

**COMPUTERIZATION OF HOTEL FACILITIES
(FOOD AND BEVERAGE SERVICES)**

**(A CASE STUDY OF ABUJA SHERATON HOTEL AND TOWERS
ABUJA)**

BY

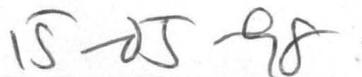
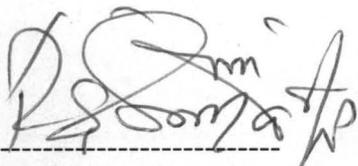
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CERTIFICATION

This is to certify that this project carried out by Adamolekun Babatunde Olumuyiwa meets the requirement for the award of a post-graduate diploma in Computer Science of federal University of Technology Minna, Niger State.



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DEDICATION

This project is dedicated to my friend, teacher, inspirer, counsellor, faithful companion and ardent supporter HOLY SPIRIT. I recognized your presence all through the course.

I love you. Thank you.

ACKNOWLEDGMENTS

I gratefully acknowledge the invaluable work and resourcefulness of the head of department of mathematics and computer science Dr. K. R Adeboye, my project supervisor Dr S. Reju, and the course co-ordinator Prince R. O Badamosi. I also thank all my lecturers for their commitment and dedication to work.

Applause and well deserved acknowledgment to my father and mother in the Lord, Rev. N. O Oke and Evangelist J. T Oke, their moral, financial and spiritual contributions to my life cannot be measured. God will remember your labour of love. I cannot forget sister Ore-ofe Oke in all these she has always been a darling.

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A sincere salute to my parents Mr. E. O. Adamolekun and Mrs W. Adamolekun thanks to my junior ones, Banji, Rotimi, Sade, Bukola and Toke. I love you all.

Thanks to my classmates for those beautiful moments shared together.

I also thank the management of Sheraton Hotel and Towers for allowing me to use their facilities. I want to use this medium to appreciate the following members of staff of Sheraton Hotel and Towers- Mr. Ugo, Mr. Muhammed, Mr. Bello and Mr. Titus. I am grateful to all those who made this opportunity possible.

ABSTRACT

Most hotels in Nigeria today are run manually. By this a lot of time is wasted in compiling bills for guests and also in collating transactions. Apart from five - star hotels runed by overseas hotel management companies, most Nigerian hotels with local management are run manually.

There is also the belief that computers are meant for only the big five-star hotel with overseas management, because software for running hotels are readily not available and computerization can be expensive. Some hotels managers also have the belief that Nigerian hotels are yet to be developed to the point of acquiring computer technology.

This project therefore, designs a computer system that can be used in food and beverage department of a hotel. The package will therefore, help in making running of a hotel to be more efficient, better co-ordinated, more marketable and viable.

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CHAPTER ONE

INTRODUCTION TO HOTEL MANAGEMENT

1.1 INTRODUCTION

For greater part of each year most people live at home . Although , they may go to work shopping, visiting friends and relatives take part in other social and leisure s and activities, their homes are where they spend the night. But many of them also increasing stay away from home on business or on holiday for other reasons throughout the year. Many of them stay in hotels.

The primary function of a hotel is to accommodate those away from home and to supply them with their basic needs, but to a greater or lesser extent hotel restaurants, bars and other hotel facilities may also serve the local population. It is this basic function of the hotel which makes it quite distinct from other types of business and to which its other functions are supplementary.

It is sufficient to now define a hotel as an establishment providing for reward accommodation, food and drink for travellers and temporary residents and usually also meals, and refreshment and sometimes other facilities for other users.

1.2 THE IMPORTANCE OF HOTELS

Hotels play an important role by providing facilities for the transaction of business for meetings and conferences, for recreation and entertainment. In that sense, hotels are as essential to economics and societies as other businesses such as transport communication and retail distribution systems for various goods and services. Though facilities hotels contribute to the total output of goods and services, which makes up the material well being of nations

and communities.

In many areas hotels are important attractions for visitors who bring to them spending power and who tend to spend at a higher rate than they do when they are at home.

In area of receiving foreign visitors, hotels are often important foreign currency earners and on this way may contribute significantly to their countries balance of payments.

Particularly in countries with limited export possibilities hotels may be one of the few source of tourism.

Hotels are important employers of labour. Thousands of the jobs are provided by hotels in the many occupations, which make up the hotel industries in most countries, many others in the industry are self-employed and proprietors of small hotels. The role of hotels as employers is particularly important in areas with few alternative sources of employment, where they contribute to development.

Hotels are also important outlets for products of other industries. In the building and modernization of hotels business is provided for construction industry and related trades. Equipment, furniture and fitting are supplied to hotels by a wide range of manufacturers. Food, drink and other consumable are among the most significant daily purchases from farmers, fishermen, food and drink supplies, and from gas electrify and water undertakings.

Last but not least hotels are on important source of amenities for local residents. Their restaurants, bar and other facilities often attract much local custom and many hotels have become social center of their communities.

1.3 TYPES OF HOTEL

Hotels can be classified in many ways. Hotels are referred to as luxury, resort,

commercial, residential, transient and in many other ways. Each of these terms may give an indication of standard or location, or particular hotel, but it does not describe adequately its main characteristics.

The main characteristics can only be seen when a combination of terms is applied to an hotel, each of which describes a particular hotel according to certain criteria. It will be helpful to appreciate what the main types of hotels are, by adopting particular criteria for classifying them, without necessarily attaching precise meaning to them.

Hotels can be classified according to location, position of the hotel in the location, reference to its relationship with particular means of transport and purpose of visit and main reasons for their guests stay.

Furthermore, hotels can be classified according to the range of its facilities and services an hotel may be open to residents and non-residents, short or long duration of guests stay, whether an hotel holds a license for sale of alcoholic liquor or not.

There are no universal agreement on how hotels should be described according to size but by reference to their room or bed capacities we normally apply the term small hotel to one with a small amount of sleeping accommodation, the term large hotel to one with several hundred beds or bedrooms and the term- medium sized hotel to one somewhere between the two, according to the size of structure of the hotels industry in a particular country.

Whatever the criteria used in hotel guides and in classification and grading systems in existence, normally at least four or five classes or grade have been found necessary to distinguish adequately the standards of hotels and these have found some currency among hotel users. The extremes of luxury and basic standards, sometimes denoted by stars. The

facilities considered as this grading include bedrooms, restraints, bars function rooms, meeting rooms and recreations facilities such as tennis courts and swimming pools, which are for the use of customers and these may be demential in type, size and in other ways.

The service of an hotel comprises the availability and extent of particular hotel services provided through their facilities, the style, and quality of all these in such terms as formality and informality, degree of personal astention and speed and efficiency.

Also the image may be defined as the way which the hotel portrays itself to people and the way in which it is perceived as portraying itself by them. It is a by product of its location, facilities and service, but it is enhanced by such factors as its name , appearance, atmosphere its associations by who stays, about itself and what other people say about it.

Finally , its price expresses the value given by the hotel through its location, facilities, service, and image and satisfaction derived by its users.

1.4. **CLASSIFICATION OF HOTELS IN NIGERIA**

MINIMUM STANDARD FOR THE CLASSIFICATION OF FIVE STAR HOTELS

1. LOCATION AND BUILDING:

- (a) the locality and environment including the approach shall be suitable for a hotel of high international standards;
- (b) the architectural features, construction and finish of the building shall conform to high international standards;
- (c) the building shall be designed by a qualified architect;
- (d) the maintenance of the exterior and interior of the building, grounds, gardens,

its furniture, fixtures, curtains, bedrooms, dining room toilets, kitchen, public areas, etc, shall be of the highest standards;

- (e) there shall be separate and independent entrances to the hotel and restaurant with separate service entrance for deliveries, etc.
- (f) the building shall be centrally air-conditioned and the bedrooms, dining rooms, conference and banquet halls, lobbies and lounges, etc. shall be sound proof;
- (g) there shall be at least one lift for every 100 rooms or major part thereof, in addition to service lifts of which there shall be at least one;
- (h) a lawn or roof garden shall be maintained.

2. Capacity:

The hotel shall have at least 100 bedroom:

3. Bedrooms:

- (a) at least 20% of the bedrooms shall be singles and 5% suites;
- (b) each bedroom shall have separate and independent access from a corridor, verandas or a gallery and be separate from other bedrooms by walls. All bedrooms shall be out of view of the public areas;
- (c) each bedrooms shall properly ventilated, lighted and clean and shall have one or more windows with glass panes measuring at least one-fourth of the floor space and provided with curtains of high quality;
- (d) each bedroom shall have reasonable free space and superior quality furnishing with:
 - (i) 190cm x 80cm single or 190cm x 160cm double beds of high quality

- with a double foam rubber mattress,
- (ii) two pillows and blanket for each guest with bed sheets and pillow covers in addition to two extra pillows and blanket,
 - (iii) a dressing-cum-writing table with a large mirror and a chair, a wardrobe or wall cupboard with space for the storage of luggage containing coat and dress hangers, a luggage stand, a coffee table, a three piece foam sofa set, a side table, a waste paper basket, two ash trays, a vacuum flask for drinking water, two hygienically cleaned glasses for each guest and a free supply of good quality stationery bearing the name and address of the hotel.
 - (iv) an electric "do not disturb" indicator fixed outside the door;
 - (v) an electric call bell:
- (e) there shall be an automatic locking system on the door of each bedroom opening into the corridor with a double locking device from within. All locks operate on a master key system:
- (f) each room shall be separately numbered;
- (g) the minimum floor area of each bedroom shall be:
- (i) 13m² for a single room
 - (ii) 16m² for a double room
- (h) all bedrooms shall have attached bathrooms:
- (i) every bedroom shall have wall to wall floor covering superior quality;
 - (j) there shall be a temperature control device in each bedroom;

- (k) every bedroom shall have a 4-band radio and system of playing piped music for guests. There shall be separate channels for oriental and western music and a channel for relaying live music from the premises of the hotel itself such as from the night club. coffee shops , etc.
- (l) suites shall be well furnished and decorated. A radio, TV, bar counter, kitchenette and refrigerator shall be provided in each suit;
- (m) there shall be a table lamp for every bed;
- (n) the rules of establishment, instructions on how to act in case of fire and all relevant local and hotel information including that on room service and the meal hours shall be kept in each bedroom;
- (o) a bouquet of fresh flowers shall be supplied in each bedroom daily.

4. **Bathrooms:**

- (a) each bathroom shall have a minimum floor are of 48 sq. ft. all water closets shall be of western type;
- (b) each bathroom shall be extremely modern in design and equipped with modern fittings of superior quality with the walls and floors covered with impervious materials of attractive designs and workmanship;
- (c) each bathroom shall have:
 - (i) an electric two point plug socket for a shaver,
 - (ii) a wash basin with a mirror over it at face height and a light over the mirror.
 - (iii) hooks or hangers for clothes. ash trays. towel rails, sanitized toilet

bowls. a bidet. a receptacle for soap and used blades a sanitary litter bin,
a bath mat and two sanitized glasses.

- (iv) an adequate supply of soap. air freshener toilet paper and shampoo.
- (v) a pair each of bath. face and hand towels for each guest.
- (vi) a long bath tub enclosed with water proof curtains, a flexible shower and two sanitized shower caps.
- (vii) running chemically sterilized hot and cold water always.
- (viii) a non-skid device in the bath tub.

5. **Light:**

- (a) all areas including the restaurant, dining room, bathrooms and corridors shall be well lighted and ventilated. There shall be a controlled lighting system in all public areas:
- (b) there shall be proper lighting arrangements and fixtures in all rooms with a light switch and point near the room entrance, a light control next to the bed, a call bell and an electric socket for plugs;
- (c) there shall be alternative arrangement for lights in case of failure of the electric power supply.

6. **Linens:**

Clean linen of superior quality, together with pillows, bedding, blankets and bed covers shall be supplied to each new guest and changed daily.

7. **Lounge/lobby:**

- (a) well-equipped and furnished lounge or lobby with space proportionate to the number of bedrooms;
- (b) wall to wall floor covering of a superior quality;
- (c) a public call telephone booth for visitors;
- (d) comfortable seating arrangements;
- (e) adequate provision of ash trays and water disposal facilities.

8. **Reception counter:**

There shall be:

- (a) a reception and information counter with a telephone for external calls operating for, 24 hours;
- (b) a concierge porter service for 24 hours;
- (c) a page service or public address system;
- (d) an information service providing general tourists information such as local events, attractions, transport, car rentals, taxi service and current and advance reservations;
- (e) wake-up call service;
- (f) numbered room keys;
- (g) professionally trained staff fluent in English with one member having a working knowledge of another foreign language;
- (h) facilities for acceptance of cables, telegrams, postal letters and supply of postage stamps;
- (i) lockers for luggage and safety deposit facilities.

9. **Conference and banquet hall:**

There shall be well-furnished and equipped halls for holding conferences and banquets.

10. **Restaurant and dining room:**

- (a) there shall be at least two restaurant, a dining room and 24 hours coffee shop.

The dining room and restaurants shall be spacious in proportion to the capacity of the hotel and shall have comfortable sitting arrangement;

- (b) the restaurants, dining room and coffee shop shall be well-equipped, well-designed and maintained at a high standard;

- (c) the furnishing and decor shall be of superior quality reflecting the local culture, history and traditions of Nigeria;

- (d) the floor of the restaurant, dining room and coffee shop shall be fully carpeted or tiled;

- (e) cuisine shall be of high quality with Nigerian and continental dishes and there shall be prompt, courteous and efficient service;

- (f) attractive menu cards indicating the prices of dishes and full meals shall be available to guest;

- (g) music shall be played during meals hours;

- (h) the kitchen shall be separate from the dinning area;

- (i) there shall be separate male and female toilets with an adequate supply of soap, towels and toilet paper;

- (k) there shall be a dance floor and an orchestra in the dinning room;

- (i) room service facilities shall be provided in all bedrooms on request.

11. **Kitchen and pantry:**

- (a) there shall be a clean and well-equipped pantry attached to the kitchen;
- (b) the kitchen and pantry shall be completely modern, professionally designed and equipped to ensure efficient operation, with arrangements for proper ventilation and efficient removal of hot air and odours;
- (c) the kitchen and pantry shall be free from all insects and pests;
- (e) the kitchen table tops and shelves shall be of stainless steel or impervious material kept in hygienic, clean and good condition;
- (f) utensils kept and used shall be of high quality, hygienically cleaned and in very good condition;
- (g) there shall be a dish-washing machine for washing crockery and cutlery and a separate sink with running hot water and cold water for washing utensils;
- (h) there shall be sufficient waste bins with covers or waste disposal units;
- (i) there shall be cold storage and deep freeze facilities for the preservation of food and perishable items;
- (j) there shall be separate areas for the preparation of meats, fish vegetable, salads, sweets, etc;
- (k) there shall be efficient kitchen staff with at least one executive chef trained at a recognized hotel training institute.

6. **Crockery:**

All utensils, crockery, cutlery, glass and tableware shall be of a high quality, clean, well maintained and hygienically treated. No crockery or glass ware used shall be

chipped, cracked or grazed. Cutlery and silverware shall be properly plated and polished.

7. **Drinking water:**

The hotel shall provide boiled and filtered drinking water in covered flasks with a clean glass for each guest in each bedroom and dining room. There shall be a chemical filtration plant for the treatment of water used in the hotel.

8. **Bar:**

There shall be well-equipped and well-stocked bar with a counter of high quality, necessary furnishings, controlled lighting arrangements, adequate refrigeration facilities, all types of glassware necessary for wines, spirits and beverage, a sufficient quantity and variety of liquors and beverages, cigarettes, cigars, snacks and an ice cube making machine.

9. **Staff and Services:**

- (a) the serving staff shall be experienced, courteous and efficient and at least 75% of them shall have been professionally trained at a recognized training institute;
- (b) all staff shall wear smart and clean uniforms on duty;
- (c) the managerial, supervisor and reception staff shall be fluent in English and in one other foreign language and should possess a diploma or certificate from a recognised institute;
- (d) the manager shall possess a diploma in hotel management from a recognized institute and have fluent knowledge of English and at least one other foreign language;

- (e) all room bearers, bartenders, dining room bearers, etc. coming into frequent contact with foreigners shall have a working knowledge of English.
- (f) a supervisor and three other employees shall be qualified in first-aid and fire fighting;
- (g) bookings shall be honoured on the terms quoted and all contractual obligations shall be met properly;
- (h) a sitting area, separate from the bar, TV lounge or games areas shall be provided;
- (i) lounge service of drinks and snacks shall be available for 24 hours.

10. **Laundry and dry cleaning:**

There shall be a modern laundry, dry cleaning and pressing unit on the premises under the management of the hotel.

11. **House keeping:**

- (a) house keeping shall be of internationally recognized standards, the premises, furniture and fixtures shall be spotlessly clean and tidy at all times;
- (b) house keeping shall be under the supervision of a professionally qualified, trained and experienced house-keeper assisted by a sufficient number of supervisory staff and house maids, all trained at a recognized training institute;
- (c) house maids shall be available on call from 8.00 a.m. to 10.00 p.m.

12. **Fire fighting:**

Adequate precautions against fire together with fire escapes, alarms and modern fire-fighting equipment shall be available on the premises, precautionary arrangements and modern equipment to prevent and deal with electricity and gas accidents shall also be provided.

13. **Management :**

- (a) the hotel shall be under the supervision of a Manager trained at an internationally recognized institute, and with sufficient experience in hotel management;
- (b) the Manager shall be fluent in English and shall understand one of the following languages:
 - (i) French
 - (ii) German,
 - (iii) Arabic;
- (c) some staff are to be on site and on call to guests 24 hours a day.

14. **Facilities:**

- (a) there shall be sufficient parking space for at least 50 cars;
- (b) there shall be a shopping arcade within the premises of the Hotel;
- (c) there shall be separate, well-equipped and properly manned cloak rooms for ladies and gentlemen;
- (d) there shall be a telephone for external and internal calls in each bedroom;
- (e) there shall be a well-equipped and decorated banquet-cum-conference hall separate from the dining room and proportionate in capacity to the size of the

hotel;

- (f) a taxi or tourist car service shall operate within the hotel premises under the auspices of the hotel management. All vehicles shall operate on meters at rates to be fixed and notified by the Regional Transport Authority;
- (g) there shall be a valet, shoe shine and shoe repair service;
- (h) there shall be a foreign exchange counter within the hotel premises;
- (i) there shall be a staff changing/rest rooms each with lockers and necessary furniture;
- (j) TV sets shall be provided in each bedroom and in all suites;
- (k) there shall be a swimming pool within the hotel premises. The pool shall be subject to chemical treatment and a filtration plant shall serve the pool;
- (l) there shall be a temperature control device in each bedroom;
- (m) every bedroom shall have a radio with separate channels for relaying news and music both piped and live;
- (n) suites shall be well furnished and maintained;
- (o) the rules of establishment, instructions on how to behave in case of fire and all pertinent local and hotel information including room service and the meal hours shall be kept in each bedroom;
- (p) there shall be separate male and female toilets in the public areas;
- (q) there shall be an adequately maintained standby generator on the premises to supply electricity where there is disruption in power supply. The generator shall

be proportionable in size to that of the hotel;

- (r) there shall be adequate provision of waste disposal facilities.

CHAPTER TWO

A CASE STUDY OF HOTEL SERVICES

(ABUJA SHERATON HOTEL AND TOWERS)

2.1 BRIEF HISTORY OF SHERATON HOTEL AND TOWERS WORLD WIDE

It all began in 1937 when Ernest Herderson and Robert Moore acquired a two - hundred room motor inn in Springfield, Massachussets, United states of America: Two years later they bought three more hotels. This time is Boston also in United states of America. One was named SHERATON and the roof top sign was in a such a good condition that rather than take it down, the name was retained and so Sheraton was born. Now there are about five hundred hotels in six continents.

2.2 ABUJA SHERATON HOTEL AND TOWERS

It was officially opened for business on January 15th 1990. The Hotel is owned by Capital Hotel PLC. A management agreement was signed with sheraton hotels and towers. By this the Management of Abuja sheraton hotel and towers came under sheraton overseas management corporation.

Sheraton hotel and towers worldwide is the hospitality arm of International Telephone and Telegraph (ITT)

Abuja Sheraton hotel and towers is a five star hotel. It fulfilled all conditions stipulated in Nigerian Tourism Development Corporation Decree (1992 No 81), Hospitality and Tourism establishments. (Registration Grading and classification regulations 1992 (see chapter one)

2.3 LOCATION

Abuja Sheraton is an integral part of the Federal Capital Territory Abuja development infrastructures. The hotel is located downtown near the National Mosque, Abuja Nursery and convenient to the International Conference Center, forty two kilometers from Abuja International Airport.

2.4 FEATURES OF ABUJA SHERATON HOTEL AND TOWERS

The hotel contains five hundred and twenty four rooms including, fifty nine suites - each room is tastefully decorated and furnished, offering air conditioning, satellite TV, in-house movies, direct dial telephone, radio, fridge and 24 - hour room service.

Other services include 24-hour concierge, Laundry and dry cleaning, 24-hour car hire service, video shop, Bureau de change, travel agent, pharmacy, shopping mall, Boutique, Hair salon and Beauty shop. Credit cards are also accepted for transaction.

SHERATON TOWERS: A hotel within a hotel, the towers at the Abuja Sheraton located on 8th floor offers the Towers features 41 luxuriously appointed guest rooms, guests are welcomed with a cocktail by the Towers executive and relax with friends or associates in the Towers lounge.

2.5 STRUCTURE OF ABUJA SHERATON HOTELS AND TOWERS

The Hotel is headed by a General Manager who by the management agreement between Sheraton Overseas Management Corporation the Operators of the hotel and Capital Hotels Plc must be a staff of sheraton overseas management corporation.

Abuja sheraton Hotels and Towers is divided into twelve department for day to day

running of the Hotel.

They are:-

2.5a **Executive Office.** :- This is the office of the General manager. He is the head of the Hotel management team. He is responsible to the board of management of the hotel headed by a chairman who is a nominee of Capital Hotel plc the owner of the hotel.

The general Manager is to see that departments are functional and they carrying out their duties accordingly with out compromising the standard of the hotel. Since sheraton hotel and towers is world wide, the management always make sure that the standard of management and efficiency of members of staff are optimum. Also, there must not be a glaring difference in the standard of service in one sheraton hotel to the other.

Further more the head of various departments in the Hotel must also make sure that weekly reports of each department gets to the General Manager.

He must also see that the relationship of the hotel to the local environment is cordial. The laws of the country guiding management and operation of hotels are adhere to strictly.

Above all the General Manager must keep the board informed about the performance of the hotel by letting the board know the performance of members of staff, the financial position of the hotel and the views of customers, about the services rendered by the hotel.

Finally, the General Manager must hold meetings periodically with heads of departments of the hotel for, cross pollination of ideas on the optimal and most efficient ways of running the hotel to achieve maximum profit. Together with all members of the management team must keep close watch on other competing hotels in the environment, since hotel business is highly dynamic, the management must be dynamic in their ideas.

2.5b Food and Beverages Department (F&B)

This is one area of the hotel that really tells the public about the services rendered, how they are rendered and how efficient they are. The hotel makes a lot of money from this department and that is why there are innovations to services rendered always. A poor F&B department can make a Hotel to go bankrupt.

Under the F&B department in Abuja sheraton and Towers we have the following services.

- (i) Conference and banquet Hall - Ladi kwali conference center of the Hotel contains fourteen meetings rooms, including 1,981 square meters of meeting space accommodating up to 2,000 theater - style. Full audio visual facilities available through F&B department.
- (ii) **Business center**:- secretarial services (typing) photo copying, fax, telex and telephone booth, offices available for rent.
- (iii) **Dining/Entertainment**
 - (a) Papillation Restaurant:- Informal, all day dining room.
 - (b) Luigi's Restaurant :- Traditional Italian Restaurant Open daily for lunch and Dinner
 - (c) Mirabelle Restaurant:- for private dining.
 - (d) Pool snack bar:- casual and relaxing terrace with mini barbecue (BBQ)
 - (e) The Boathouse; open house informal dine/bar with delightful entertainment.

- (f) Elephant Bar:- where drinks are available every nights Bustling atmosphere and we entertainment every night.
- (g) Lobby bar:- fashionable meeting place open daily.
- (h) The Bakery shop :- freshly baked item to take away
- (i) New Dazzle Night club:- Open to Hotel resident and guests from Tuesday to Saturday.
- (j) Casino:- where fortunes can be won or lost .
- (k) Room services:- room services are provided in all bedrooms on request.

(Iv) Recreation:-

Health club and Sport with fully equipped gymnasium, Jacuzzi, steam room, sauna, message rooms and outdoor swimming pool. Four flood lit Tennis courts, squash courts, table tennis, Darts and Health drinks Bar. Coaching is also available.

In house guest have temporary membership to outdoor recreational facilities.

The food and Beverages (F&B) department is headed by a manager.

2.5c Accounts Department:- The department is headed by a financial controller. he is a member of staff of sheraton overseas management corporation. Other qualified accountants are employed to run the accounts of the hotel. The department is fully computerized. The accounts department takes care of the financial transaction of the hotel with contractors, suppliers, members of staff and guests. All guest transactions through various outlets in the Hotel are reconciled by members of staff of this department after which the services have been rendered and or in the course of rendering the services.

Since people who manage various outlets are not accountants all documented transactions are entered later by the accounts departments. the head of this department submits weekly financial report to the General Manager.

2.5d Training:- This department provide training within the hotel premises for the staff and it also recommend members of the staff for training outside the establishment .

Since many of the people who are employed by the hotels are green horn in hotel management and also it is also necessary that various professionals employed in the establishment must undertake some compulsory training in other fields e.g. safety and fire fighting. The department formulate polices on training matters. Also they recommend members of staff for training that are relevant to the need of the hotel local and international.

2.5 e Sales and Public Relations:- Since hotel business pays much emphasis on hospitality and courteous treatment of guests the sales and public relations department is highly necessary in an hotel.

This department is in charge of selling the hotel to the public. This department comes up with diferent promotions, for example beauty pageant, sales promotion, anniversaries, and packaging of funfilling programmes for the hotel guests. Also, they also make sure that they get response from the public on how the hotel is rated and how services can be improved upon for more convience of the guest.

2.5f Personnel: This department is responsible for recruitment of staff, keeping and updating staff records, promotion, welfare of staff and making sure that a conducive environment to work is provided.

2.5g **Front Office:-**

It is headed by front office manager. This is the reception and information counter of the hotel. Here, porter service for twenty four hours is provided, a page service or public address system an information service providing general tourists information such as local events attractions, transport, car rentals and fax service, are part of the services rendered by this department.

This is where guests are checked into rooms and also where checking out formalities are conducted. Payments are made here in case, the guest want room accommodation. Current and advance reservations are made here.

Staff are professional trained to be fluent in English language with at least one staff having a working knowledge of one other foreign language.

Facilities for acceptance of cables, fax messages telegram, postal letters and supply of postage stamps are provided twenty-four hours non-interruptible telephone facilities are also provided.

Lockers for luggage and safety deposit facilities are provided.

2.5h **Housekeeping and Laundry Services**

The duties of this department are to :-

- (a) achieve the maximum efficiency possible in the care and comfort of the guests
- (b) establish a welcoming atmosphere and a courteous, reliable service from all staff of the Hotel
- (c) ensure a high standard of cleanliness and general up keep in all areas
- (d) ensure hotel's safety and security regulations are made known to all staff of

the hotel.

These standards are well kept in Abuja Sheraton hotels and Towers. The hotels has modern laundry, dry cleaning and pressing unit on the premises under the management of the hotel.

The premises, furniture and fixtures are always clean and tidy. Housekeepers are provided from morning till night.

2.5i **Kitchen:-**

The kitchen is headed by Executive chef. Under this department we have the kitchen, pantry and crockery. This is where the menu served in various restaurants, banquets, conferences and rooms in the hotel are being prepared.

Modern equipment are provided here to make the menus highly hygienic and delicious.

2.5j **Purchasing:-**

All the needs of various departments are directed to the General Manager. After the approval of the General Manager, it is then the duty of purchasing manager and his staff to purchase the various items. Contracts are awarded to contractors to supply the items to the hotel. The hotel maintains a highly organized purchasing department such that items are supplied within the stipulated time so that the hotel will not suffer any embarrassment.

2.5k **Security:-** Abuja Sheraton hotel and Towers occupies a large expense of hand.

There are also many rooms, offices and facilities in hotel. The need for efficient security cannot be over emphasized.

The hotel premises are fenced round to provide adequate protection to guests,

properties and hotel staff. Security TV monitors are provided inside and outside hotel to monitor everybody coming in and going out of the hotel.

Furthermore uniformed hotel security staff are also available to monitor movement and help guests.

Adequate precaution against fire together with fire escapes, alarms and modern fire fighting equipment are available on the premises, precautionary arrangements and modern equipment to prevent and deal with electricity and gas accidents are also provided.

2.51 **Engineering:-**

Since various equipment are installed to make the guest comfortable there is need for engineering department to maintain, service and repair these sophisticated equipments.

Abuja sheraton hotel and towers uses a central airconditioner system, boilers, fire fighting equipment, electricity generators, Staff buses, official cars, lightings laundry and kitchen equipment etc, the engineering department is charged with day to day maintenance, repair and servicing of these equipment.

The department is headed by a director who is a registered professional mechanical engineer;

CHAPTER THREE

SYSTEM DESIGN.

3:1 INTRODUCTION

The essence of this project is to develop a package that can be used in hotels to quicken their services to their customer. Today in Nigeria, it is a common scene even in standard hotels, that it takes very much time for customers to be checked in and also to be checked out. The real problem is in the checking out since facilities in these hotels are not computerized, what usually happens when a customer is checking out is that front office workers are usually seen running up and down or telephoning other departments in the hotel enquiring about the expenses incurred by the guest. Also, sometimes, where their procedures are a little bit faster, cashiers or front office Manager have to go through a lot papers from various departments. The bills on these papers are added together to get the actual bill of the guest.

From the above, it is very clear that, the system is cumbersome, time wasting and it also give room for a lot disputes and argument at the front office.

To reduce stresses on the part of both parties computerizing the hotel facilities is a sure way of easing these problems.

This project is design to computerized the food and beverage department of a five-star hotel. Abuja Sheraton hotel and towers is used as a case study.

The system is designed to

- (a) to reduce bottle neck arising in billing and collating guests bills.
- (b) To reduce to the barest minimum time spent in checking guests in and out.

- (c) Since customers are kings, this system will make guests to be treated with dignity and respect. The stress that goes with standing and crowdy environment are reduced to the minimum.
- (d) It will also make accounting procedure to be much easy. collating records about guests and auditing sales will be done faster.
- (e) to make information to be entered and be retrieved faster.

3.2 FOOD AND BEVERAGE DEPARTMENT

This department is broken down to nine units.

- (i) Papillon Restaurant:- Informal, all day dining room.
- (ii) Luigi's. Traditional Italian open daily for lunch and dinner.
- (iii) Mirabelle Restaurant:- for private dining.
- (iv) Pool snack bar:- casual and relaxing terrace with mix barbecue.
- (v) The Boathouse:- Open house informal/bar with delightful entertainment.
- (vi) Elephant Bar:
- (vii) Lobby Bar:-
- (viii) The Bakery shop
- (ix) The new Dazzle Nightclub

3.3 OUTPUT SPECIFICATION

Five questions helped to determine what the output of the system should be

- 1) Who will receive the outputs
 - the guests, internal auditors, shift managers, food and beverage manager and account department.

- 2) What is its planned use?
 - i. For guests so that they can know their bills.
 - ii. The food and beverage department, account department and internal auditors. It is for decision making; store records, updating of hotel accounts and account reconciliation.
- 3) How much details is needed?
 - i. The guests needs to know their bills and details of the bills.
 - ii. The food and beverage department needs to know the details about each guests and sales.
 - iii. The account department, internal auditor, and management needs to know about sales.
- 4) when and how often is the output needed.
 - i) when requested by guests.
 - ii) when the deposits of guests are exhausted
 - iii). when guests are checking out.
 - iv) when the hotel needs to know the amount of sales.
 - v) when there is need for auditing and reconciliations.
- 5) By what method.
 - i). By displaying and printing.

3.4 MODULAR PROGRAMM DESIGN.

In this approach, an instruction in the main control module, branches programm control to a subordinate module. Each modules are, as a matter of fact a program within a

program.

There is also a design introduction on the screen.

The function of each module are

3.4.1 **Main Menu**

This program displays the main menu and offers the user the choice of implementing any of the sub-programs.

3.4.2 **Registration.**

It is the program that registers guests at the front office of the Sheraton hotels and towers.

3.4.3 **Food Services (Restaurants)**

It is the program that handles the billing of customers using room-number as key field. There are nine sub-menus which consist of the list of available restaurants.

3.4.4 **Delete Record (Delete Rec)**

It is the program that handles deletion of customer's record after he or she might have left the hotel.

3.4.5 **Generate Report (Report)**

Is the program that generates report at the point of checking out. It consists of two sub-menu. Personal and Summary

3.5 **INPUT SPECIFICATION**

Two database files are used and they are as shown in the figures below

3.5.1 Hotel DBF

FIELD NO	FIELD NAME	FIELD TYPE	WIDTH	DEC	INDEX
1	Room No	Character	7	-	N
2	Name	Character	20	-	N
3	Address	Character	20	-	N
4	City	Character	10	-	N
5	Country	Character	12	-	N
6	From	Character	12	-	N
7	Destination	Character	12	-	N
8	Nationality	Character	10	-	N
9	Deposit	Numeric	9	2	N
10	Arrival Date	Date	8	-	N
11	Departure Date	Date	8	-	N
12	Bill	Numeric	9	2	N
13	Balance	Numeric	9	2	N

3.5.2 Rest DBF

FIELD NO	FIELD NAME	FIELD TYPE	WIDTH	DEC	INDEX
1	ROOM NO	CHARACTER	7	-	N
2	BILL	NUMERIC	9	2	N
3	BALANCE	NUMERIC	9	2	N

3.6. SOFTWARE DEVELOPMENT

This phase involves the writing of programs for the new system. To do this, one need to choose a suitable programming language, write the flow chart, code and document the program.

3.7 CHOOSING PROGRAMMING LANGUAGE

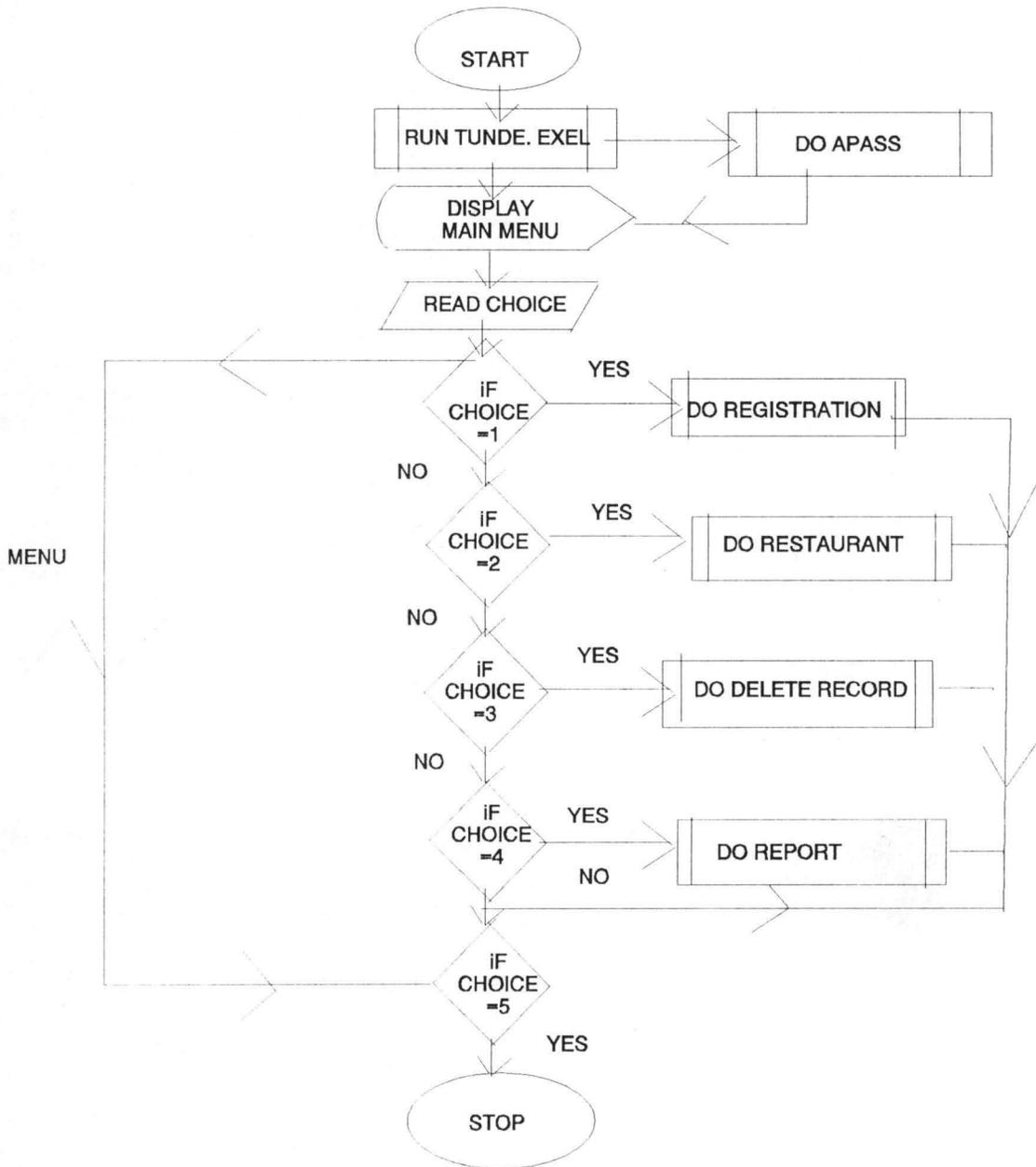
A program in any language is constructed statements, instructions or commands for a computer to perform a certain activity. There are a number of programming languages available which include, Basic, fortran, Pascal, Database etc. for this application DBase IV is used. This application was chosen because of is powerful facilities which include among others, user friendliness, efficient handling of information storage, and retrieval and allows reports generation.

3.8

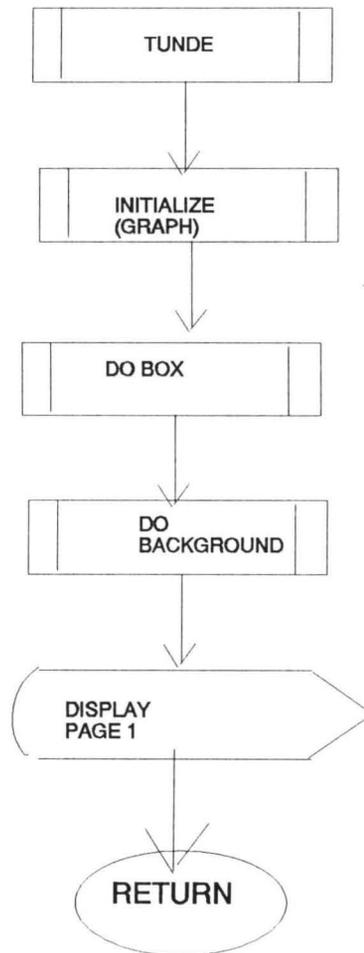
FLOWCHARTS.

3.8.1

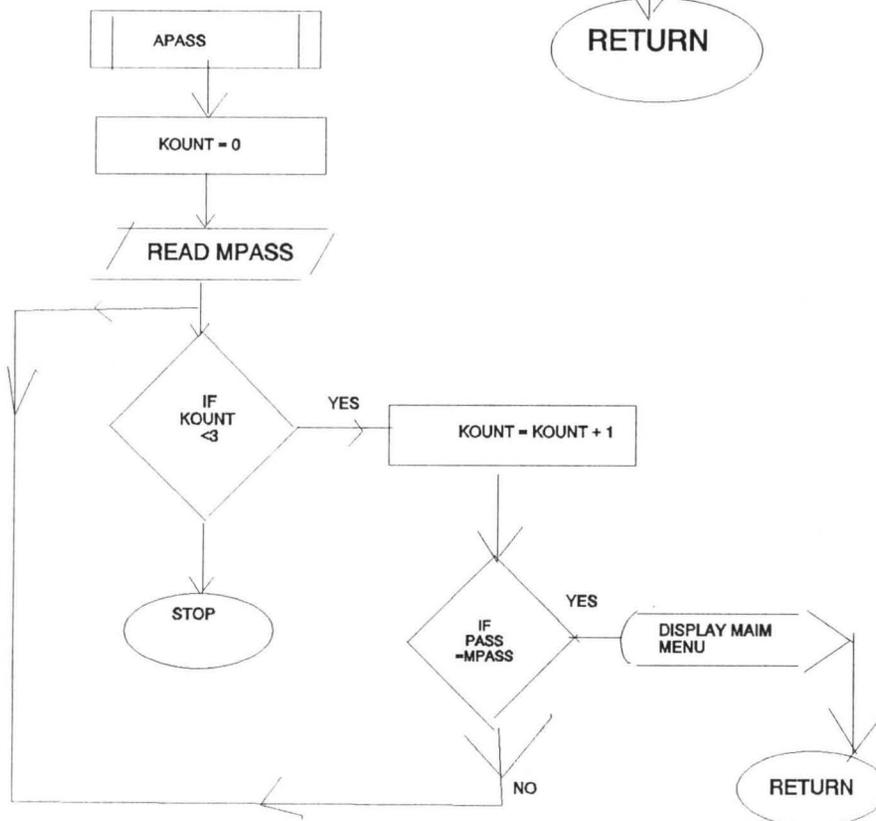
For main menu



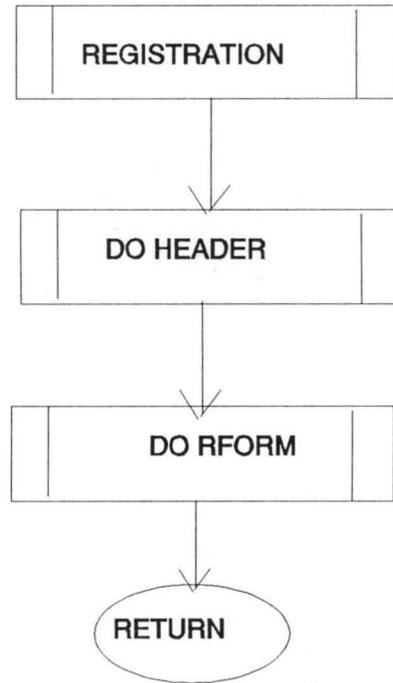
3.8.2. For Screen



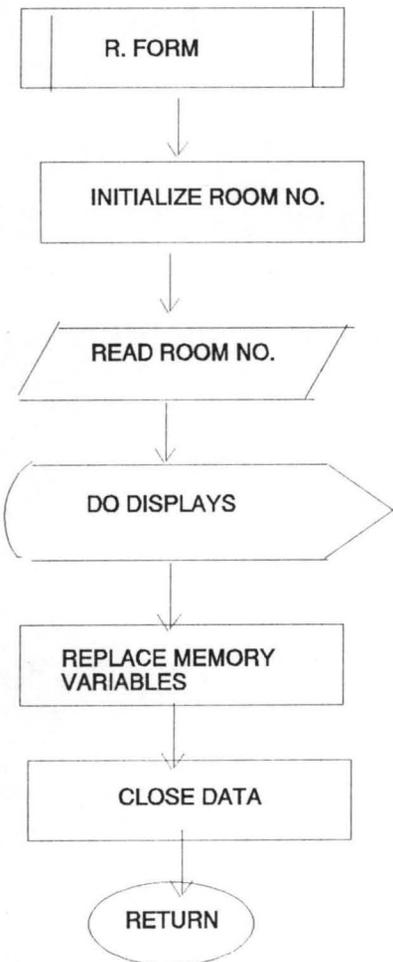
3.8.3. For Pass word



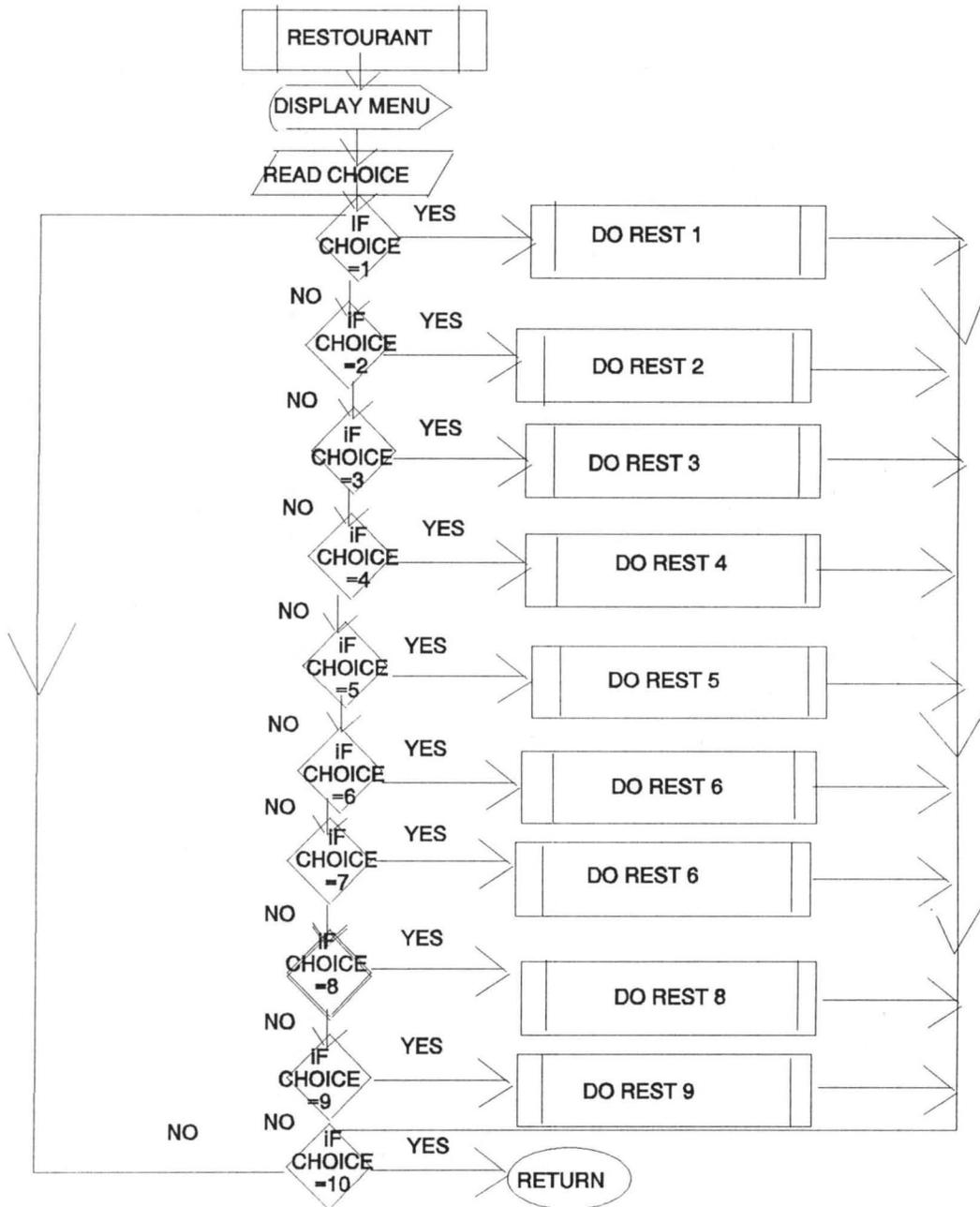
3.8.4 For Registration



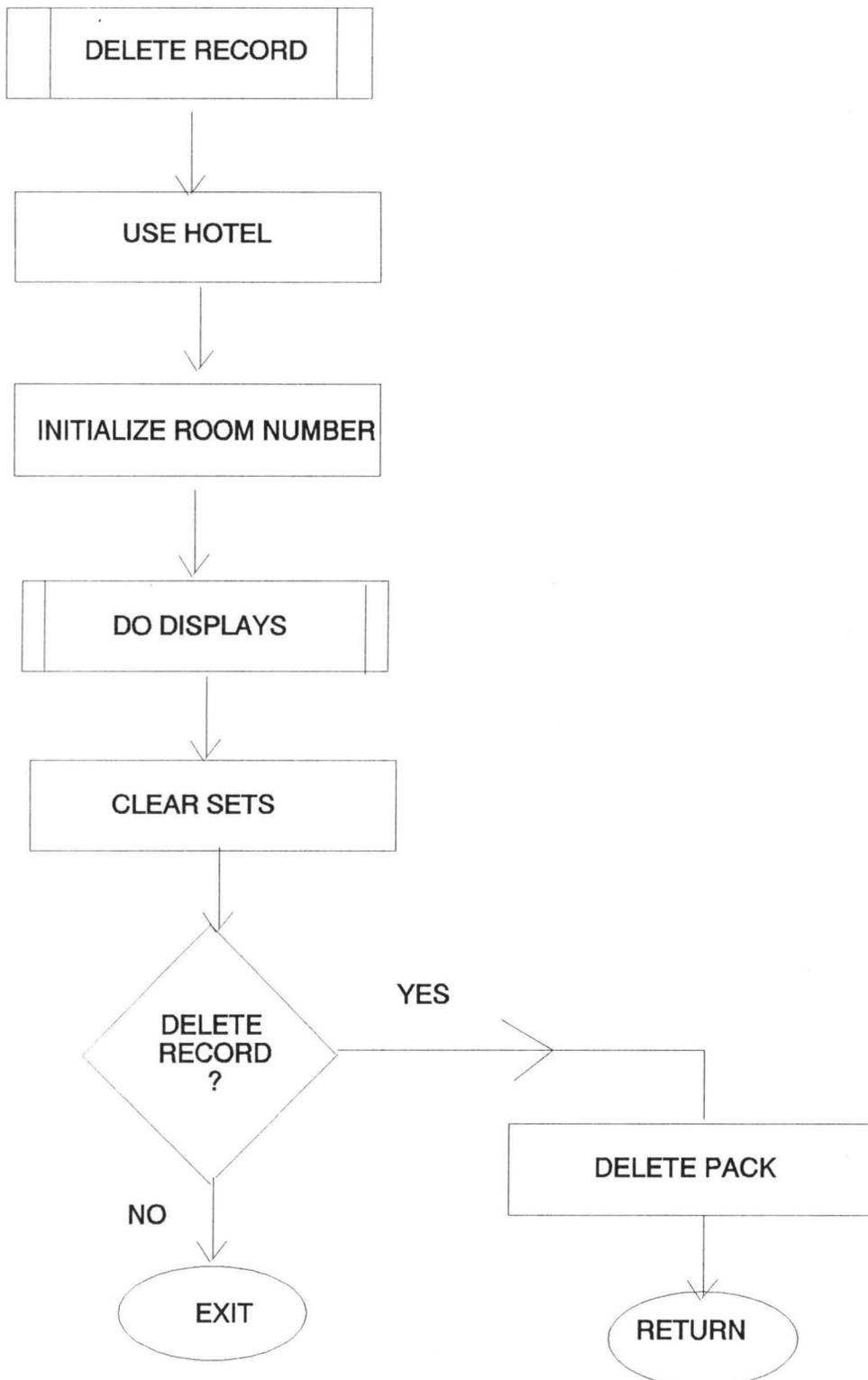
3.8.5 For Form



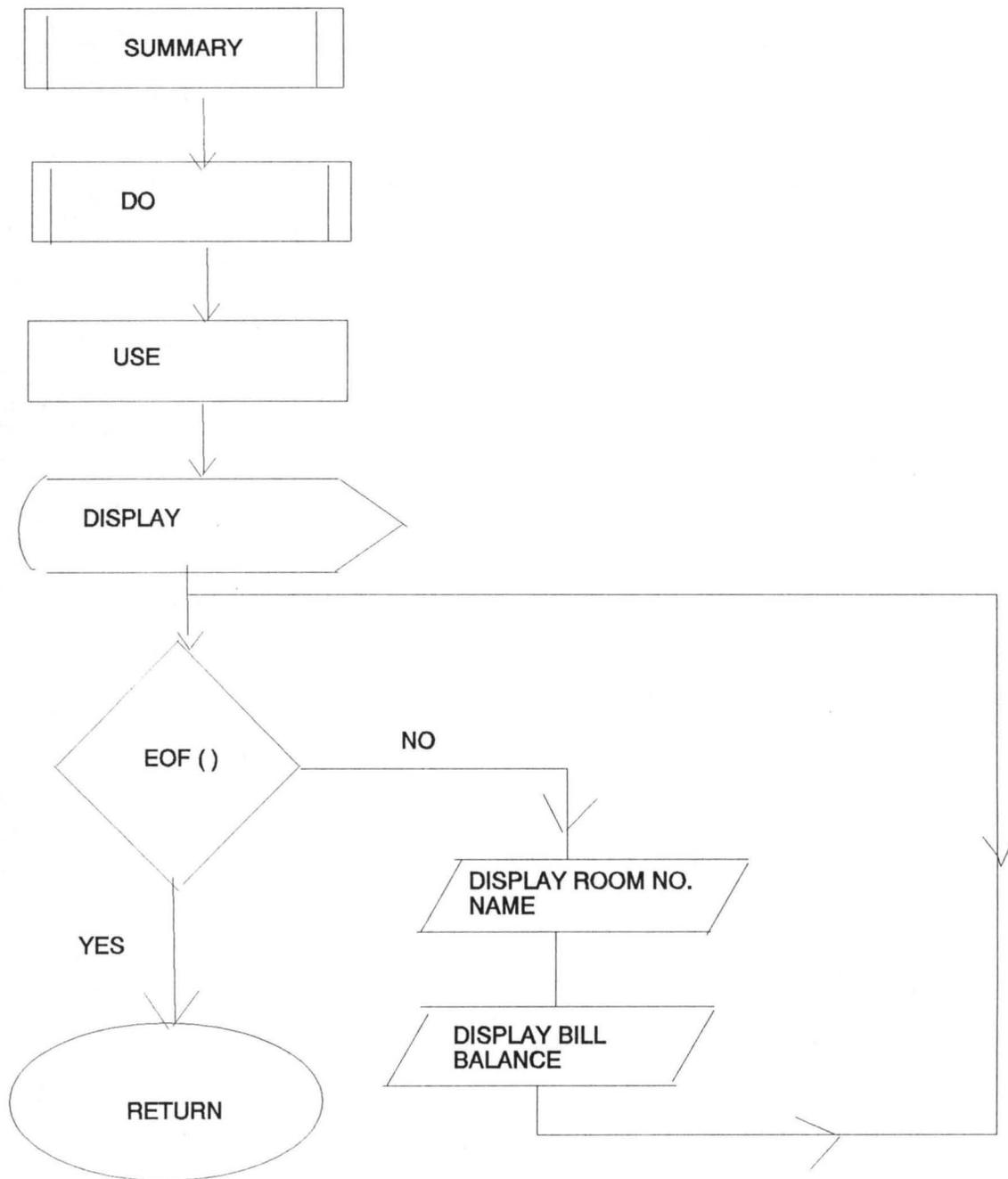
3.8.6 For Restaurant



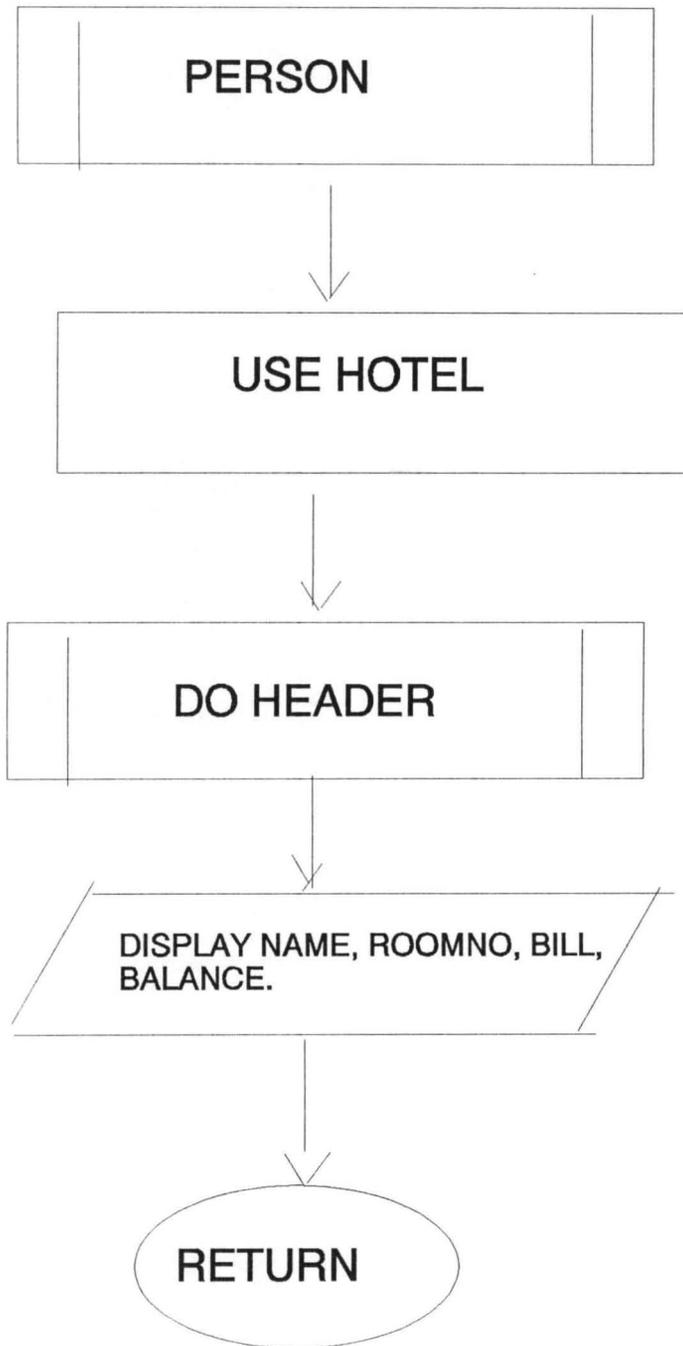
3.8.7 To Delete Record



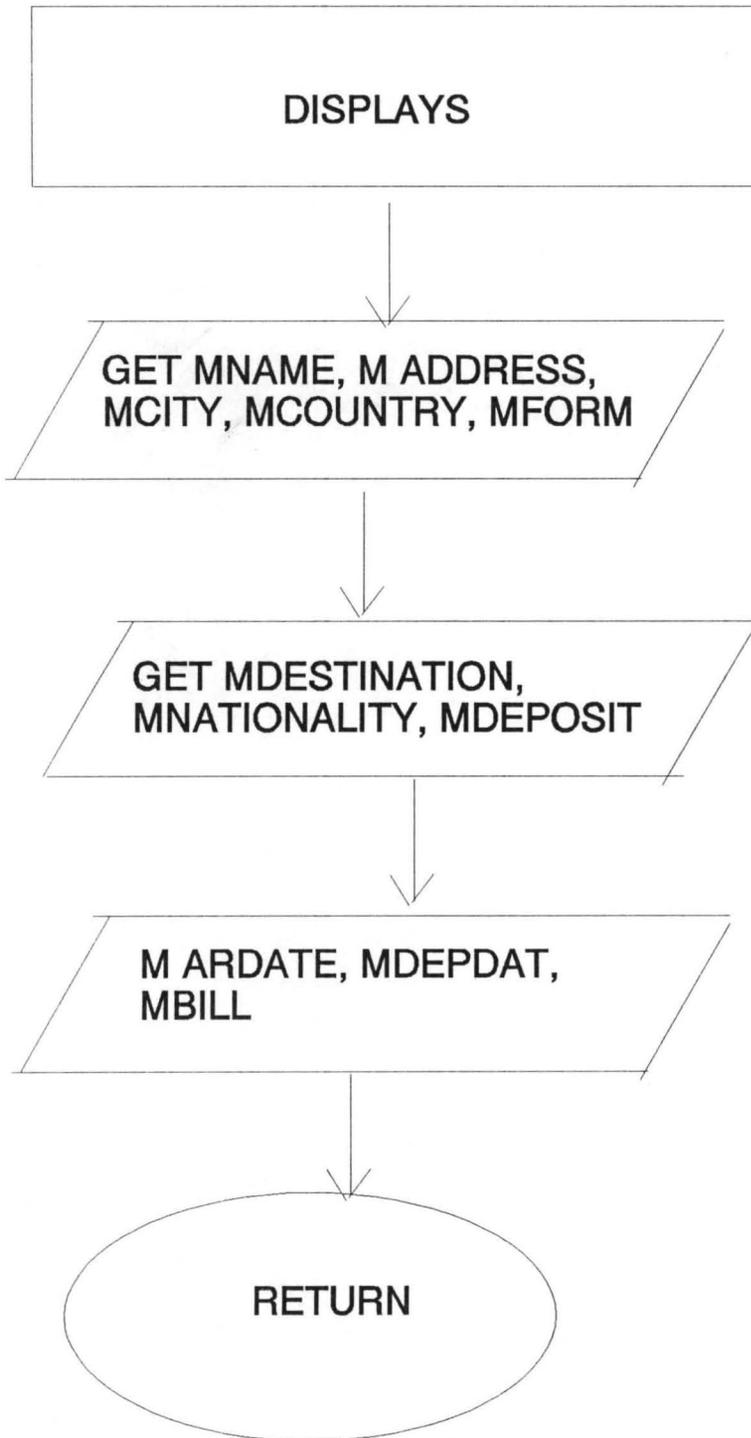
3.8.9 For Summary



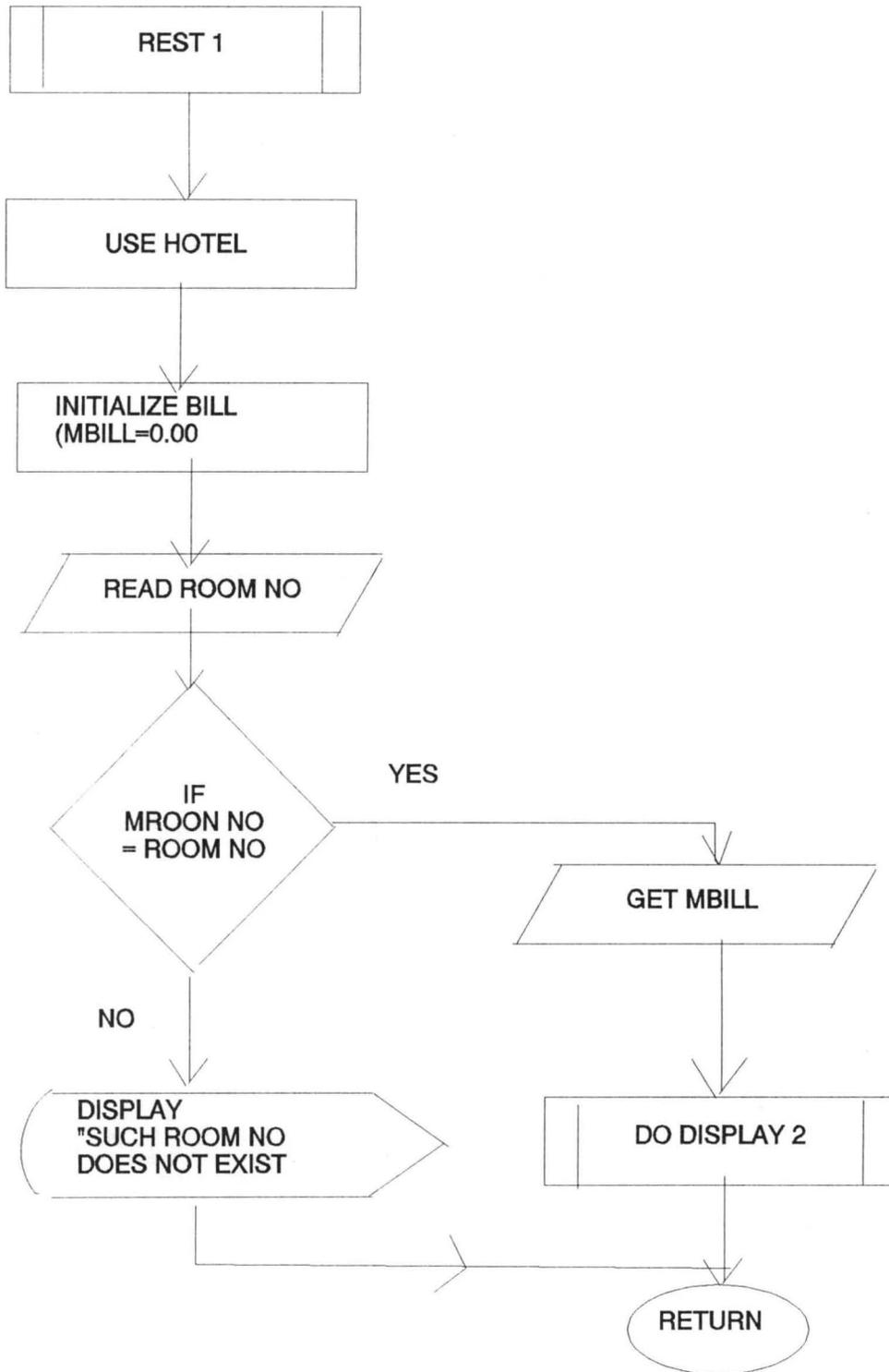
3.8.10 For Person



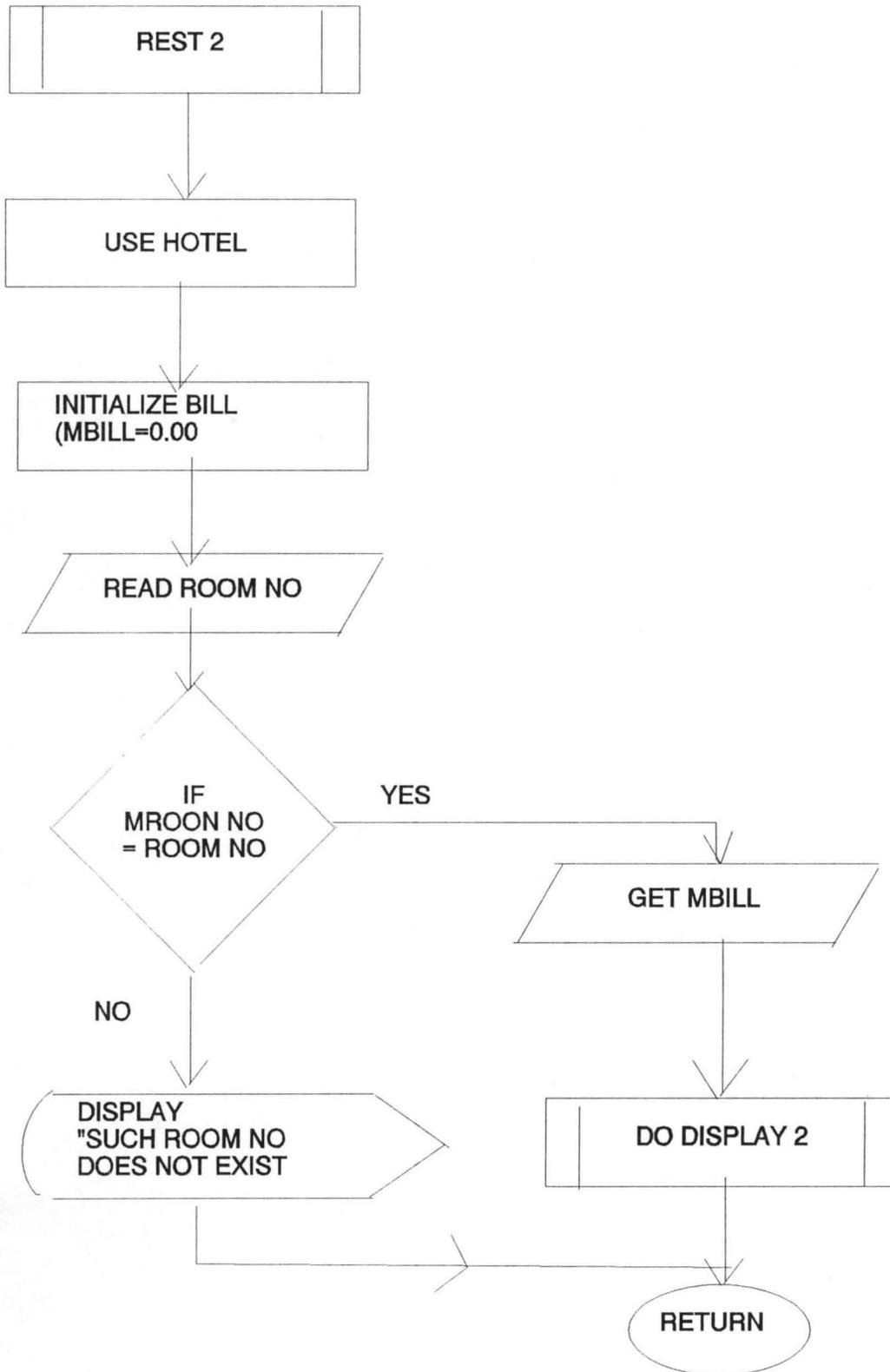
3.8.11. For Display



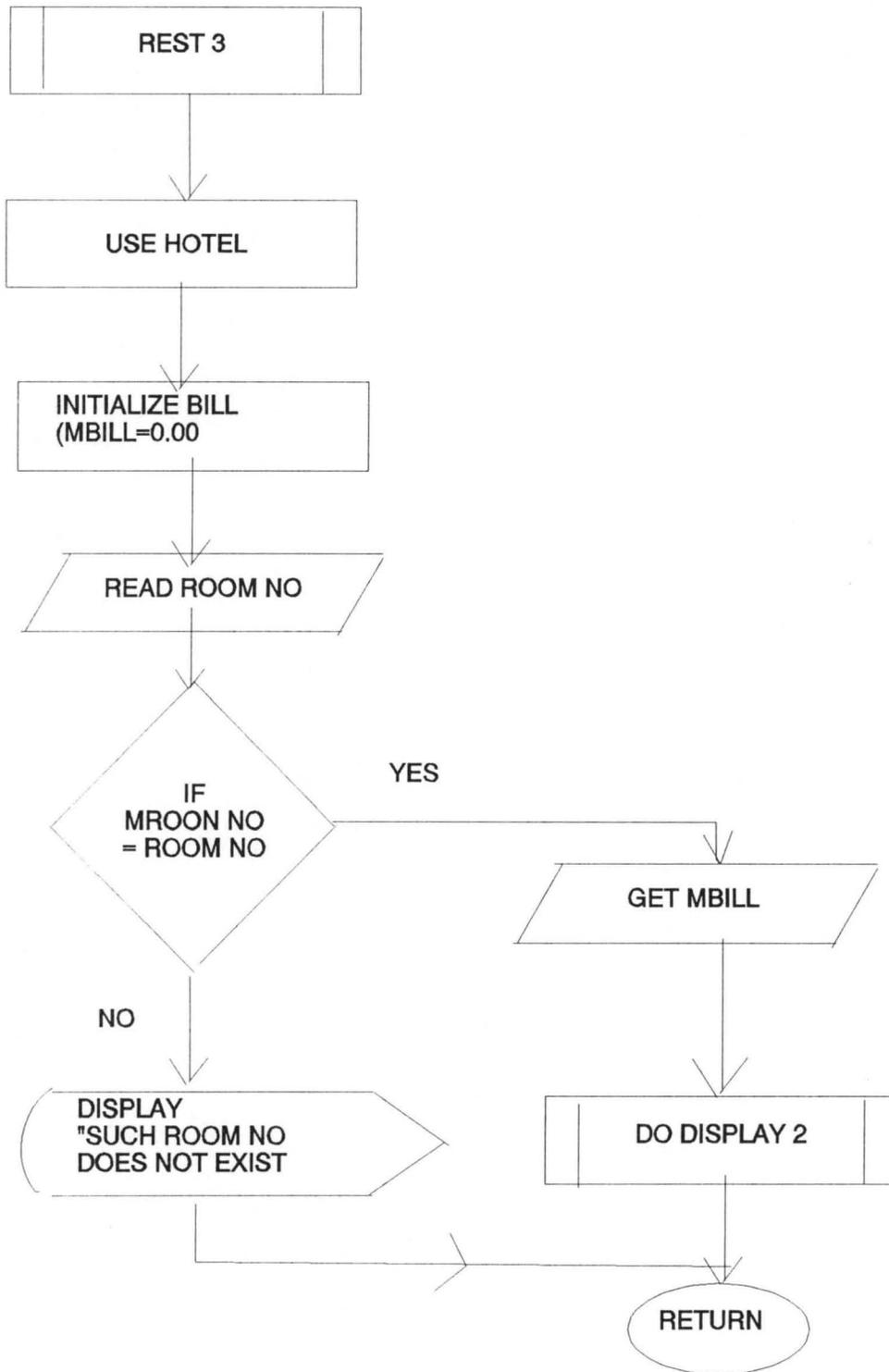
3.8.12 For Restaurant 1



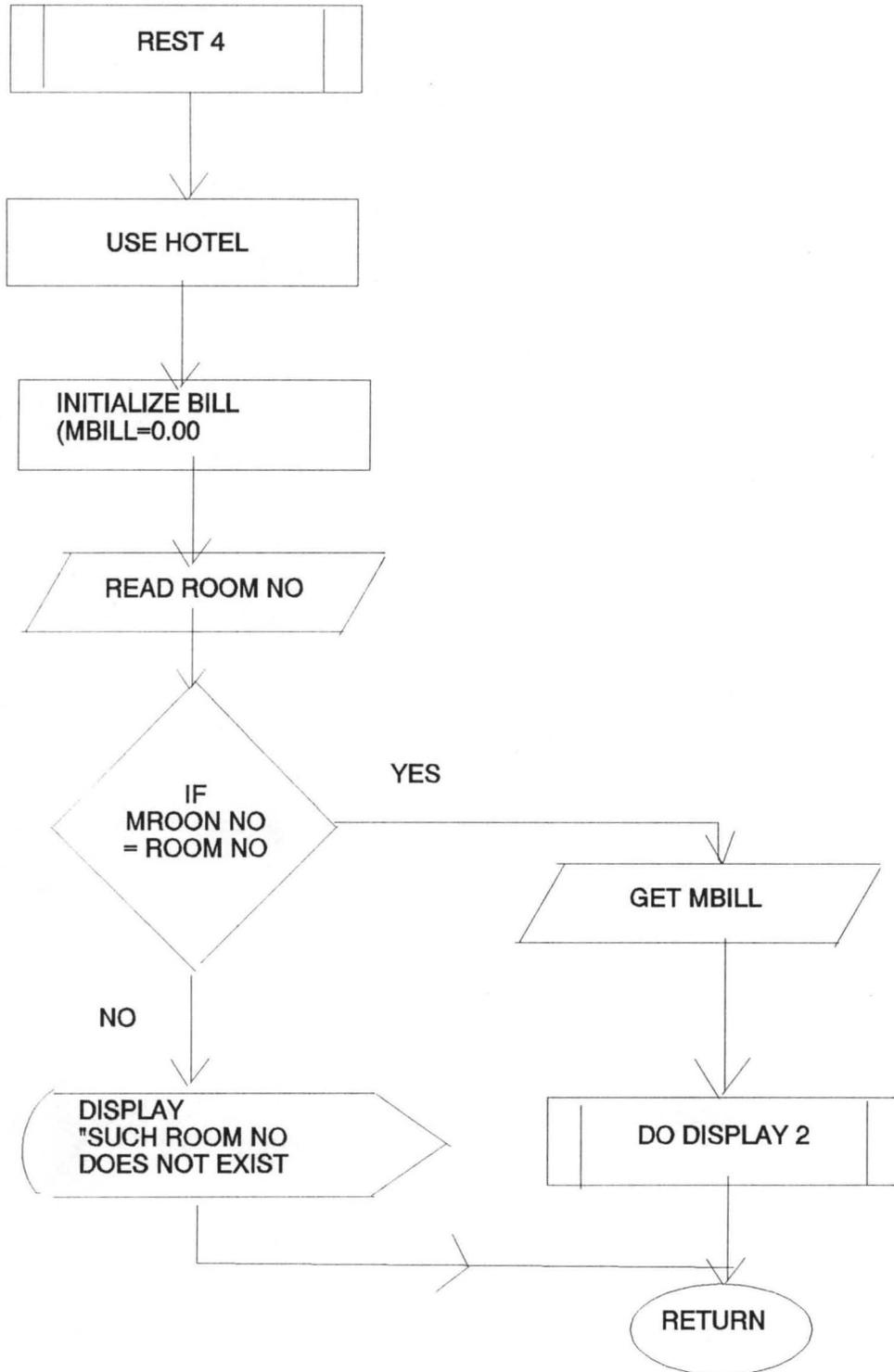
3.8.13. For Restaurant 2



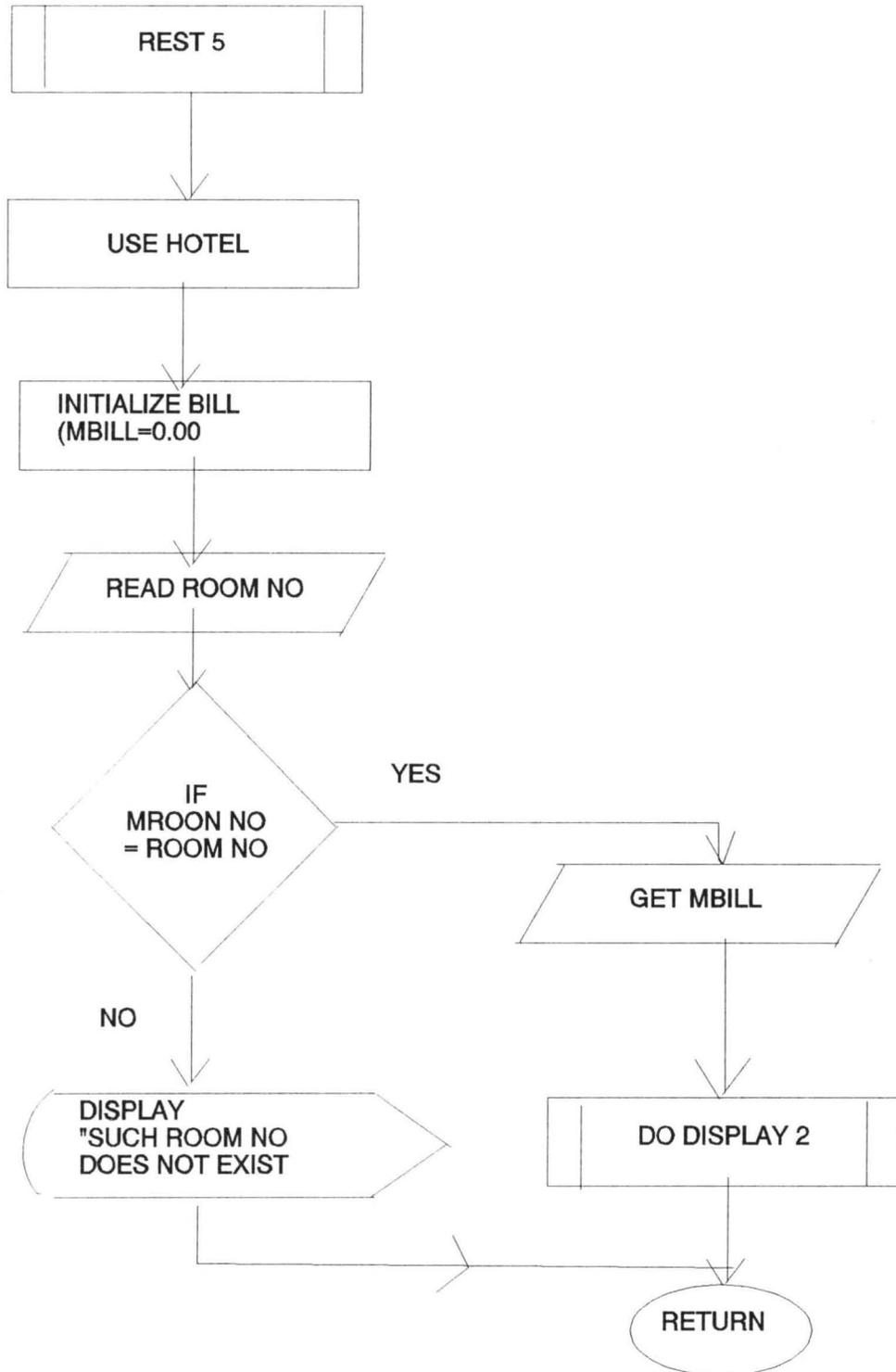
3.8.14 For Restaurant 3



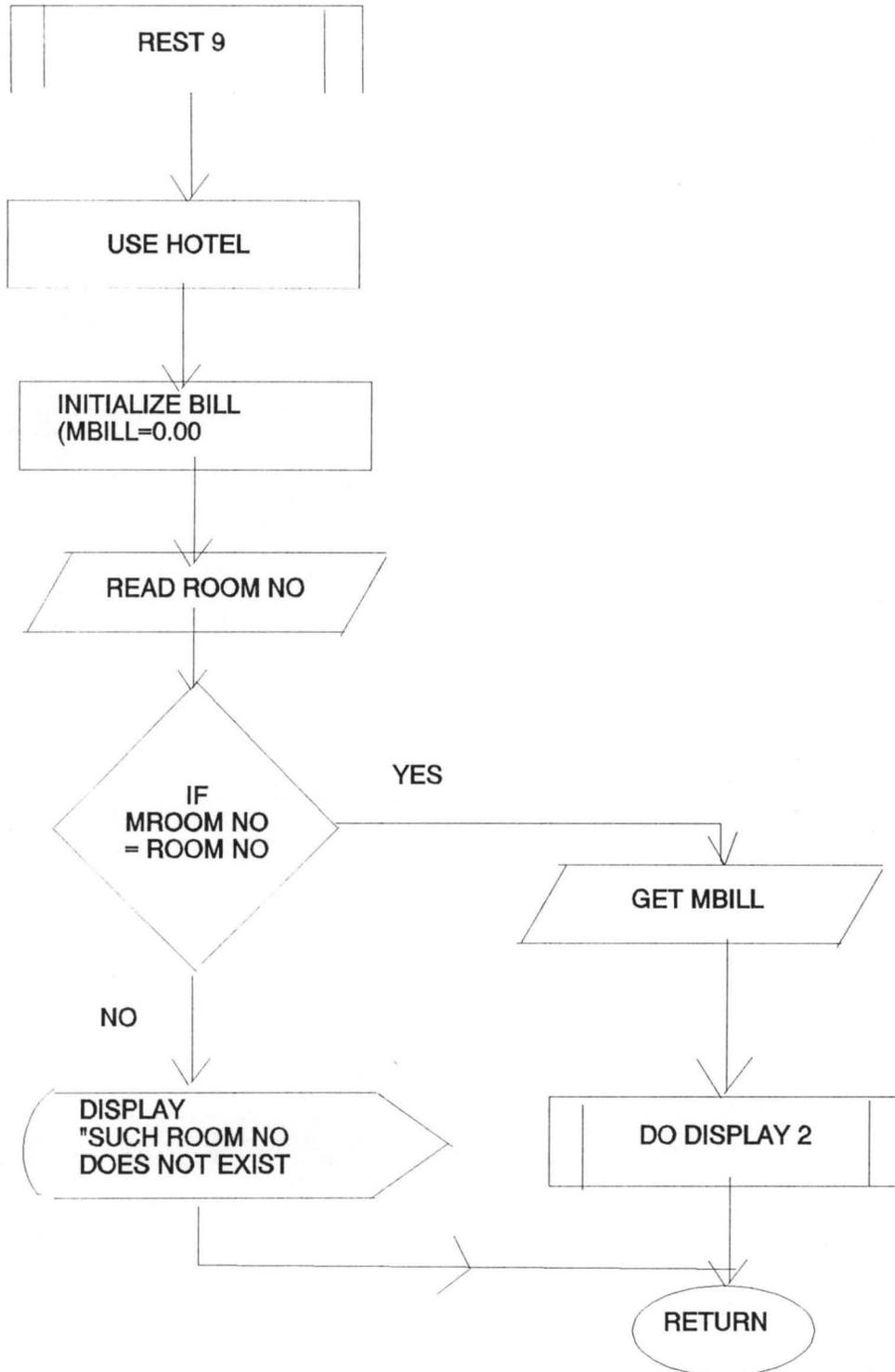
3.8.15 For Restaurant 4



3.8.16 For Restaurant 5



3.8.20 For Restaurant 9



3.9 OUTPUT OF THE PROGRAM

The followings are the output of what the program is design to achieve.

SHERATON HOTEL AND TOWERS

COMPUTERIZATION OF HOTEL

FACILITIES

FOOD & BEVERAGES SERVICES

ADAMOLEKUN B. O. (PGD/MCS/110/96)

COMPUTER SCIENCE DEPT., FUT,

MINNA

- Press any key to continue....

ENTER YOUR PASSWORD:

Press any key to continue...

CHAPTER FOUR

4. HOTEL SYSTEM IMPLEMENTATION

4.1 INTRODUCTION:- This is the process of coding, testing and documenting programs.

. This project designs a computer system that is more efficient than manual Operation.

In hotel business the comfort of guest starts immediately at the gate of the hotel. Since staff and procedures in the hotel must be seen to be very efficient, computerization of hotel facilities is a sure step in making the hotel efficient and comfortable.

So also computerization will make the workplace to be better organized. Less paper work will be done, less time is also spent in attending to each customer and better record keeping is enhanced.

This aspect take much of overall system development effort. Because this is where all the effort of making services of the hotel to have a better outlook are measured.

Moreso, it involves development of quality assurance procedures, including data security, backup and recovery and system controls.

4.2 COMPUTERIZING METHODOLOGY.

The data used for this system is from the guest. Guest lodging in the hotel will have to fill a particular form in the front office. The information requested in the form are surname, other names, Residential address, city, country, coming from and Destination.

Others are Nationality, arrival date and departure date. This form is called

REGISTRATION CARD.

Since the most efficient means is for the hotel computers to be networked all the data generated are entered into the computer in the front office; By this when the guest is finally checked in he or she can enjoy any of the facilities offered by the food and beverage department. When the guest mentions his or her name or his or her room number the file is immediately located by the computer.

Unlike the manual system which uses carbonized paper for the purpose of coding and duplication, the computerized coding sheets are used, which can be produced by the computer unit. The guests entered their records on these sheets of paper which will later serve as a back-up.

This is done for every customer coming into the hotel. Though if a guest has been a regular customer often, his or her file can be activated anytime is around. Processing of data is a continuous process in as much as the guest is enjoying any of the hotel. Since any guest lodging in the hotel must make initial deposit to cover his stay in the hotel, at the time of checking out, all records of transaction can be generated, display and printed.

The computer can generate any record about food and beverage department. Each of the unit will be able to monitor also that no guest enjoy any facility beyond his initial deposit; At each unit of the food and beverage Department (F&B) the deposit will be displayed, the current bill, the total bill incurred and the balance. This means that no guest can enjoy beyond the deposited amount.

Finally, at the end of day's transaction a summary of the day's transaction can be generated. Back up of all transactions conducted in various units can be also be generated,

made on diskettes and store in a cabinet for future references.

4.3 INSTALLATION:-

Installation of the computer systems will involves highly skilled engineers, computer analyst and programmers .Abuja sheraton hotel and towers consists of more than five hundred rooms, and with many departments, the number of personnel to installed the equipment will high. So also they need to be highly skilled engineers because, if the systems are not networked the purpose of computerization may be defeated.

But for any hotel that may want to use computer systems in their F&B department the number of personnel to install the systems will depend on the size of the hotel.

4.4 IMPLEMENTATION

Since implementation includes those activities that take place to convert from an old, system to the new. In this case, the old system will be a manual system while the new system is the computerize system.

Much money will be needed to convert from the old system to a new system, there must be proper implementation.

In changing from old system to a new system two important questions must be asked.

- 1) Who are the people to operate the new system?
- 2) which type of conversion to adopt?

4.4.1 Training

The implementation of the system must commence with training of staff that will carry out the coding of data for the computer unit, and other staff of the hotel that will be

using the system to carry out their day to day work in the hotel. The training of the staff must be handled by the company computerizing the hotel.

The advantage of this is that, a uniform approach will be evolve, the system designer will be very sure that the staff attain the level of proficiency needed, and that there will be no problem during the hangover.

When the staff to use the system have been properly trained then a meeting can be arranged between the management and system designer on the modalities for conversion.

4.4. 2 **Conversion**

This is the conversion of the old file data into the form required by the new system. It is also regarded as part of changeover. For this aspect to take place, there are some important things to consider.

- i) The system has been proved to the satisfaction of the systems analyst and the other implemtation activities have been completed.
- ii) User manager are satisfied with the results of the systems tests, staff training and reference manuals.
- iii) The target date for changeover is due. When the above have been fulfilled, then the conversion can be done in any of the following ways.

(a) **Direct Changeover**

This is when the old system is replaced by the new in one move. It is complete replacement once. This is possible when everybody concerned has confidence in the new system. The changeover must be planned in detail, systems tests and training must be comprehensive. This system is the least expensive but highly risky.

(b.) **Pilot Running**

This is when data from one or more previous periods for the whole or part of the system is run on the new system. This is done when results must have been obtained from the old system, and the new results compared with the old.

(c.) **Parallel Running**

This is when current data processed on both old and new systems to cross-check results. Here the old system must still be kept alive and operational until the new system has been proved for at least one system cycle, live data are used in the real operational environment of place, people, equipment and time.

An advantage is that the results of the old system and new system can be compared before acceptance by the user, thereby promoting user confidence. But one must put into consideration extra cost. and difficulty of user staff to carry out clerical operations for the two systems within the time available.

(d) **Staged Changeover.**

This when the new system is introduced piece by piece. That is series of limited-size direct changeovers. A complete part or equal section is committed in to the new system. While the remaining part or section are still processed using the old system when the selected processed is operating satisfactorily is the remaining selected transferred. With this method the analyst can learn from mistakes made as the changeover progress.

4.5 MAINTENANCE

When the system is up and running there may be need to conduct changes and enhancements. These may be caused by increase in tariffs and government regulations. They

may also be new products to be marketed by the hotel or expansion of facilities on the ground may necessitate this.

One of the reasons of changing into a new system is because of efficiency, the computer, system must be maintained as at when due so that it can render optimum service. Most of the time, the maintenance of a system is handled by the system developer with other members of his team.

4.6 IMPLEMENTATION REVIEW.

This is intended to check accuracy and timeliness of the new system with a view to identifying any unusual situation. This will be achieved through the following approaches:-

- (a) **Event Logging:-** This entails user recording unusual events that effects the new system.
- (b) **Impact Evaluation:-** This determines the effect of the new system on the organization under review.
- (c) **Attitude Survey:-** This entails sampling the views of current users towards the new system. The views could be positive or otherwise.

CHAPTER FIVE

DOCUMENTATION, CONCLUSION AND RECOMMENDATION

5.1 DOCUMENTATION

It is necessary to provide a manual of instruction which will aid in training and can also be used for reference purpose. All requirements specified in chapter 3 will form part of this document.

5.1.1 User's Guide

A. To Operate the System with DBASE IV in Hard Disk

1. AT C:\> (C Prompt) get system Directory
i. e type C :\> Dbase
2. This may open the assist menu. In this case, press the ESCAPE KEY to ascent to the dot prompt, from where the program will be accessed by typing set default to A:
3. Insert the diskette that contains the program system in drive A.
(i.e. Food PRG)
4. (a) Press enter key
(b) Type DO FOOD and press ENTER KEY
5. The introduction message appear and the user is asked to press any key to continue.
(b) The user is then asked to type in the pass word
6. The main-menu drive appear after the correct password has been typed. The menu is designed in such a way that the user does not need to be some one that has much knowledge of computer.

5.1.2 Hard Ware Support

The recommended hardware are:-

- (1) IBM COMPATIBLE MICRO COMPUTER
- (2) MAIN MEMORY CAPACITY 640KB
- (3) HARD DISK 10MB
- (4) VISUAL DISPLAY UNIT: COLOR GRAPHICS

PRINTER

- (1) DOT MATRIX: 1200. CPS 24. PIN

OR

LASER JET .6L (HP)

STABILIZER/UPS

STABILIZER: 250VA.

U.P.S. 500 VA

5.1.3 Software Support

The recommended software are the ones listed below.

- (1) Disk operating system MS DOS 6.0
and above
- (2) DBMs Package: DBASE IV
- (3) TURBO PASCAL COMPILER TP 6.0

5.2 CONCLUSION

Preliminary study of hotels using manual system of operation has revealed that a change is inevitable. A lot of problems are encountered with the manual system of processing

transaction. But introduction of computer system transaction in hotel will be advantageous to the guests and the hotel management.

In Abuja Sheraton hotels and towers it was found that because the hotel facilities and outlets are all computerized, services rendered to customer are highly efficient. Guests are checked in within minutes and since billing are compiled by computers guests really appreciate the efficient services rendered by the hotel.

This project also has served as a kind of eye opener to how computer system can contribute to marketability of hotel business. Since there are so many outlets in an hotel, coordination is much more easier in a computerized environment. The emphasis of this project is the food and beverage department with about eight outlets that guests can choose from. It can be adapted to a small hotel or a bigger hotel.

5.3 RECOMMENDATION

Since hotels contains of so many other departments as highlighted in chapter one and two of this project there are still room for further development. for the computer system to be highly efficient, the best thing to do is to computerized all facilities in the hotel. With all facilities computerized, guests will be made more comfortable and on the part of the management coordination and managing of vast facilities are done more efficiently.

I am therefore recommending that other facilities like, housekeeping, room services, sales, training, kitchen, purchasing and accounts, etc are computerized. I wish in more years to come students will work on these other parts, so that the work can be complete.

Secondly, I wish to recommend that hotels no matter has small will begin to avail themselves the use of computer in managing their businesses.

APPENDIX 1

* MAINPROGRAM

```
run a:\tunde
set talk off
set echo off
set cent off
set conf on
set escap on
set safe off
set status off
set color to B
clear all
do apass
do while .t.

store 0 to choice
clear
set color to B+,g,w,w+
do header
@8,20 to 20,60 doub
@10,26 say '1. === Registration'
@12,26 say '2. === Food Service'
@14,26 say '3. === Delete Record'
@16,26 say '4. === Generate Report'
@18,26 say '5. === QUIT'
@21,24 to 23,56 doub
@22,28 say 'Your Choice [ ]'
@22,41 get choice pict '9'
read
do case
    case choice = 1
        do Registration
    case choice = 2
        do Restaurant
    case choice = 3
        do Deleterec
    case choice = 4
        do Report
    case choice = 5
        quit
    otherwise
        @22,20 say 'Invalid Choice'
        wait
        @22,1 clear to 24,79
```

```
endcase
enddo
return
```

```
Procedure apass
set device to screen
set status off
set talk off
set safe off
mpass = "TUNDE"
store .t. to test
store 0 to kount
clear
do while test .and. kount < 3
  store space(5) to pass
  @10,10 say "ENTER YOUR PASSWORD:"
  set inte off
  set color to b/b
  @10,30 get pass pict "@X!"
  read
  set color to w/b
  set inte on
  wait
  clear
  if pass = mpass
    @ 10,10 clear to 12,70
    @20,20 say "AUTHORITY TO ACCESS THIS PACKAGE GRANTED"
    @22,20
    wait
    clear
    return
  else
    kount = kount + 1
    clear
    @10,5 say "WRONG PASSWORD "
    @12,12 say " RE-ENTER AGAIN"
    wait space(10) + " press any key to continue"
    clear
    loop
    store .f. to test
    @6,10 say " UNAUTHORIZED USER !"
    @8,12 say " GOOD BYE!"
    close all
    cancel
```



```
@21,28 say 'Your Choice [ ]'  
@21,41 get choice2 pict '99'  
read  
do case  
  case choice2 = 1  
  clear  
  do rest1  
  
  case choice2 = 2  
  clear  
  do rest2  
  
  case choice2 = 3  
  clear  
  do rest3  
  
  case choice2 = 4  
  clear  
  do rest4  
  
  case choice2 = 5  
  clear  
  do rest5  
  
  case choice2 = 6  
  clear  
  do rest6  
  
  case choice2 = 7  
  clear  
  do rest7
```

```
case choice2 = 8
clear
do rest8
```

```
case choice2 = 9
clear
do rest9
```

```
endcase
```

```
enddo
return
```

Procedure rform

```
use hotel
store 'Y' to ans
set stat off
use hotel
do while ans = 'Y'
clear
store space(10) to mroomno
@1,25 to 3,55
@2,30 say 'Registration section'
@3,3 to 20,77 doub
@4,5 say 'Room number:' get mroomno pict 'AAA-999'
read
store space(20) to mname
store space(20) to maddress
store space(10) to mcity
store space(12) to mcountry
store space(12) to mfrom
store space(12) to mdestinat
store space(10) to mnatnality
store 0.00 to mbill
store 0.00 to mdeposit
store 0.00 to mbalance
store ctod(' / / ') to mardate, mdeupdate
```

```

do displays
read
append blank
replace roomno with mroomno
replace name with mname, address with maddress, city with mcity
replace country with mcountry, from with mfrom, destinat with mdestinat
replace bill with mbill, deposit with mdeposit
replace ardate with mardate, depdate with mdepedate
@21,20 to 23,60
store 'N' to ans
@22,22 say 'Enter more record(s) ? (Y/N)' get ans pict '!';
    valid ans $ 'YN' error 'Invalid entry !!!'
read
enddo
close databases

return

```

Procedure Displays

```

@4,45 say 'NAME:' get mname pict '@!'
@6,5 say 'ADDRESS:' get maddress pict '@!X'
@6,45 say 'CITY:' get mcity pict '@X'
@8,5 say 'COUNTRY :' get mcountry pict '@!'
@8,45 say 'COMING FROM:' get mfrom pict '@!'
@10,5 say 'DESTINATION:' get mdestinat pict '@!'
@12,5 say 'NATIONALITY:' get mnatnality pict '@!'
@14,5 say 'DEPOSIT:' get mdeposit pict '999999.99'
@14,45 say 'ARRIVAL DATE:' get mardate pict '99-99-99'
@16,5 say 'DEPARTURE DATE:' get mdepedate pict '99-99-99'
@16,45 say 'BILLING :' get mbill pict '999999.99'

```

```
return
```

Procedure Display2

```

replace bill with (mbill + bill)
replace balance with (deposit-bill)

@16,30 say 'BILL TO PAY:' +str(bill,7,2)

@18,30 say 'DEPOSIT:' +str(deposit,7,2)

@20,30 say 'BALANCE:' +str(balance,7,2)

```

```
use hotel
@23,5 say ' '
wait
close data
return
```

```
procedure deleterec
```

```
store 'Y' to ans
set stat off
use hotel
do while ans = 'Y'
clear
store space(7) to mroomno
@1,25 to 3,55
@2,30 say 'Deletion of Record'
@3,3 to 20,77 doub
@4,5 say 'Room no:' get mroomno pict 'AAA-999'
read
locate all for mroomno = roomno
if found()
store name to mname
store address to maddress
store ardate to mardate
store depdate to mdepdate
store country to mcountry
store city to mcity
store from to mfrom
store natnality to mnatnality
store bill to mbill
store destinat to mdestinat
store balance to mbalance
store deposit to mdeposit
do displays
clear gets
@21,20 to 23,60
store 'N' to reply
@22,22 say 'Are you sure? (Y/N)' get reply pict '!';
valid reply $ 'YN' error 'Invalid entry!!!'
read
if reply = 'Y'
dele
pack
endif
else
```

```
@10,20 say 'Record does not exist'
endif
@21,20 clea to 23,60
@21,20 to 23,60
store 'N' to ans
@22,22 say 'Delete more record? (Y/N)' get ans pict '!'
read
enddo
close data
return
```

```
procedure rest1
  set status off
```

```
  use hotel
```

```
  clear
```

```
  @1,25 to 3,55
```

```
  @2,30 say 'Papillion Restaurant'
```

```
  store space(7) to mroomno
```

```
  store 0.00 to mbill
```

```
  @12,30 say 'Room number:' get mroomno pict 'AAA-999'
```

```
  read
```

```
  locate all for mroomno = roomno
```

```
  if found()
```

```
    @14,30 say 'Your Bill is:' get mbill pict '999999.99'
```

```
    read
```

```
    do display2
```

```
  else
```

```
    @18,20 say 'Such Room does not exist'
```

```
  endif
```

```
  close data
```

```
  return
```

```
procedure rest2
```

```
  set status off
```

```
  use hotel
```

```
  clear
```

```
  @1,25 to 3,55
```

```
  @2,30 say 'Luigi_s Restaurant'
```

```
  store space(7) to mroomno
```

```
store 0.00 to mbill
@12,30 say 'Room number:' get mroomno pict 'AAA-999'
read
locate all for mroomno = roomno
if found()
@14,30 say 'Your Bill is:' get mbill pict '999999.99'
read
do display2
else
@18,20 say 'Such Room does not exist'
endif
close data
return
```

```
procedure rest3
  set status off
```

```
  use hotel
  clear
  @1,25 to 3,55
  @2,30 say 'Mirabelle Restaurant'
  store space(7) to mroomno
  store 0.00 to mbill.
  @12,30 say 'Room number:' get mroomno pict 'AAA-999'
  read
  locate all for mroomno = roomno
  if found()
  @14,30 say 'Your Bill is:' get mbill pict '999999.99'
  read
  do display2
  else
  @18,20 say 'Such Room does not exist'
  endif
  close data
  return
```

```
procedure rest4
  set status off
```

```
  use hotel
  clear
```

```
@1,25 to 3,55
@2,30 say 'Pool Snack Bar'
store space(7) to mroomno
store 0.00 to mbill
@12,30 say 'Room number:' get mroomno pict 'AAA-999'
read
locate all for mroomno = roomno
if found()
@14,30 say 'Your Bill is:' get mbill pict '999999.99'
read
do display2
else
@18,20 say 'Such Room does not exist'
endif
close data
return
```

```
procedure rest5
  set status off
```

```
  use hotel
```

```
  clear
```

```
  @1,25 to 3,55
```

```
  @2,30 say 'Boathouse'
```

```
  store space(7) to mroomno
```

```
  store 0.00 to mbill
```

```
  @12,30 say 'Room number:' get mroomno pict 'AAA-999'
```

```
  read
```

```
  locate all for mroomno = roomno
```

```
  if found()
```

```
  @14,30 say 'Your Bill is:' get mbill pict '999999.99'
```

```
  read
```

```
  do display2
```

```
  else
```

```
  @18,20 say 'Such Room does not exist'
```

```
  endif
```

```
  close data
```

```
  return
```

```
procedure rest6
  set status off
```

```
  use hotel
  clear
  @1,25 to 3,55
  @2,30 say 'Elephant Bar'
  store space(7) to mroomno
  store 0.00 to mbill
  @12,30 say 'Room number:' get mroomno pict 'AAA-999'
  read
```

```
  locate all for mroomno = roomno
  if found()
  @14,30 say 'Your Bill is:' get mbill pict '999999.99'
  read
  do display2
  else
  @18,20 say 'Such Room does not exist'
  endif
  close data
  return
```

```
procedure rest7
  set status off
```

```
  use hotel
  clear
  @1,25 to 3,55
  @2,30 say 'Lobby Bar'
  store space(7) to mroomno
  store 0.00 to mbill
  @12,30 say 'Room number:' get mroomno pict 'AAA-999'
  read
```

```
  locate all for mroomno = roomno
  if found()
  @14,30 say 'Your Bill is:' get mbill pict '999999.99'
  read
  do display2
  else
  @18,20 say 'Such Room does not exist'
```

```
endif
close data
return
```

```
procedure rest8
  set status off
```

```
  use hotel
```

```
  clear
  @1,25 to 3,55
  @2,30 say 'Bakery Shop'
  store space(7) to mroomno
  store 0.00 to mbill
  @12,30 say 'Room number:' get mroomno pict 'AAA-999'
  read
```

```
  locate all for mroomno = roomno
  if found()
  @14,30 say 'Your Bill is:' get mbill pict '999999.99'
  read
  do display2
  else
  @18,20 say 'Such Room does not exist'
  endif
  close data
  return
```

```
procedure rest9
```

```
  set status off
```

```
  use hotel
```

```
  clear
```

```
  @1,25 to 3,55
```

```
  @2,30 say 'New Dazzle Nightclub'
```

```
  store space(7) to mroomno
```

```
  store 0.00 to mbill
```

```
  @12,30 say 'Room number:' get mroomno pict 'AAA-999'
```

```
  read
```

```
  locate all for mroomno = roomno
```

```
  if found()
```

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```

? "S/N ROOM NO.      NAME      BILLING  BALANCE"
? replicate ('=',79)
store 1 to cout
use rest
use hotel

```

```

go top
do while .not. eof()
?str(cout,3),' ',roomno, ' ', name, ' ', str(bill,9,2),' ',str(balance,9,2)
cout = cout + 1
skip
enddo
? replicate ('=',79)
?
set alternate off
@ 23,5 say ' '
wait
close data
return

```

procedure person

```

set alternate to 'hotel1.out'
set alternate on
store 'Y' to ans
set stat off

```

```

use rest
do while ans = 'Y'

```

```

store space(7) to mroomno
@1,25 to 3,55
@2,30 say 'Printing of Record'
@3,3 to 20,77 doub
@4,5 say 'Room no:' get mroomno pict 'AAA-999'
read
use hotel
clear
locate all for mroomno = roomno
if found()
clear
do header
? space(30),'NOTICE OF BILLING'
? space(30),'*****'

```

```

?
? 'NAME : ',NAME
?
? 'ADDRESS : ',ADDRESS
?
? 'ROOM NUMBER: ',ROOMNO
?
? 'ARRIVAL DATE: ',ARDATE,' ', 'DEPARTURE DATE: ',DEPDATE
?
? 'BILLING : ', BILL
?
? 'BALANCE :',BALANCE
?
? SPACE(35),'SIGNED:.....'
  set alternate off
  @23,2 say ' '
  wait
else
  @14,22 say 'Room does not exist'
  @23,2 say ' '
  wait
endif
@21,20 clea to 23,60
@21,20 to 23,60
store 'N' to ans
@22,22 say 'Print more record? (Y/N)' get ans pict '!'
read
clear
enddo
close data
return

```

APPENDIX 2.

Program menu(Input, Output, Custfile, Staffile, Roomfile);

Uses Crt, Printer, Graph, Dos;

Const

{User define fill pattern}

User1 : FillPatternType = (\$AA, \$59, \$AA, \$55, \$AA, \$55, \$AA, \$55);

User2 : FillPatternType = (\$FF, \$10, \$FF, \$10, \$FF, \$10, \$FF, \$10);

User3 : FillPatternType = (\$00, \$00, \$00, \$00, \$00, \$00, \$00, \$00);

User4 : FillPatternType = (\$FF, \$FF, \$FF, \$FF, \$FF, \$FF, \$FF, \$FF);

User5 : FillPatternType = (\$AE, \$A4, \$AE, \$A4, \$AE, \$A4, \$AE, \$A4);

Spacebar=chr(32);

Esc=chr(27);

Tab=chr(09);

Uparrow=chr(72);

Downarrow=chr(80);

Leftarrow=chr(75);

Rightarrow=chr(77);

Enter=chr(13);

Label 10;

Var

GraphDriver : integer; { The Graphics device driver }

GraphMode : integer; { The Graphics mode value }

MaxX, MaxY : word; { The maximum resolution of the screen }

ErrorCode : integer; { Reports any graphics errors }

MaxColor : word; { The maximum color value available }

OldExitProc : Pointer; { Saves exit procedure address }

Datfile:Text;

Lina:Array[1..5] of String[20];

Lin,Ans:String[80];

linn:String[35];

scr, mark,ecode,tot:integer;

y0, y1, y2,x1, x2,i,j,k2,k,m2,m,tabin,tabout,amax,amin,tabout2: integer;

Key:Char;

Rep,ct,choice3,choice1,choice2,choice4:integer;

Keyp:String[1];

function Int2Str(L : LongInt) : string;

{ Converts an integer to a string for use with OutText, OutTextXY }

var

```

S : string;
begin
  Str(L, S);
  Int2Str := S;
end; { Int2Str }

Procedure Initialize;
{ Initialize graphics and report any errors that may occur }
var
  InGraphicsMode : boolean; { Flags initialization of graphics mode }
  PathToDriver   : string; { Stores the DOS path to *.BGI & *.CHR }
begin
  { when using Crt and graphics, turn off Crt's memory-mapped writes }
  DirectVideo := False;
  OldExitProc := ExitProc;           { save previous exit proc }
  PathToDriver := 'A:\tp\bgi';
  repeat

{$IFDEF Use8514}                       { check for Use8514 $DEFINE }
  GraphDriver := IBM8514;
  GraphMode := IBM8514Hi;
{$ELSE}
  GraphDriver := Detect;               { use autodetection }
{$ENDIF}

  InitGraph(GraphDriver, GraphMode, PathToDriver);
  ErrorCode := GraphResult;           { preserve error return }
  if ErrorCode <> grOK then           { error? }
  begin
    Writeln('Graphics error: ', GraphErrorMsg(ErrorCode));
    if ErrorCode = grFileNotFound then { Can't find driver file }
    begin
      Writeln('Enter full path to BGI driver or type <Ctrl-Break> to quit:');
      Readln(PathToDriver);
      Writeln;
    end
    else
      Halt(1);                         { Some other error: terminate }
    end;
  until ErrorCode = grOK;
  Randomize;                           { init random number generator }
  MaxColor := GetMaxColor; { Get the maximum allowable drawing color }
  MaxX := GetMaxX;           { Get screen resolution values }
  MaxY := GetMaxY;

```

```
end; { Initialize }
```

```
Procedure box(x1,y1,x2,y2,r1,r2,c1,c2,c3:integer);
```

```
begin
```

```
  setcolor(c1);
```

```
  setlinestyle(Solidln,0,Normwidth);
```

```
  arc(x1+r1,y1+r1,90,180,r1);
```

```
  arc(x2-r2,y1+r2,0,90,r2);
```

```
  arc(x1+r2,y2-r2,180,270,r2);
```

```
  arc(x2-r1,y2-r1,270,0,r1);
```

```
  line(x1+r1,y1,x2-r2,y1);
```

```
  line(x2,y1+r2,x2,y2-r1);
```

```
  line(x2-r1,y2,x1+r2,y2);
```

```
  line(x1,y2-r2,x1,y1+r1);
```

```
{ setfillpattern(user2,c1);}
```

```
floodfill(x1+10,y1+10,c1);
```

```
setlinestyle(Solidln,0,Thickwidth);
```

```
setcolor(c2);
```

```
arc(x1+r1,y1+r1,90,180,r1);
```

```
arc(x2-r2,y1+r2,0,90,r2);
```

```
setcolor(c3);
```

```
arc(x1+r2,y2-r2,180,270,r2);
```

```
arc(x2-r1,y2-r1,270,0,r1);
```

```
setcolor(c2);
```

```
line(x1+r1,y1,x2-r2,y1);
```

```
line(x2,y1+r2,x2,y2-r1);
```

```
setcolor(c3);
```

```
line(x2-r1,y2,x1+r2,y2);
```

```
line(x1,y2-r2,x1,y1+r1);
```

```
end;
```

```
Procedure Press;
```

```
Begin
```

```
  Setcolor(Yellow);
```

```
  Settextstyle(Defaultfont, Horizdir,2);
```

```
  Outtextxy(100, 460, '- Press Space bar to continue');
```

```
  repeat
```

```
    Key := Readkey;
```

```
  until (key = Spacebar) or (key = esc);
```

```
  if key = esc then halt;
```

```
End;
```

```
Procedure Initial(Name:String);
```

```
Begin
  Initialize;
  Settextstyle(Triplexfont,Horizdir,4);Setcolor(Yellow);
  Outtextxy(10,5,Name); Setcolor(White);
  bar(5,40,630,50);
  bar(5,430,630,440);
End;
```

```
Procedure Background;
Begin;
  initialize;
  setfillpattern(user1,7);
  box(5,10,Maxx-10,Maxy-20,20,20,7,15,15);
End;
```

```
Procedure ClearSc;
Begin
  Clrscr;
  setfillpattern(user4,0);
  box(0,0,Maxx,Maxy,0,0,0,0,0);
  floodfill(100,100,0);
End;
```

```
Procedure Page1;
Begin
  Background;
  setttextstyle(Defaultfont, Horizdir,2);
  Setcolor(Red);
  Outtextxy(50, 70, 'SHERATON HOTEL AND TOWERS');
  Outtextxy(20, 140, 'COMPUTERIZATION OF HOTEL FACILITIES');
  setttextstyle(Defaultfont, Horizdir,2);
  Outtextxy(30,210, 'FOOD & BEVERAGES SERVICES');
  Setcolor(Blue);
  Settextstyle(Defaultfont, Horizdir,2);
  Outtextxy(30, 280, 'ADAMOLEKUN B.O.(PGD/MCS/110/96)');
  Outtextxy(20, 350, 'COMPUTER SCIENCE Dept., FUT Minna');
  Setcolor(Yellow);
  setttextstyle(Defaultfont, Horizdir,2);
  Repeat

  Outtextxy(100, 420, '- Press any key to continue');
  Until keypressed;

End;
```

BEGIN {Main Program}

Initialize;

Page1;

CloseGraph;

END.