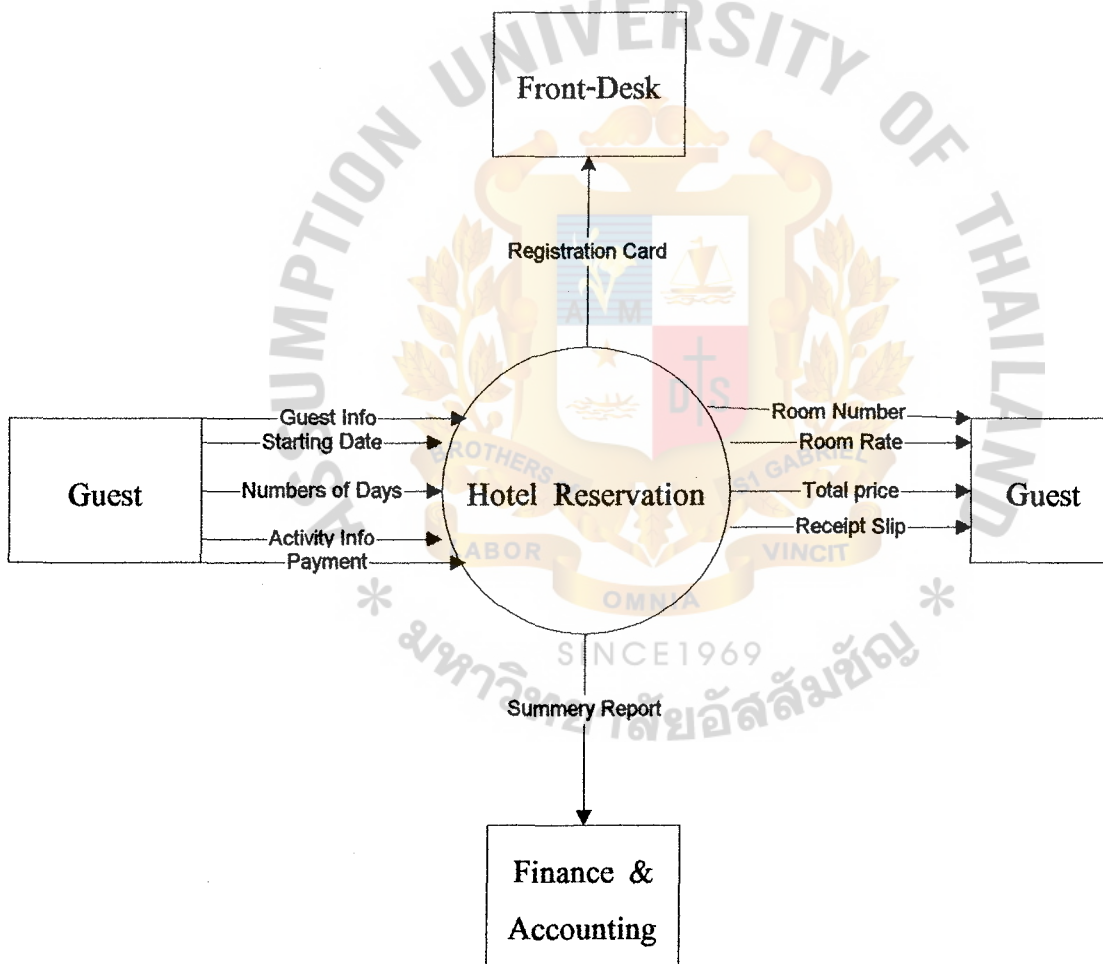
Figure 3 : Context Diagram
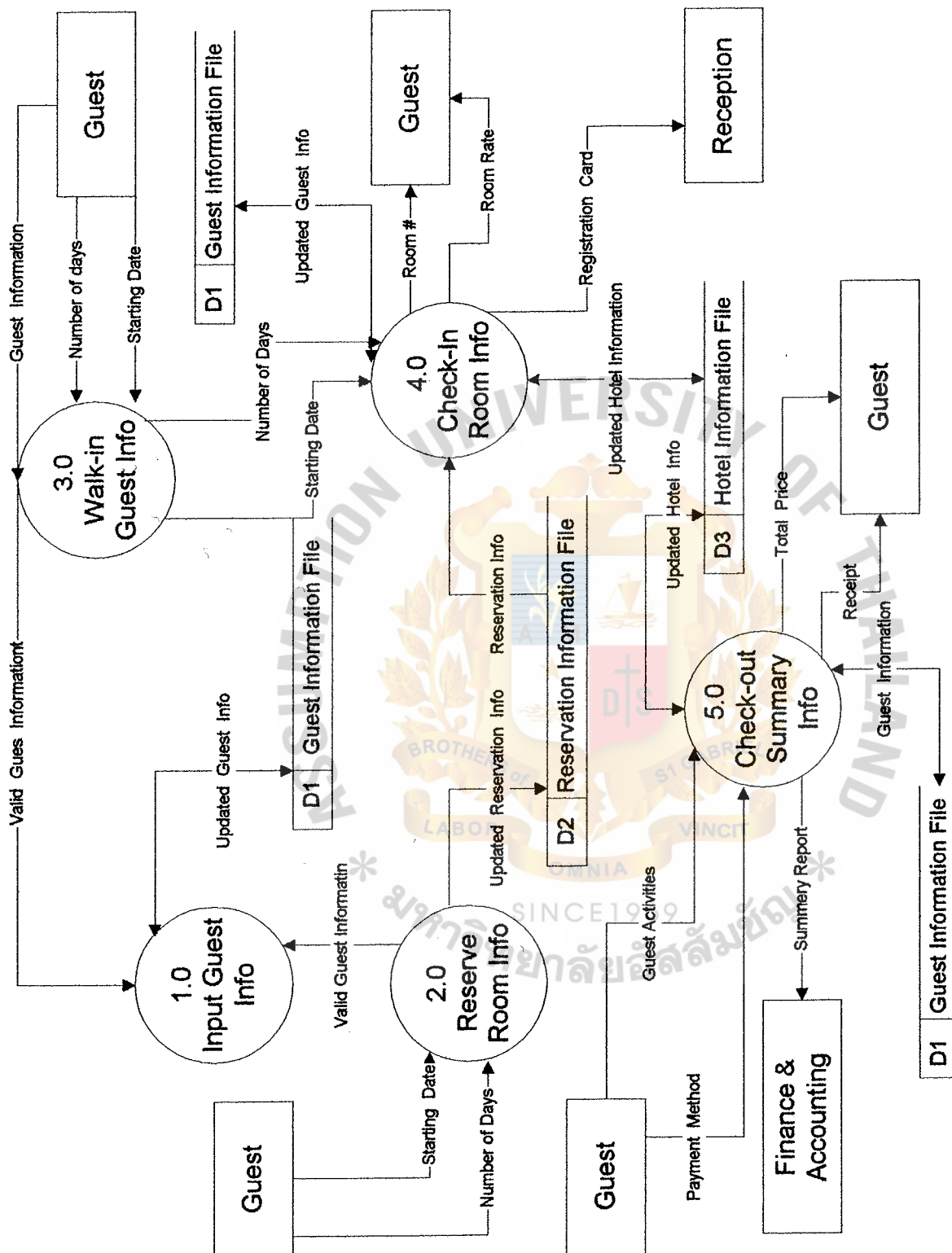
Figure 4 : DFD (Level 0) Hotel Reservation.

12
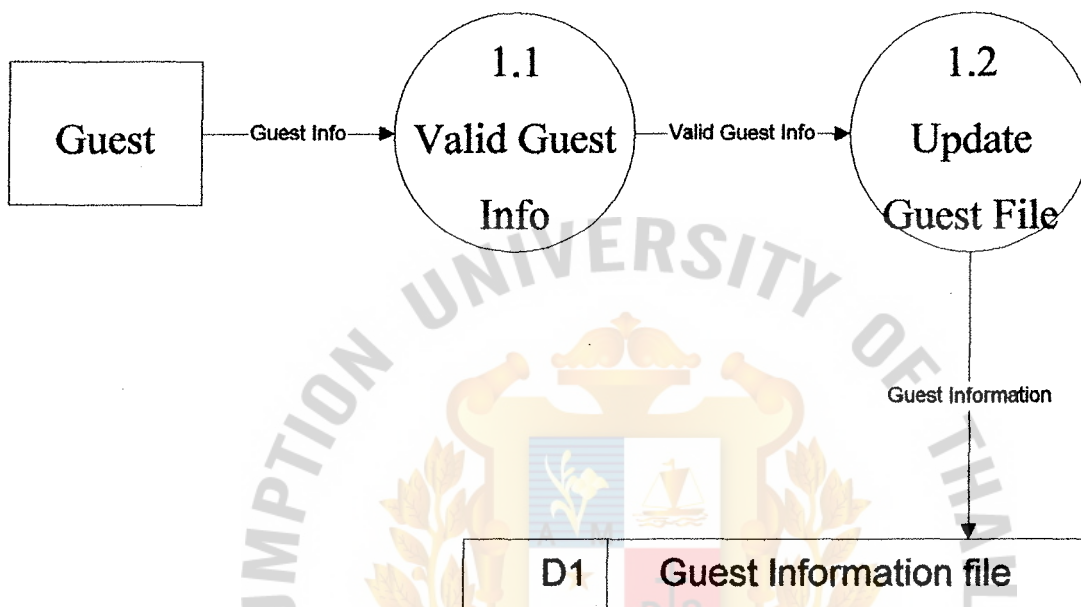
Figure 5 : DFD (Level 1) : Input Guest Information
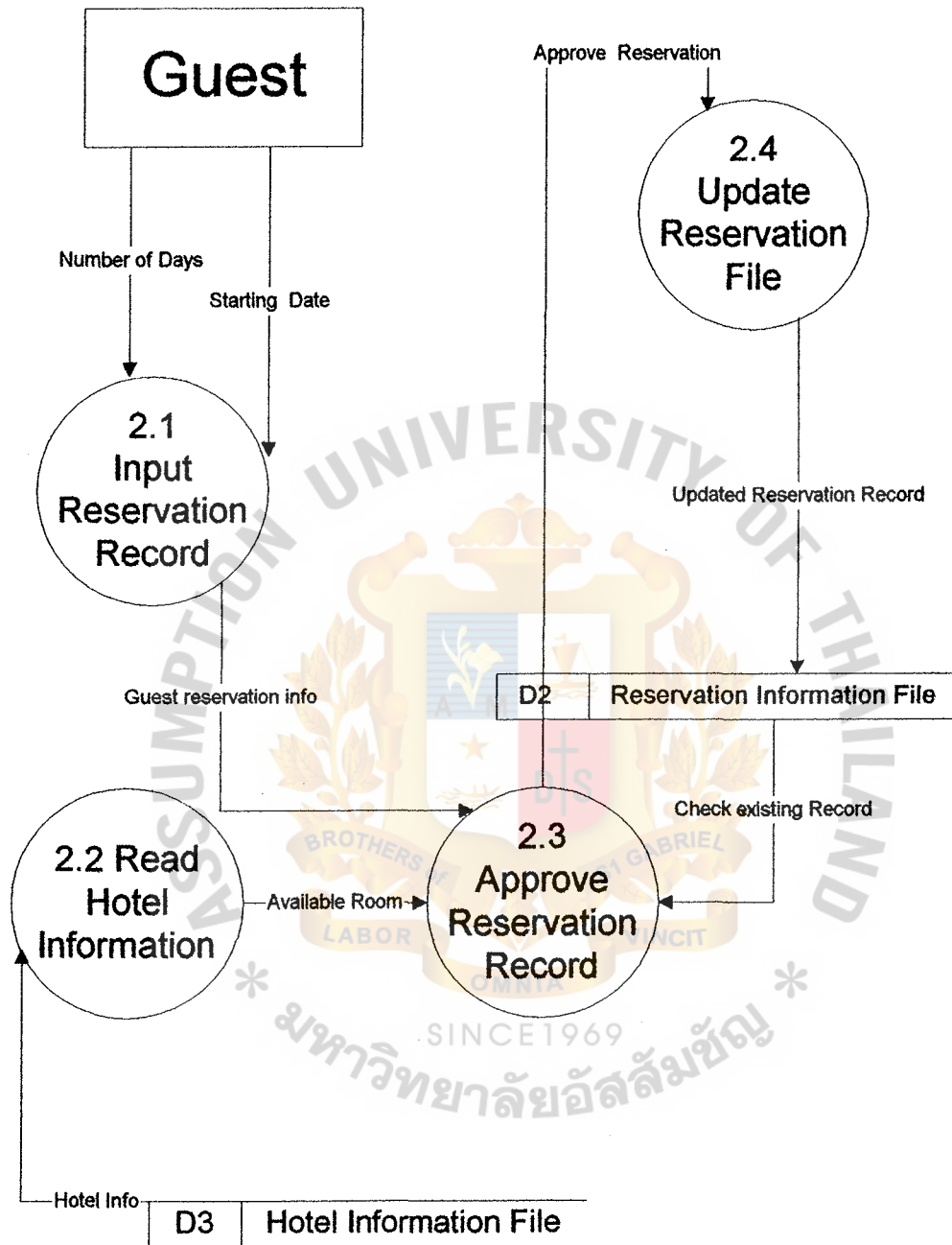
Figure 6 : DFD (Level 1) Reservation Room Information
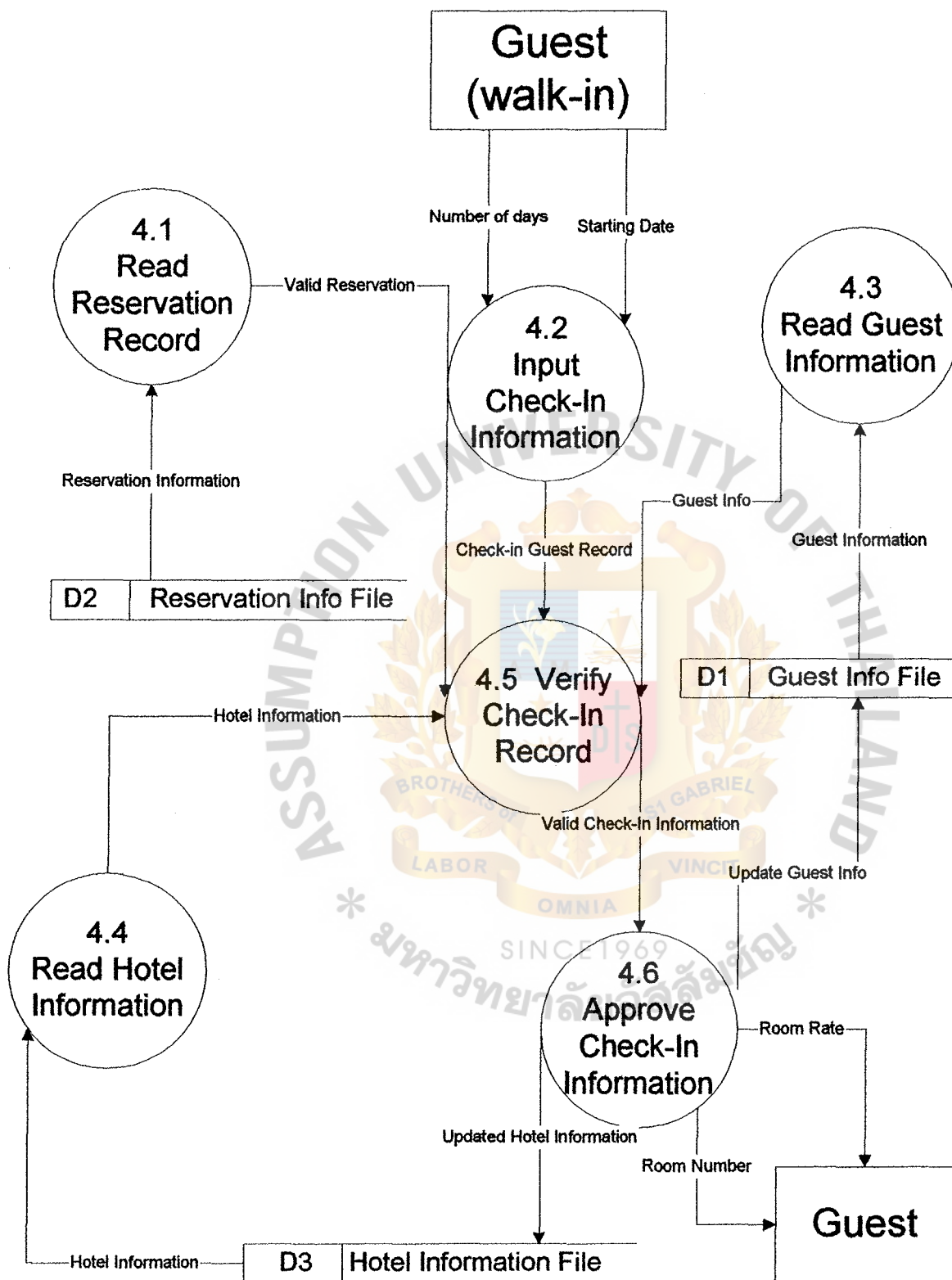
Figure 7 : DFD (Level 1) Check-In Hotel Information

15
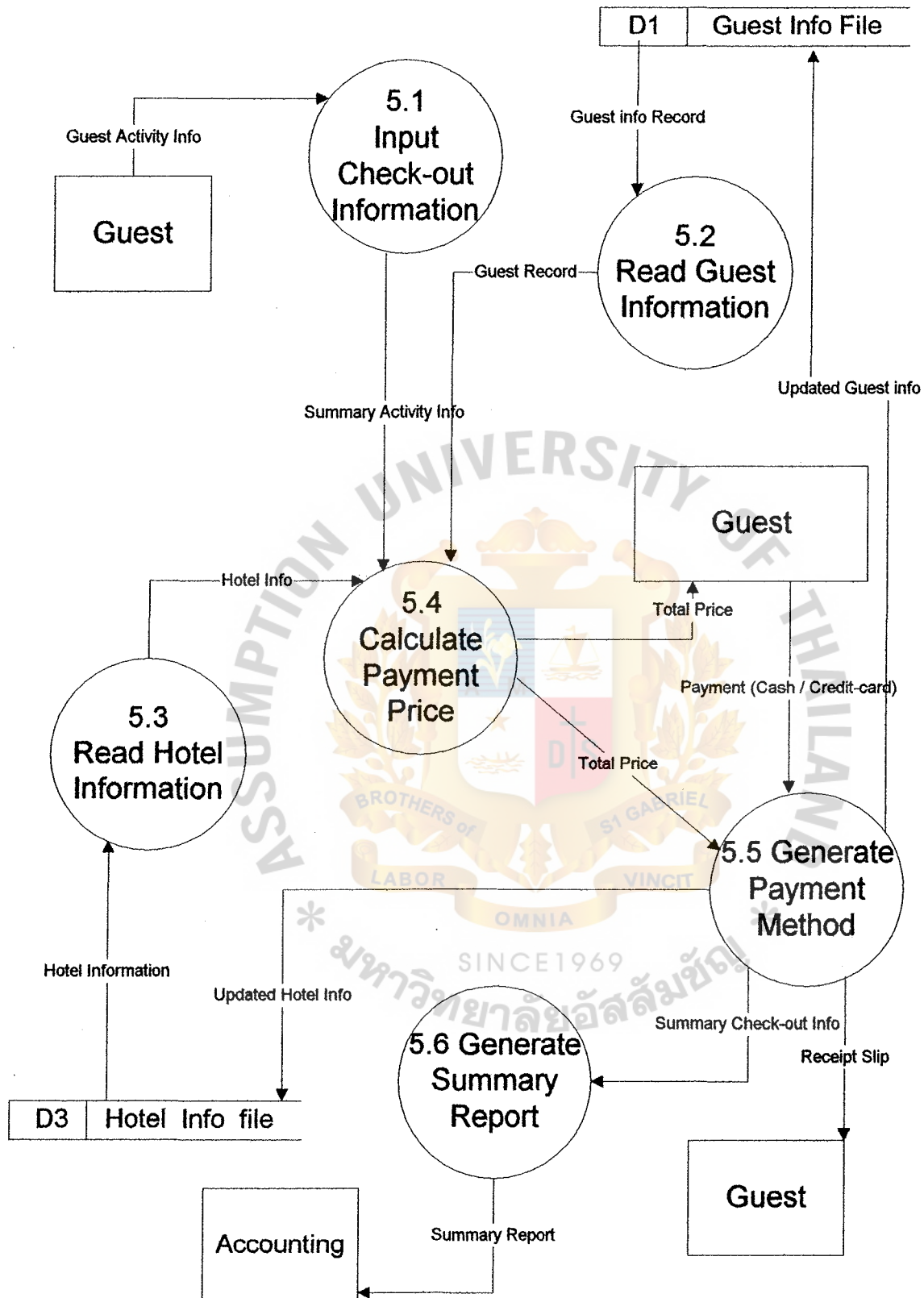
Figure 8 : DFD (Level 1) Check-out Processing
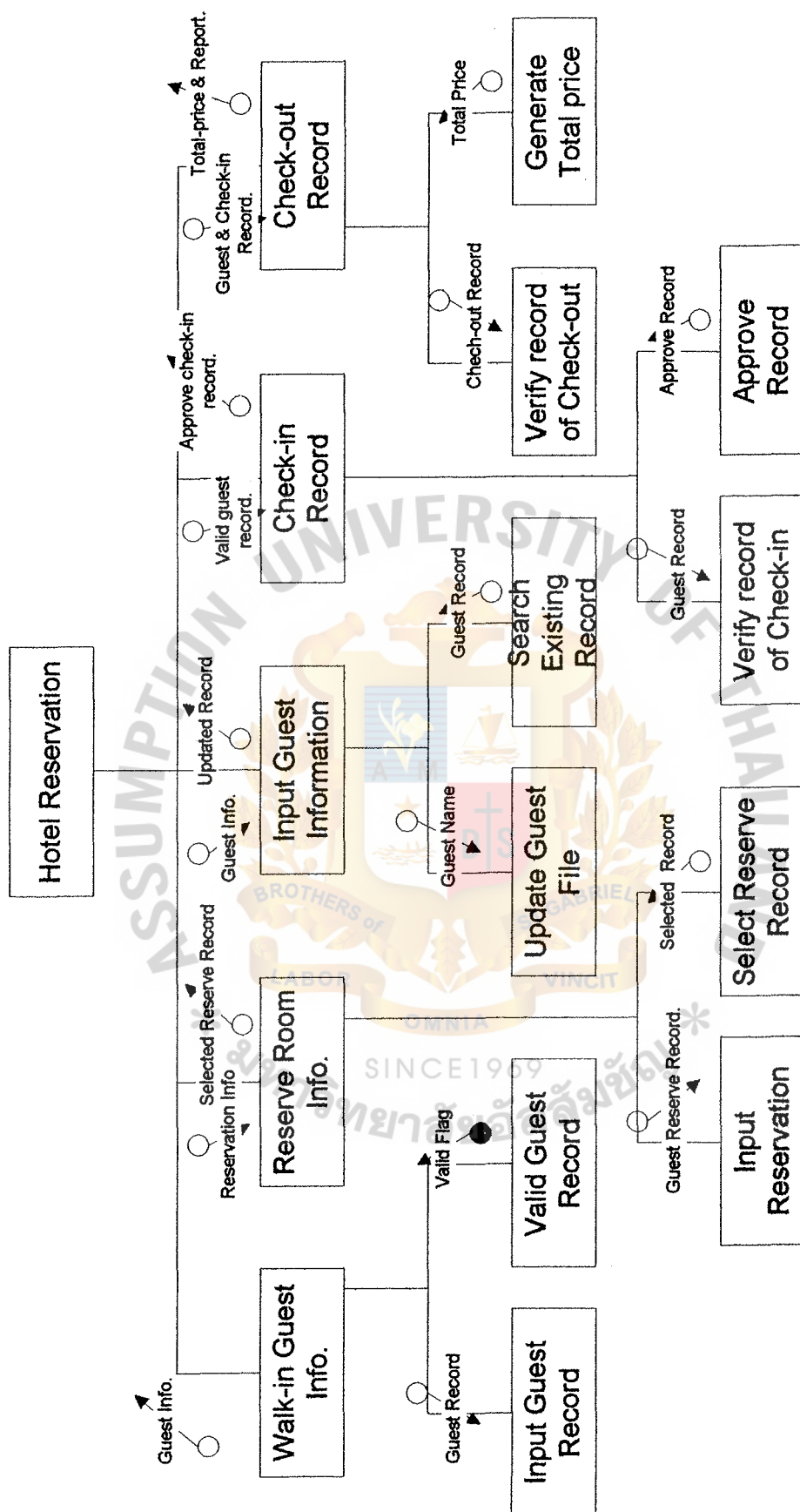
Figure 9 : (Structure Chart) : Hotel Reservation System.

17
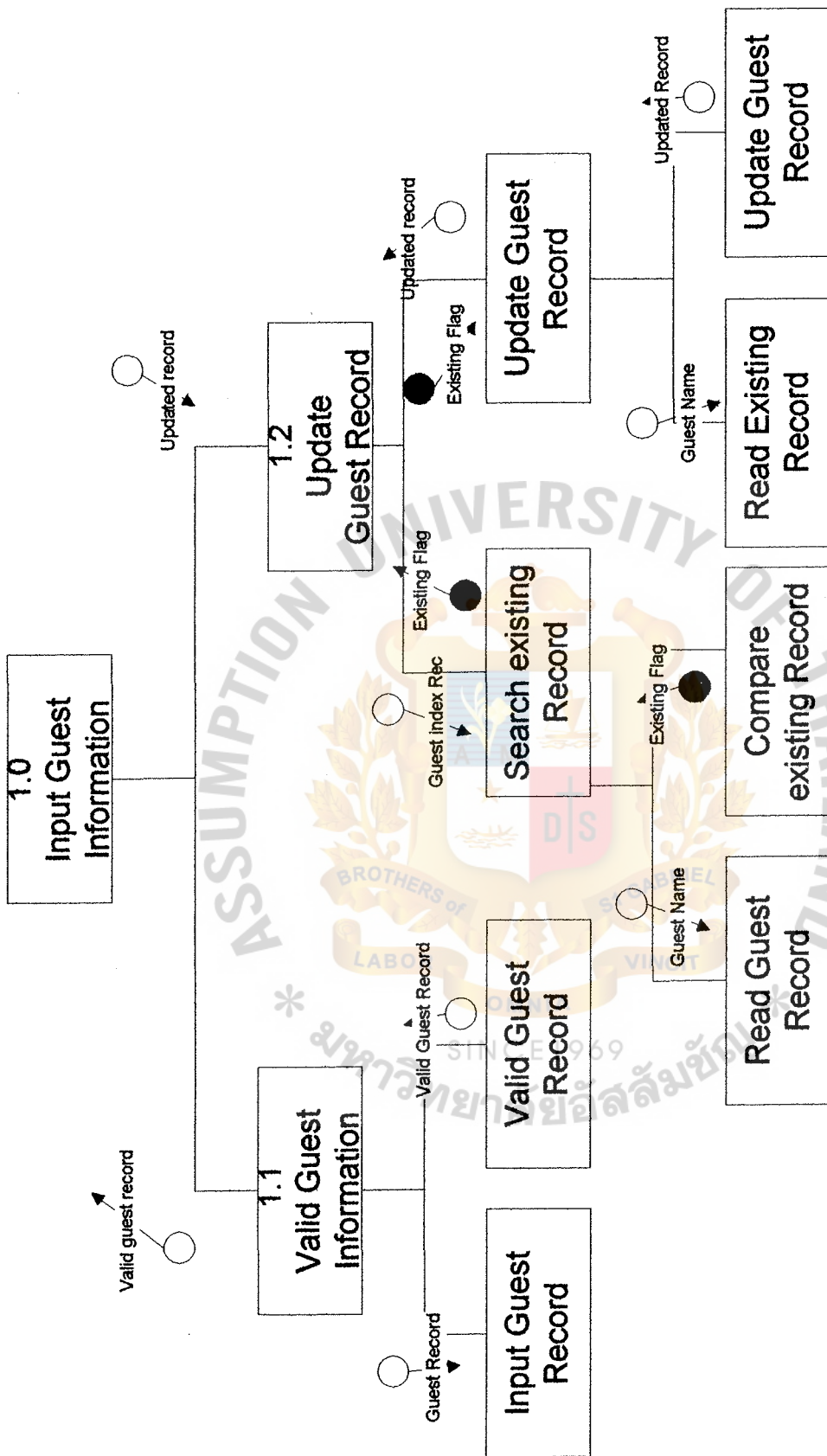
Figure10 (Structure Chart) : Input Guest Record.

18
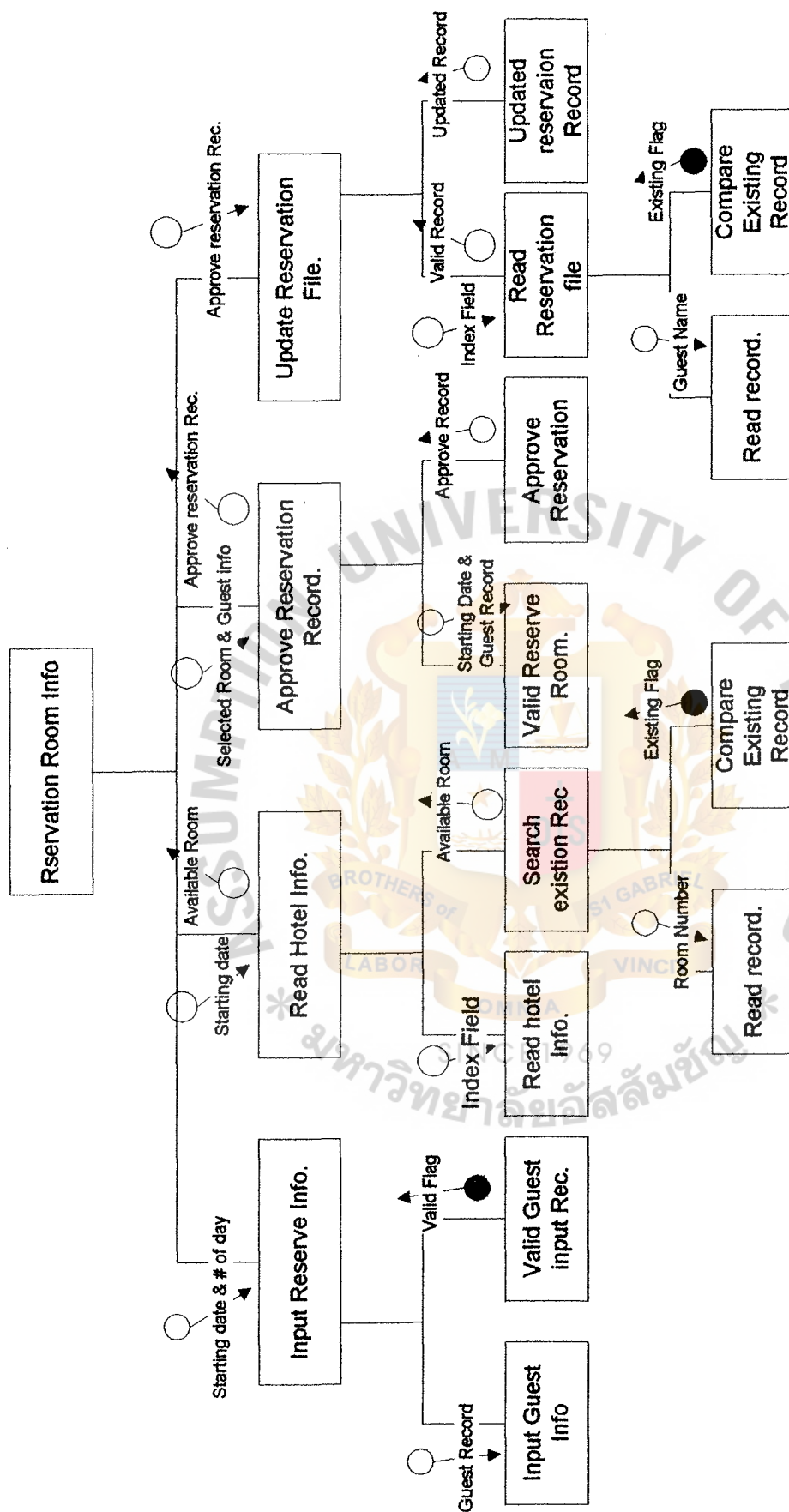
Figure 11 (Structure Chart) : Reservation Room Record.

19
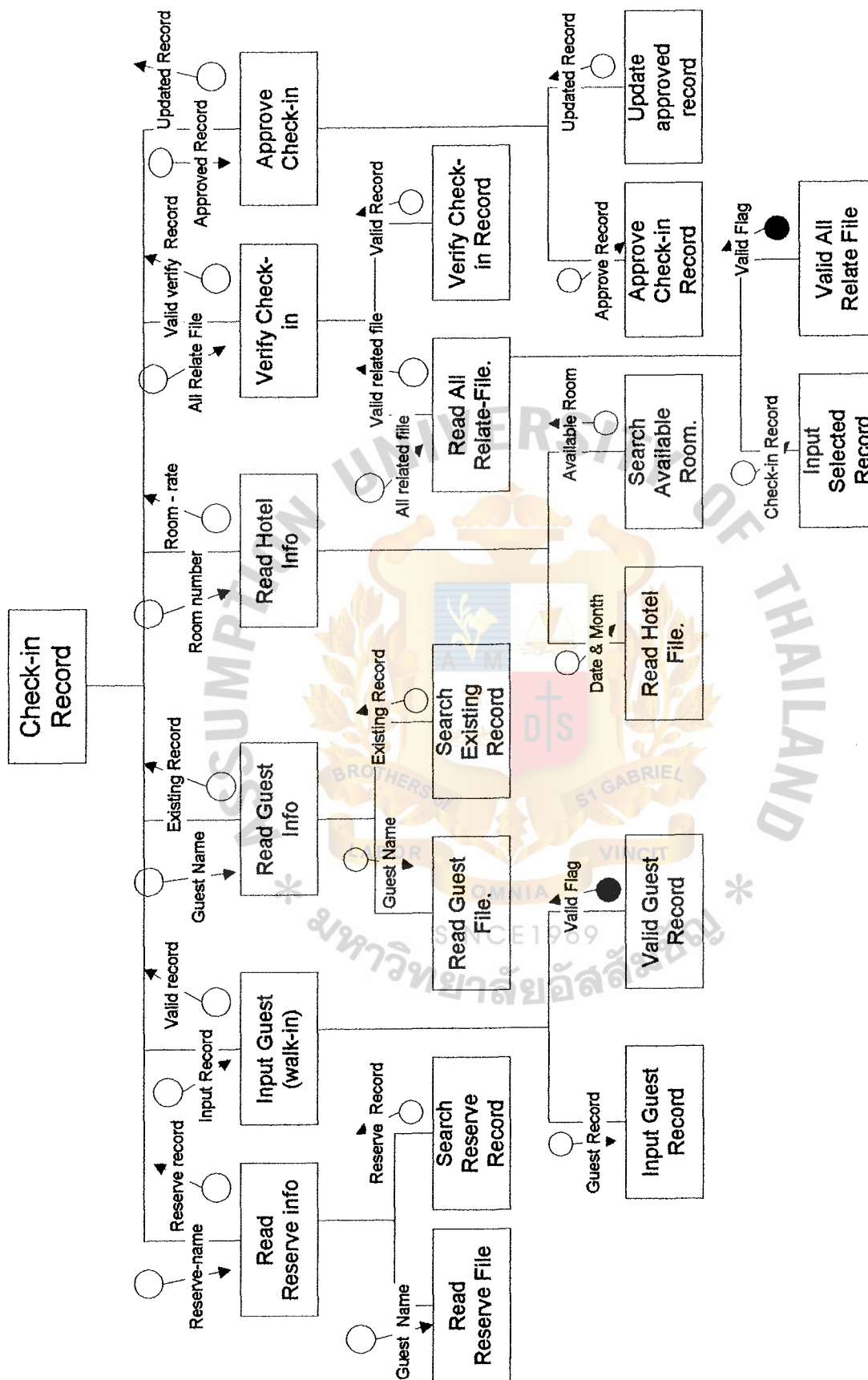
Figure 12 (Structure Chart) : Check-in Record Processing
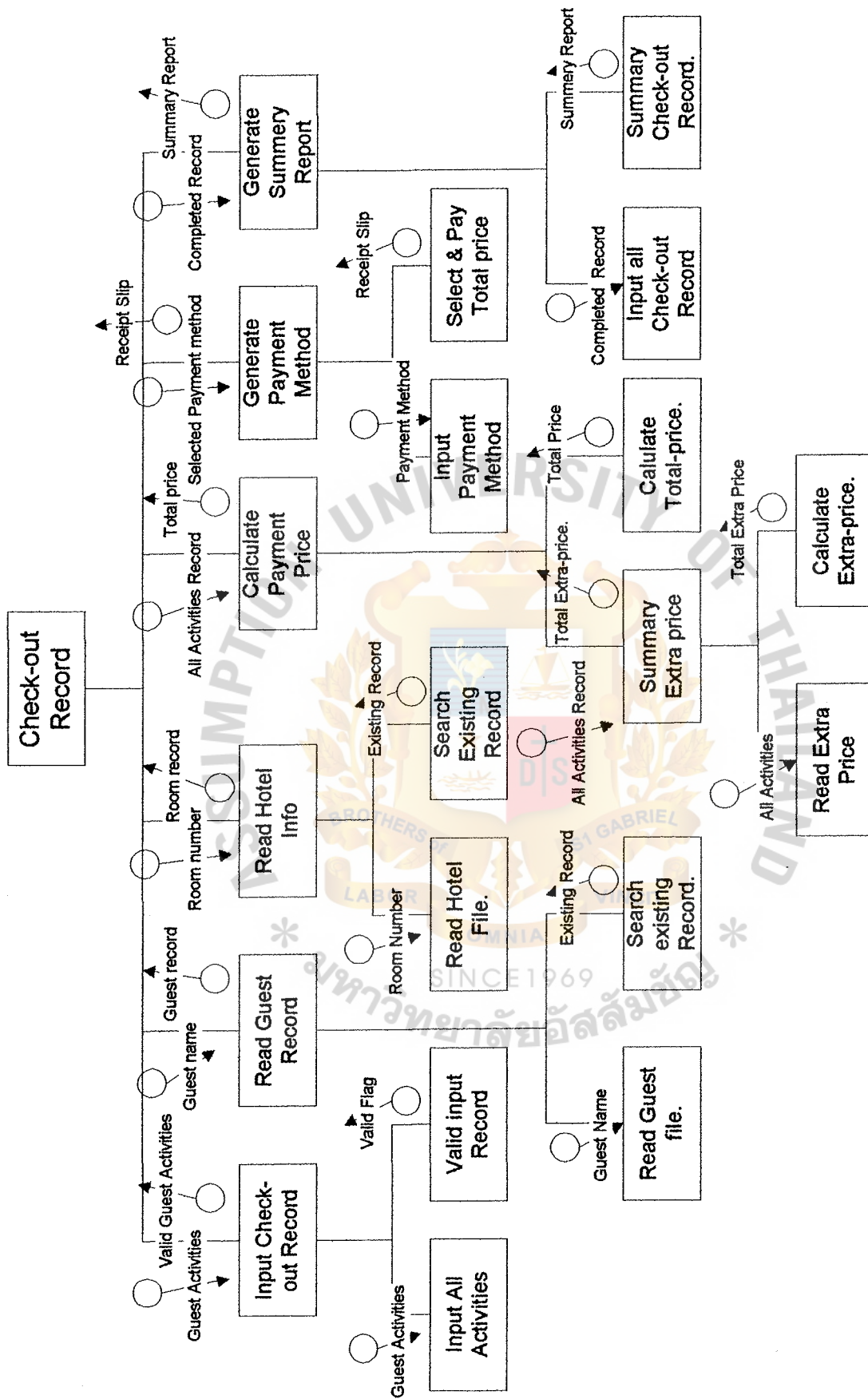
Figure 13 (Structure Chart) : Check-out Record Processing

21

3.3 Hardware & Software Requirement

For the new system is provided , the prepare hardware specification and software specification to support this system is the major concern because the cost in this part is expensive and it is long period of time to use. So should provide them for the good way as follow :

3.3.1 Hardware Requirement

1) Computer Server

- 64 bits 266 MHz Microprocessor (Intel Pentium Pro)
- 64 MB on board RAM Memory expandable to 512 MB
- 2 MB ECC on board cache
- Server EISA slots 2 PCI slots
- One PCI/EISA Combination slots
- Integrated PCI-based Fast Narrow SCSI-2 Controller with DMA and external SCSI-2 Controller
- Intergrated SVGA graphic controller
- One 1.44 MB diskette drive and Hard disk 4 GB.
- One CD_ROM 16 x
- 15" SVGA, non-interlaced, MPR-2 emission standard color Monitor

2) Micro Computer   10 Sets

- Pentium , 166 MHz Microprocessor
- Sim RAM 32 MB , expondable to 64 MB
- 256 kb on board cache
- Drive 1.44 MB and harddisk 1.7 GB.

- Card VGA PCI

- Monitor 15" SVGA (non-interlaced)

- 2 serial ports / one parallel port

- Network Ethernet card / lan card

3) Dot Matric Printer (Paint report)

- 24 Pin, Impact Dot Matric

- 10 character / inch at draft mode

- Parallel Inter face

4) Uninterrupt Power Supply

- 600 VA Capacity (For Server) and 1KVA

- Stabilizer mode 220 VA

- Back up time 60 minutes at full load

5) Hub & Lan-card & UTP line.

3.3.2 Software Requirement

1) Network Operating System

- Microsoft Windows NT Server, 10 user for computer

server

- Microsoft Window 95, 10 sets

2) Database Management System

- Visual basic for Window Version 3.0

- Crystal Report for Window

- Microsoft Access for Window

23

3.3.3 Hardware Configuration

For the hardware configuration is the major concept for the new system to be implemented and should be provided to support the future system may be the good design for hardware configuration design as follow:
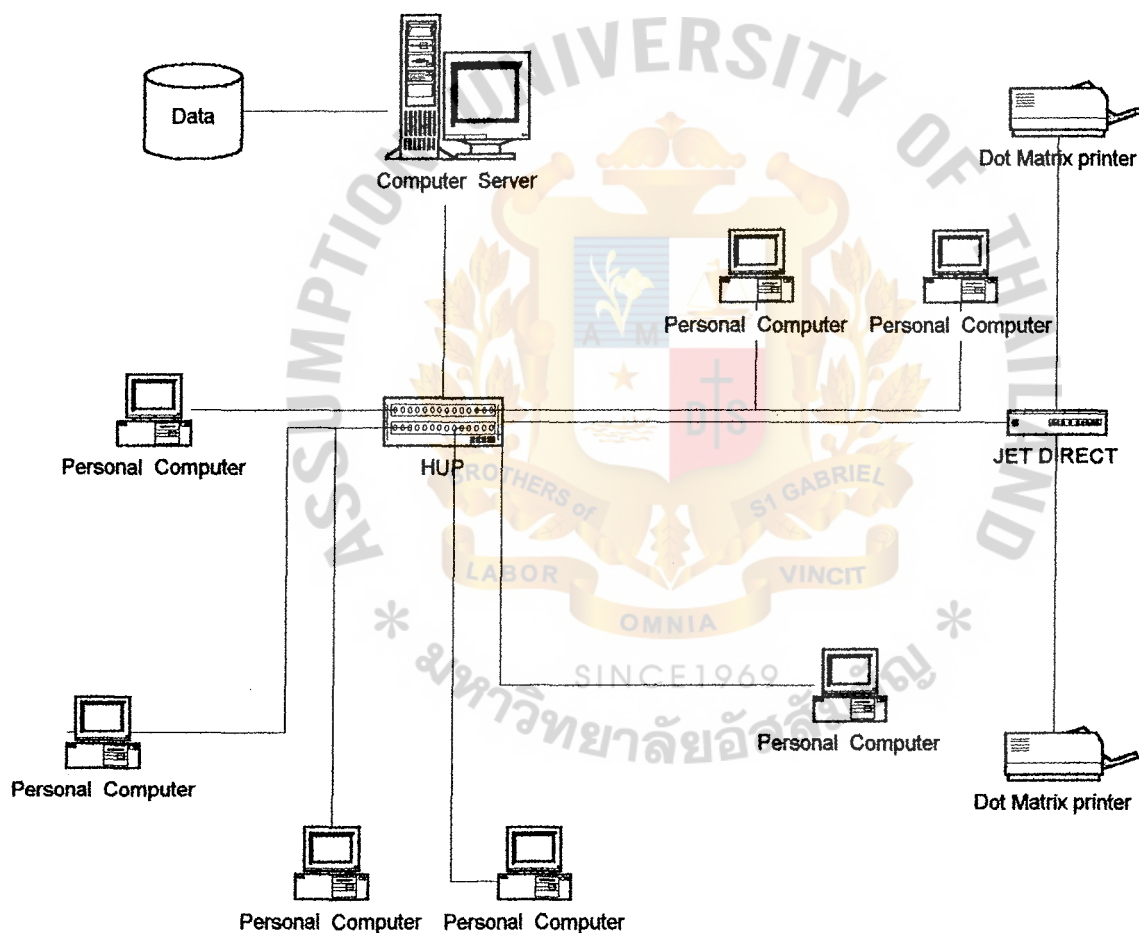
Figure 14 Hardware Configuration

3.4 Security & Control

In Malaysia hotel, there are many employees who work whole day, so the most important that should be considered is security-control for maintain computer system and data

The basic concept that is used is functional and group-level whrer the functional is the operation system for each process in hotel. And group-level is for each person who work in the some work, we set as group. In each group which have some work but we separate level for authorization process.

For Malaysia hotel, there are 6 department as Accounting, Marketing, Personal, Front-office, Admin/purchase and House-keeping. Eash department, there is a manager and employees so manager like leader in each group and employees are as member in each group. Security system use as login_id and Password for each login_id, the authorization is different and as :

Login_id : Group_id , level

                    XX   XX

Password : XX _ _ _ _ X

owncr password

Definition of Group_level

front-office : Set group_id as 30

there are 10 emplyee in the department.

So we set login_id and level use as

25

- Front_office Manager : 30 , 50

- Assistance Manager : 30 , 40

- Staff (1) : 30 , 21

- Staff (2) : 30 , 22

| |

| |

- Staff (n) : 30 , 2n

For this group, Manager has highest capability to authorize process and staffs have lower authorization. All above are security for authorization program.

The other security measurement are as follow

1) Check for authorization

For each person who logon to the program. They have different authorization and priority to process their job at the same time.

2) Keep logon Record

To set Program to keep security of each logon_id. Who use Program and write the record every time that someone change or update record file.

3) To keep back up data file

The computer administration who maintain this computer system. He should back up data file into diskette such as everyday , every 2 days or weekly-keeping-record.

3.5 Cost and Benefit Analysis

The existing system is as follow

The Malaysia hotel , Management as family system , The existing system for front desk is manually when guest come in , reservation , reception will ask them to fill in the form and keeping that information as document so they need to manage system for collecting , searching , reporting or Update that information. Sometime , they use along time to do about those processes and about accuracy of data is problem. So they try to solve all of these problem to use computer system to manage organization , to manage data collection , create report and use this program to input all information. To Compare about cost benefit of this system the first time, they need more resourses such hardware , software , training-course for their employees. But for long term , they will get more benifit and to be able to solve problems that occured.

The starting cost include :

- Hardware , software , cable line
- The installtion cost
- The cost of providing support during implementation
- The cost of any necessary remodeling

Ongoing cost include :

- The system maintainance cost
- The cost of Backup system
- Training cost
- Accessories cost , include paper , diskettes , printer , ribbon
- The addition equipment cost

To consider about all of cost and compare for the future. This system can saving cost , not only labor reduction benifit but also increase time less, accuracy , completion work are benifit for this system.

3.5.1 The cost of hardware and software

The cost of whole system include hardware cost , software cost , implementation cost and maintainance cost (include training cost) that need for this hotel reservation system. It is a major system for each hotel to make more comfortable and more efficiency.

(1) Hardware cost

- Computer Server 1 set	= 150,000	Baht
- Micro computer 10 set	= 350,000	Baht
- Dot Matrix Printer 2 set	= 24,000	Baht
- Uninterrupted Power supply 2 set	= 24,000	Baht
Total of hardware part	= 548,000	Baht

(2) Cabling System Requirement

- Hub and Lan-card	= 29,410	Baht
- UTP cable	= 4,000	Baht
Total of Software part	= 33,410	Baht

(3) Software Requirement

- Network Operating System	= 15,000	Baht
- Database management System	= 5,000	Baht
Total of Software part	= 20,000	Baht
Total of Investment	= 601,410	Baht

$$\text{Payback Period} = \frac{I}{(1-T)R}$$

Where   I   =   Investment

          T   =   Tax rate

          R   =   Annual Saving

$$\text{Payback Period} = \frac{601,410}{(1-0.3)(288,000)} \text{ year}$$

                   =   2 years 11 months.

I   =   601,410

T   =   0.3

R   =   288,000

Note. (Continues)

For Malaysia Hotel, to separate front-office into 3 groups as

	Old system	New system	Reduce	
8.00am. - 16.00pm :	5	3	2	persons
16.00pm - 24.00pm :	5	3	2	persons
0.00am - 8.00am :	2	2	-	persons
Total :	12	8	4	persons

Average salary for each person is   6,000   baht.

Save cost for 4 persons is   24,000   baht / month

1 year = 12 months, save cost is   288,000   baht / year

For Break-event point Graph.
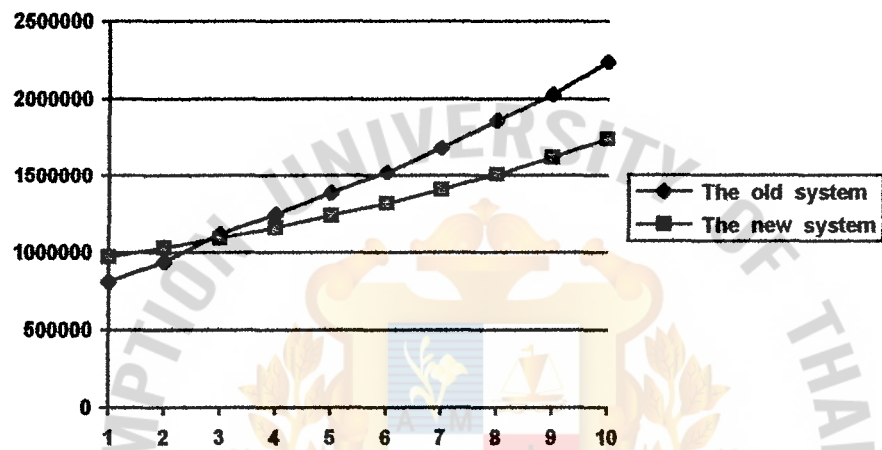
Figure 15 : Break Event Point Graph

3.5.2 Tangible Benefits

Tangible benefit are advantage measurable in value (Baht) , save time , reduce resources that accrue to the organization through use of the information system. After implementation of the new system for Malaysia Hotel we will accept benefit are as follow :

1) More efficiency work , increase in speed of processing for each department to connect to each others to exchange some information or sending data to storage and adjust more efficient data base design. To reduce redundancy problem. To be able to decrease the amount of employee time needed to complete specification task.

2) Reduce work. For computer system , we provide the system to process some work instead of people work so employees can save their time to do some work such as summary report , use them for analyze future planning.

3) Reduce increasing employee. For each year , they need more employees to support their business so the cost of organization will increase every year. To solve this problem , they decided to use computer system instead.

4) Reduce inventory document form and paper. To stock document form is high cost for the budget of hotel. So they need their budget plan is balance and reduce the organization cost. They use computer system instead for stock paper and document form.

5) To support for new technology. To provide new resource to support new service to guest is one thing that should be concerned because to make them for their comfortable and impression of this service such as provide E-mail for them to communicate to their own country. Let them to use computer for their work such as typing document or letter.

31

3.5.3 Intangible Benifits

Some benefits that is getted to the organization from use of information system are difficult to measure but it is important. This benefit are known as intangible benefit. For the hotel reservation system of Malaysia hotel can be summary for intangible benefit as follow :

1) To Impose discipline for all of the emplyees and management throughout the system.

2) To forcast or improving management planing activies.

3) To get more currently and accuracy information for management and planing for future plan.

4) Becoming more competition in customer service.

5) Increasing job satisfaction for employees by eliminating tedious tasks.

3.6   Test Plan

The testing for new system is important step to do. Although it may use a long time to test and prepare data for this. But it is necessary to ensure that there is no error for new system to be implemented. Testing is the best way to do when user departments are asked to assist in identify all possible siituations that might arise. Another method is to inquire the internal auditors of their opinions on possible situations that may arise.

3.6.1   Code Testing

To test , program-module to examine logic of the program so that the result in executing module should return correct result or expected result. Or testing an individual program to ensure that it performs according to the program specifications.

3.6.2   Specification Testing

The specification test is performed to test what the program should do or how to perform under the various condition such as peak load testing , storage testing , performance time testing .

3.6.3 Recovery testing

To test for recover data, whenever there is some problem about data such as damage data, last of data to solve this problem by backup all data in everyday or every week. To backup and restart test to ensure that all files can be reconstructed if they were totally destroyed.

3.6.4 Human factor testing

To test, human ability or understanding for new system. How to change their roution work to new system. How new system do (stop of working). Maybe some time they need more training.

3.7 Implementation Plan

Implementation plan includes all steps to converse from existing system to use new system (that already tested) It should includes hardware installation and software implementation , prepare for new system and maintainance service.

There are many steps to implement as :

1) Hardware set up and installation

2) Software implementation

3) Converse data new system

4) Training

5) Maintanance

3.7.1 Hardware set up and installation

- Design where to install computer system in this building

- Installation hardware part such as computer-server , PC

- Installation line to link for this LAN network

- Set up hardware configuration

3.7.2 Software implementation

- install operating system

- Set up hardware configuration

- Implement new hotel reservation system

- Testing , it can work or not

3.7.3 Converse Data for new system

Data in existing system , should be conversed to new system format and store is new system and testing correctness of data.

3.7.4 Training

To prepare people for new system. Some people do not know how to use the new one. We should have training course to them to make them understand how the new system work (step by step) and how to create report. To overview flow of this program so they can analyze and solve problem that happens.

3.7.5 Maintainance

After implementtation new system. Malaysia hotel still needs us to maintain their system . And still introduce their user about their work question or they use program which has some problem , to be able to solve for them.
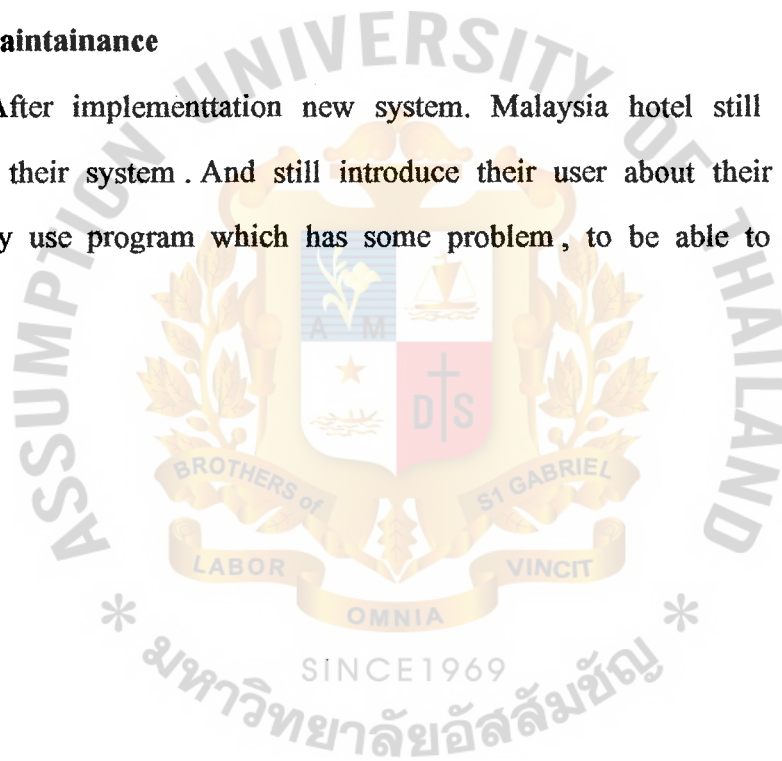
Activities	August				September				October				November			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Preparation and Interview																
- Interview		■	■													
- Identify the area of study				■												
- Identify Current Problem					■											
System Analysis and Design																
- Develop Context Diagram						■										
- Develop Data Flow Diag.							■									
- Data Dictionary								■								
- Data Base Design									■							
- Process Specification										■						
- Screen Design											■					
- Report Design												■				
Implementation																
- Coding													■	■		
- Implementation & Testing														■	■	
- Document										■	■	■	■	■	■	

Figure 16 : Gantt Chart of Project Implementation

36

4. Conclusions and Recommendations

4.1 Conclusions

Hotel reservation system is sub system of Hotel management system but it is one system that is more important than some others.

Become of more competition , Now a day, each hotel try to develop their work or work processing For more efficiency , comfortable and easier.

To implement computer system is one way for them to be selected. It is answer for their problem. Almost old system are manual system. So when processes the work processing is complicate (many step to do for each processing). To reduce step of work is one reason for computer system.

Computer system use help them for their Database management, front desk servicing , create reporting. It can reduce your time for processing some work such as create daily-report , monthly-report or analysis-report which you can use all of these report to be analyze and planning your hotel policy or business planning.

For your accuracy data or information , to reduce error of manual system , and reduce your management cost are also good reason for implement computer system.

4.2 Recommendations

Since this hotel reservation system is implemented instead of the existing system which is the manual system. The serious concerning is about the implementation plan, for operation plan and management plan.

Sometime, there is the rejected reaction from some users who do not want to use the computer or never use computer, they will against to change. Lacking of skill in computer using maybe the cause of computer fearing. So the good way is to propose the alternative to solve this problem should have computer training course for end users.

At the same time, there are more training course or understanding in the system should be provided. For maintainance system, we need more people who have more understanding or experience to teach or introduce the end users.

For the future plan, to use more powerful of this system. To connect modem to provide E - mail to guest is another alternative to do, to addmore PC (computer or workstation) for future service may be provided.

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Appendices

A - File Layout

The file layout of the proposed system are shown in table 1 to table 8 as follow.

Table 1 : Guest File.

File ID   : Guest

File name : Guest Information

No.	Fieldname	Width	Type	Valid	Description
1.	G#	7	Character	YYXXXXXX	Guest Number
2.	Gname	30	Character		Guest name
3.	Pass_No	16	Character		Passport number
4.	Address	50	Character		Address of guest
5.	Nationality	25	Character		
6.	Payment_ Method	2	Character	CR (credit) CA (cash)	How to pay cash / credit
7.	Deposit	-	Numeric		Deposit cash of payment when guest check - in.

Table 2 : Hotel File.

File ID   : Hotel

File name : Hotel Information

No.	Fieldname	Width	Type	Valid	Description
1.	R#	3	Character		Room number
2.	R_Type	2	Character		Type of each room
3.	R_Rate	-	Numeric		Room Rate for each room type.
4.	Chk_in_date	8	Date	DD/MM/YY	Check - in date.
5.	Chk_out_date	8	Date	DD/MM/YY	Expected checkout date or check out date.
6.	Reserve_Flag	2	Character	(Y/N)	Reserve Flag for hotel reservation

Table 3 : Reception File.

File ID   : Reception

File name : Reception Information

No.	Fieldname	Width	Type	Valid	Description
1.	Rept_ID	6	Character		Running number reception_Employee
2.	Rept_name	25	Character		Name of reception employee
3.	Position	20	Character		Position of each employee.

41

Table 4 : Department File.

File ID   :   Department

File name : Department Information

No.	Fieldname	Width	Type	Valid	Description
1.	Dept_name	15	Character		Name of each department.
2.	Dept_tel	4	Character		Extention telephone number.
3.	Number_of_employee	-	Numeric		Number of person in each department.

Table 5 : Check-in File.

File ID   :   Check - In

File name   :   Check - In record

No.	Fieldname	Width	Type	Valid	Description
1.	Gname	30	Character		Guest name
2.	R#	3	Character		Room number
3.	chk_in_date	8	date	DD/MM/YY	Check in date
4.	chk_out_date	8	date	DD/MM/YY	Experted check out date.
5.	Number_of_person	-	Numeric		Number of person in each room

42

Table 6 : Check-out File.

File ID   : Check_out

File name   : Check_out record

No.	Fieldname	Width	Type	Valid	Description
1.	Gname	30	Character		Guest number
2.	R#	3	Character		Room number
3.	Chk_out_date	8	date	DD/MM/YY	Check out date
4.	Total_price	-	Numeric		Total price of each room
5.	Payment_ Method	2	Character	CA (cash) CR (credit)	Credit Card or cash

Table 7 : Reservation File.

File ID   : Reservation

File name   : Reservation Information

No.	Fieldname	Width	Type	Valid	Description
1.	RV_name	30	Character	-	Reservation name
2.	Number_of_ days	-	Numeric	-	Expected number of day to stay
3.	Start_date	8	date	DD/MM/YY	Starting date for
4.	No_of_Room	-	Numeric	-	Number of Room
5.	R_Rate	-	Numeric	-	Room Rate for reservation.
6.	Rcpt_ID	6	Character	-	Employee who make reservation.

43

Table 8 : Extra-charge File.

File ID : Extra-charge

File name : Extra-charge of each room.

No.	Fieldname	Width	Type	Valid	Description
1.	R#	3	Character		Room number
2.	Gname	30	Character		Name of guest
3.	Service_charge	-	Numeric		Service Charge 10%
4.	Govern_tax		Numeric		Government TAX 10%
5.	Laundry	-	Numeric		Total laundry price
6.	Others	-	Numeric		Others price.
7.	Food	-	Numeric		Total of food price.
8.	Telephone	-	Numeric		Total Tel price.
9.	Miscelleneous	-	Numeric		Total of Miscell - eneous price.
10.	Total_price_ room	-	Numeric		Total price of room

B - Data Dictionary

Guest Information	=	Guest number	+
		Guest name	+
		Address	+
		(Pass-No)	+
		Nationality	+
		Payment-Method	+
		Deposit	
Guest name	=	First name	+
		(Middle name)	+
		Last name	
Address	=	House number	+
		Road	+
		City	+
		(State)	+
		Country	+
		Zip	
Payment-Method	=	[credit card / cash]	
Credit card	=	[VISA / MASTER / AMEX / DINER]	

Hotel Information	=	Room-number	+
		Room-type	+
		Room-Rate	+
		(chk_in_date)	+
		(chk_out_date)	+
		(Resouce-flag)	

| Room-type | = | [Standard / Supervisor / Deluxe] |

| Standard-Room | = | [Single / Double] |

| Supervisor | = | [Single / Double] |

| Deluxe | = | [Single / Double] |

| Room-Rate | = | Room-Rate + (Extra-bed charge) |

| Reserve flag | = | [Reserve / Vacant] |

Reception Information	=	Rcpt_ID	+
		Rcpt-name	+
		Position	

| Rcpt-name | = | First_name | + |
| | | Last_name | |

46

Department	=	Dept_name	+
		Dept_tel	+
		number of employee	

Depart_name	=	[Accounting / Marketing / Personal /
		Front office / Administration /
		House-keeping]

Check_in Record	=	Gname	+
		Room_number	+
		Chk_in_date	+
		Chk_out_date	+
		Room_Rate	
		Number of person	

Chk_in_date	=	Date	+
		Month	+
		Year	

Chk_out_date	=	Date	+
		Month	+
		Year	

47

Check-out Record	=	Gname	+
		Room_number	+
		chk_out_date	+
		(Total_Price)	+
		Payment-Method	

Reservation Information	=	RV_name	+
		Number of day	+
		Starting_date	+
		Room_Rate	+
		(Rcpt_ID)	

RV_name	=	First name	+
		(Middle name)	+
		Last name	

Starting-date	=	Date	+
		Month	+
		Year	

Extra-charge   =   Room Number   +

Gname   +

Service-charge   +

Govern-tax   +

(Telephone)   +

(Laundry)   +

(Food)   +

(Others)   +

(Misselleneous)   +

Total-price_room

49

Process Specification.

Process Name   :   Input Guest Information

Process Number :   1.0

Description   :   To process , input guest information when check-in.

Inbound   :   Valid guest information.

Outbound   :   Updated guest information.

Process Name   :   Reserve Room Information.

Process Number :   2.0

Description   :   To process reservation Transaction and keep record.

Inbound   :   Number of days , Starting date.

Outbound   :   Valid guest information , Updated reservation record.

Process Name   :   Walk-in Guest Information.

Process Number :   3.0

Description   :   To process input guest (walk-in) record.

Inbound   :   Guest information , Number of days , Starting date.

Outbound   :   Valid guest record.

Process Name   :   Check-in Room Information.

Process Number :   4.0

Description   :   To process check-in for guest .

Inbound   :   Starting date , Number of date , Guest information ,
                     hotel information record.

Outbound   :   Room-number , Room-rate , Updated guest record ,
                     registration card , Updated hotel record.

Process Name   :   Check-out Information Record.

Process Number   :   5.0

Description   :   To process check-out record.

Inbound   :   Guest activities , Payment method , Hotel record ,

                               Guest information record.

Outbound   :   Receipt-slip , Total-price , Summary report ,

                               Updated hotel record , Updated guest record.

Process Name   :   Input Reservation Record.

Process Number   :   2.1

Description   :   To process Guest Input Record.

Inbound   :   Number of days , Starting date , Guest information.

Outbound   :   Guest reservation record.

Process Name   :   Read Hotel Information.

Process Number   :   2.2

Description   :   To read available room in the hotel.

Inbound   :   Date and Month.

Outbound   :   Available room.

Process Name   :   Approved Reservation Record.

Process Number   :   2.3

Description   :   To approve reservation record for guest reservation.

Inbound   :   Available room , Guest record.

Outbound   :   Approved reservation record.

Process Name	:	Update Reservation File.
Process Number	:	2.4
Description	:	To update reservation file.
Inbound	:	Approved reservation record.
Outbound	:	Updated reservation record.

Process Name	:	Read Reservation Record.
Process Number	:	4.1
Description	:	To read reservation file by selected index.
Inbound	:	Guest name.
Outbound	:	Selected reservation record.

Process Name	:	Input Check-in Information.
Process Number	:	4.2
Description	:	To process guest check-in record (Walk-in guest)
Inbound	:	Number of days , Starting date , Guest information.
Outbound	:	Check-in guest record.

Process Name	:	Read Guest Information.
Process Number	:	4.3
Description	:	To read existing guest record.
Inbound	:	Guest name.
Outbound	:	Selected guest record.

52

Process Name   :   Read Hotel File.

Process Number   :   4.4

Description   :   To read hotel record.

Inbound   :   Date , Month

Outbound   :   Room number , Room rate.

Process Name   :   Verify Check-in Record.

Process Number   :   4.5

Description   :   To verify check-in record for guest.

Inbound   :   Check-in guest record , Selected reservation record ,
                      Hotel information record.

Outbound   :   Valid check-in transaction.

Process Name   :   Approve Check-in Record.

Process Number   :   4.6

Description   :   To approve check-in transaction for guest.

Inbound   :   Valid check-in transaction.

Outbound   :   Updated guest record , Updated hotel record ,
                      Room rate , Room number.

Process Name   :   Input Check-out Information.

Process Number   :   5.1

Description   :   To process guest check-out record.

Inbound   :   Guest activities.

Outbound   :   Summary guest activities record.

Pocess Name	:	Read Guest Information.
Process Number	:	5.2
Description	:	To read guest information record.
Inbound	:	Guest name.
Outbound	:	Selected guest record.

Process Name	:	Read Hotel Information.
Process Number	:	5.3
Description	:	To read hotel record by room number.
Inbound	:	Room number
Outbound	:	Selected room record.

Process Name	:	Calculate Payment Price.
Process Number	:	5.4
Description	:	To calculate total price for guest.
Inbound	:	Room record , Summary activities , Guest record.
Outbound	:	Total price.

Process Name	:	Generate Payment Method.
Process Number	:	5.5
Description	:	To generate payment method for guest.
Inbound	:	Total price , Payment Method.
Outbound	:	Receipt slip , Summary check-out information , Updated hotel record , Updated guest record.

Process Name	:	Generate Summary Report.
Process Number	:	5.6
Description	:	To generate summary report for check-out transaction.
Inbound	:	Summary check-out information.
Outbound	:	Summary report.

C - Report Layout

Malaysia Hotel

Night Clerk-Room Count : **(dd/mm/yy)**

Room	Person	Rate	Service	Tax
Total				

	Total	Vacant	Occupy
No. of Room			
No. of Guest			

Figure C-1 : Room Count Report

Malaysia Hotel

Cashier Report   (dd/mm/yy)

Description	Correction		Net	
	Quantity	Amount	Quantity	Amount
Room Charge				
Room Day Used				
Coffee Shop				
Long Call				
Oversea Call				
Facimile				
Laundry				
Miscelleneous				
Total Price				

Figure C-2 : Cashier Report

Malaysia Hotel

Cashier Report (dd/mm/yy)

Description	Correction		Net	
	Quantity	Amount	Quantity	Amount
Cash				
American Ex				
Visa Card				
Master Card				
Total				

Figure C-3 : Cashier Report

Malaysia Hotel

Cash Summary Report (dd/mm/yy)

Room	Gname	Arrive	Depart	Deposit	Cash	Card	Adv	By
		Total						

Figure C-4 : Cash Summary Report

Malaysia Hotel

Check-in Report (dd/mm/yy)

Room	Gname	PayMtd	Arrive	Depart	Rate	Pass No	Deposit

Total of Room	Rooms

Figure C-5 : Check-in Report

Malaysia Hotel

Check-out Report (dd/mm/yy)

Room	Gname	PayMtd	Arrive	Depart	Rate	ExCharge	Total

Total of Room	Rooms
Total Room Charge	Baht
Total Service Charge	Baht
Total Govern-Tax	Baht

Figure C-6 : Check-out Report

Malaysia Hotel

Trial Balance   (mm/yyyy)

Description	Month		Year	
	Quantity	Net	Quantity	Net
Room Charge				
Servc Charge				
Govern Tax.				
Sub Total :				
	Quantity	Net	Quantity	Net
Discountroom				
Room Rve. :				
Total :				

Figure C-7 : Trial Balance (1)

Malaysia Hotel

Trial Balance   (mm/yyyy)

Description	Month		Year	
	Quantity	Net	Quantity	Net
Coffee Shop				
Bag / Store				
Lobby Bar				
Pool Bar				
Local Call				
Long Call				
Oversea Call				
Telex				
Facsimile				
Breakfast				
Lunch				
Dinner				
Laundry				
Tour Services				
Car Park				
Miscelleneous				
Deposit Cash				
Total :				

Figure C-8 : Trial Balance (2)

Malaysia Hotel

Trial Balance (mm/yyyy)

Description	Month		Year	
	Quantity	Net	Quantity	Net
Cash				
American Exp				
Visa Card				
Master Card				
Diner's Club				
SCB Card				
TFB Card				
BBL Card				
Total :				

Figure C-9 : Trial Balance (3)
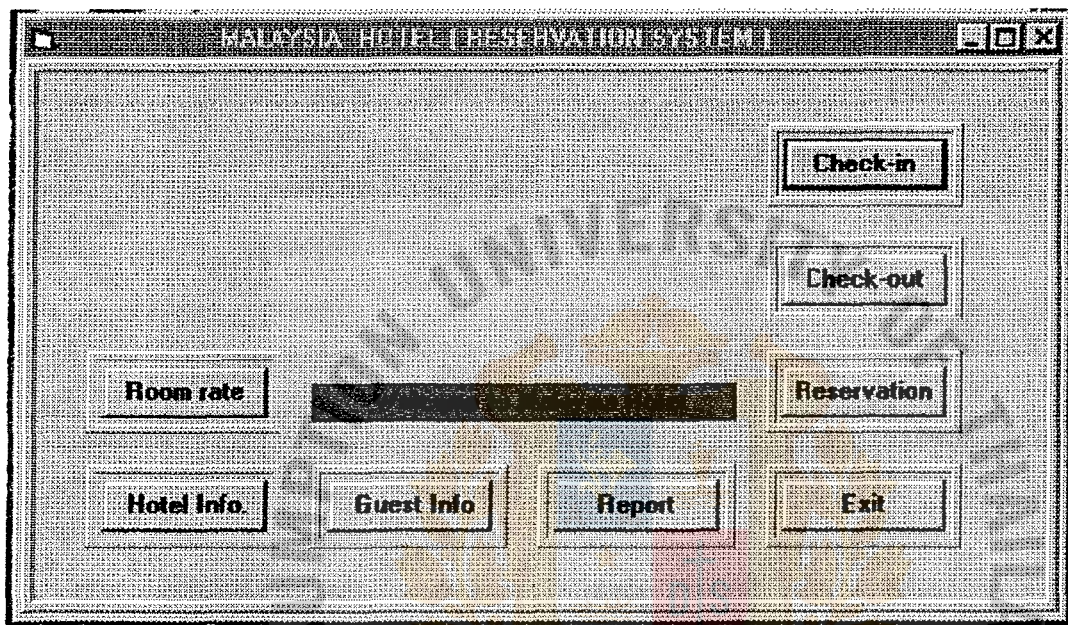
Figure D-1 : Main Menu Screen

Figure D-2 : Hotel Information Screen

Figure D-3 : Guest Information Screen

Figure D-4 : Reservation Information Screen

Figure D-5 : Check-in Record Screen

Figure D-6 : Check-out Record Screen

Figure D-7 : Extra-Charge Screen
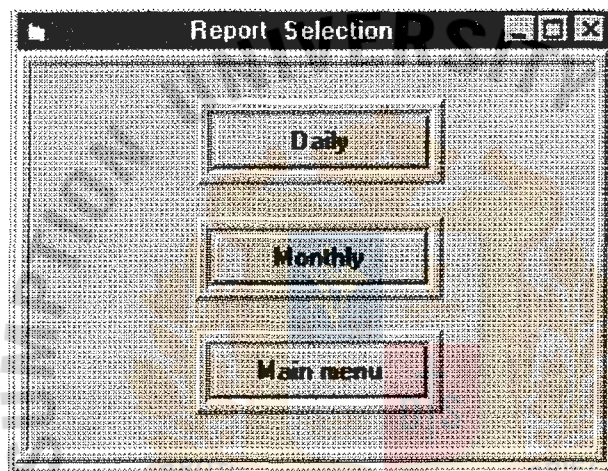
Figure D-8 : Report Selection Screen
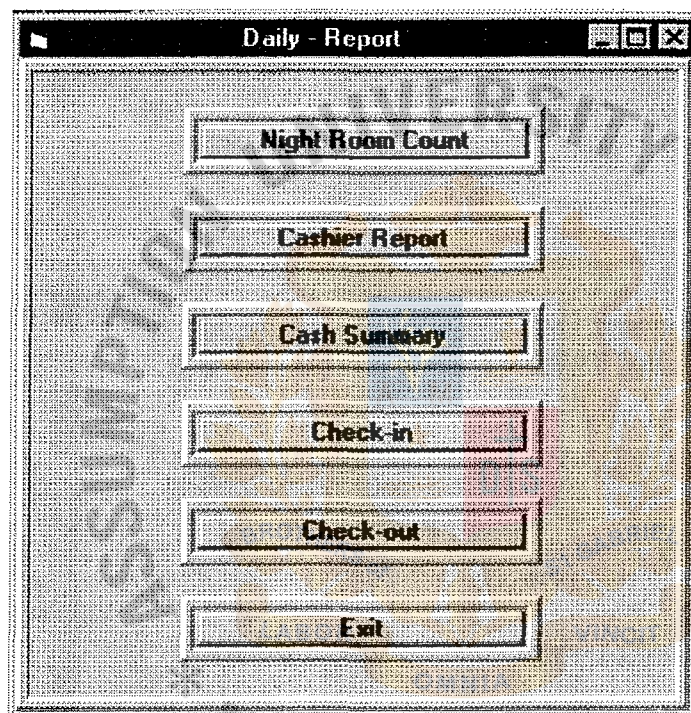
Figure D-9 : Daily Report Screen
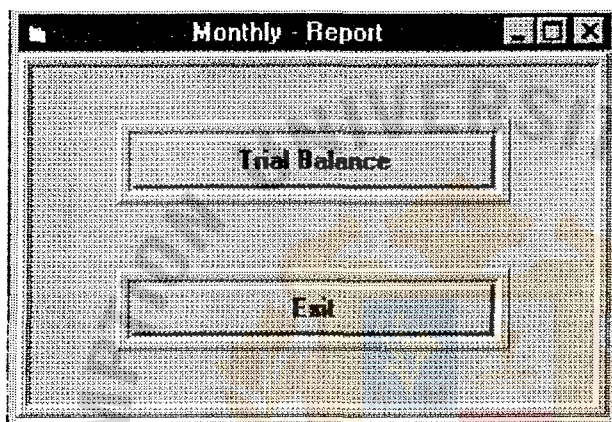
Figure D-10 : Monthly Report Screen.

Figure D-11 : Room Rate Screen.
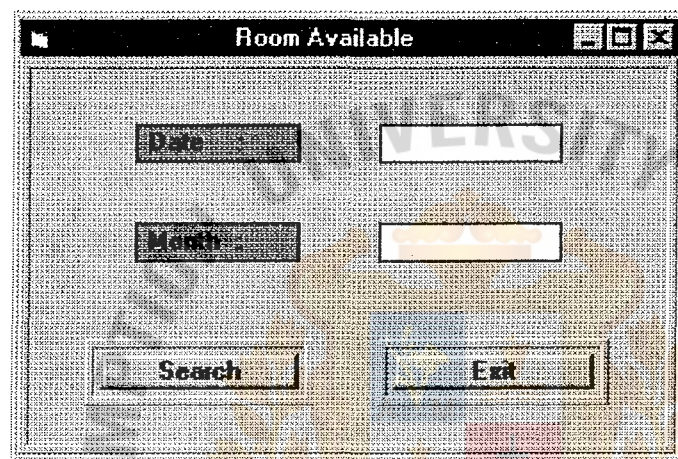
Figure D-12 : Search Room Available Screen
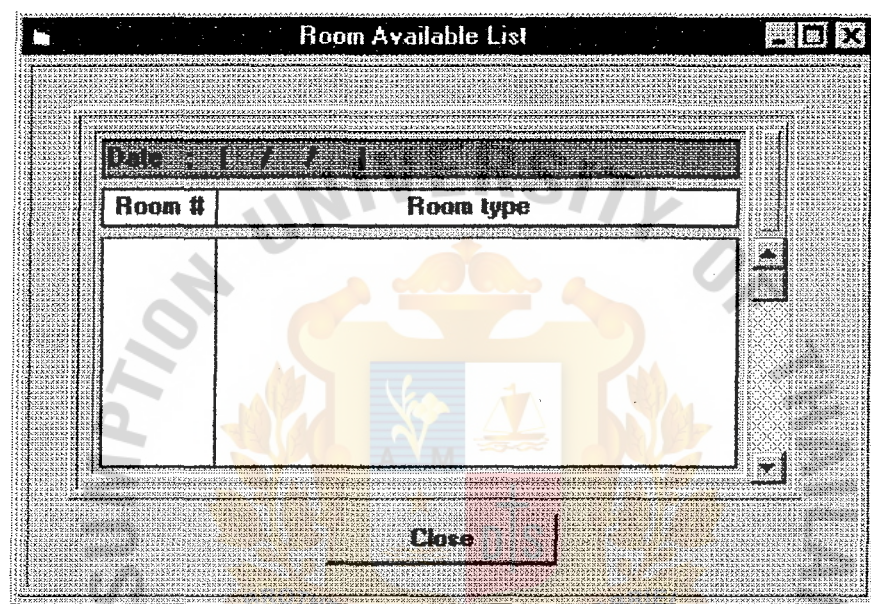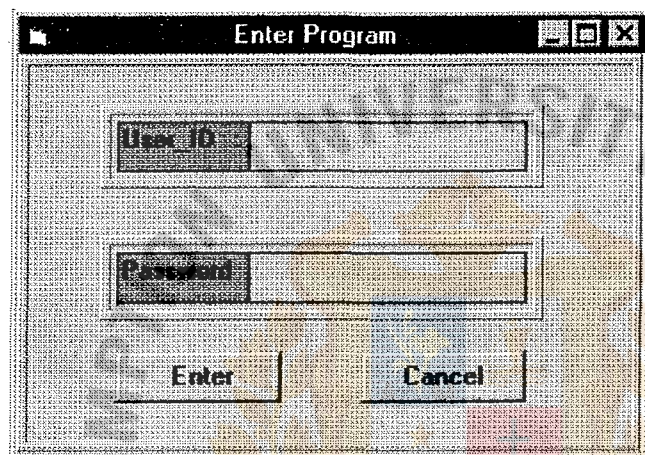
Figure D-13 : Room Available List Screen.

Figure D-14 : Enter Program Screen

Figure D-15 : Other Extra Charge Screen.

Figure D-16 : Food Extra Charge Screen.