
TOURS AND TRAVEL MANAGEMENT SYSTEM: A CASE STUDY OF VIRUNGA

HOTEL AND CAMPSITE IN KISORO DISTRICT WESTERN UGANDA

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ABSTRACT

The study aimed at tours and travel management system with a case study of Virunga hotel and campsite in Kisoro district western Uganda and it was guided by the following objectives; To explore the problems encountered in the Management of the existing Manual Tours and Travel Management System of Virunga Hotel and Campsite in Kisoro District, to develop a web-based system that will make information more detailed, effective, and accurate, and ease the delay hitherto encountered with the existing Manual System of Virunga Hotel and Campsite in Kisoro District and to implement a web-based Tours and Travel Management System that will help people appreciate the state's natural endowment and also serve as a complementary tool for tourism industry in Uganda. The extent of current (file based) system was found to be high making the percentage of 50 (90.9%) and 5 (9.1%) were in databases system meaning that they have been using a manual Tours and Travel management system. A new Web-Based Tours and Travel management system was developed with the capability for storing a vast piece of data/information. The main difference between the old system and the new Web-Based Tours and Travel Management System is that data capturing and processing is computerized and that computers are used instead of papers and books. It requires less storage space. It is also much more efficient since it can generate reports within minimum time and with minimal errors.

Clients are implored to use the web-based tours and travel management system as it is easily accessible from anywhere around the globe as long as one has internet connection. This will improve customer experience as booking becomes very easy and the client can see the services and their quality available at the hotel without needing to physically be present at the hotel.

Key words: tours and travel management system

Background of the study

According to (George, 2022), the term tour was in vogue as early as 1690. The British traveled to widen their knowledge of the continent, especially to study the culture and social life. This practice was gradually adopted by other lovers of cultural centers. The result of the process was that many European historic and cultural centers were opened to the British tourist. In early 1730's, the small fishing resorts around the British coast begin to attract tourists seeking to their diseases by drinking the sea-water or by immersing themselves in it.

The introduction of a rail link between the major centers in 1830, had a profound impact on the pleasure travelers for the first time. Many entrepreneurs began to inspire rail travel by organizing excursion for the public at discounted offers. Mr. Thomas Cook (1855), also put together all the components of tourism products and sold them as inclusive tour to the tourists and his pre-packaged tour inspired other tour organizations in the travel industry to organize similar tours to all parts of the globe.

According to (World Travel and Tourism Council (WTTC), 2019), the package tour sales generate \$25 billion annually in the United States, \$18 billion in Europe, \$19 billion in Britain, and \$21 billion in Asia. Today tours sales represented 50 percent of all leisure travel sales and 35 percent of all travel agency revenues.

Mankind has come a long way in transportation since Christopher Columbus (1492), sailed to the new world from Spain and an expedition which took over 10 weeks to arrive at the final destination. Travel by water often provided more comfort and speed than land- travel, at least until the advent of a network of railways in the 19th century. Travel for the purpose of tourism is reported to have started around this time when people began to travel for fun as travel was no longer a hard and challenging task. This was capitalized on by people like Thomas Cook selling tourism packages where trains and hotels were booked together (Merriam-Webster, 12th Apr 2021).

A walking tour and travel is a movement of a historical or cultural site undertaken on foot, frequently in an urban setting. Short tours can last under an hour, while longer ones can take in multiple sites and last a full day or more. A walk can be led by a tour guide, as an escort (Columbus, October 12, 1492)

Statement of the problem

Tourism is a major source of revenue for many countries, and Uganda is no exception. The country is endowed with a diverse range of tourist attractions, including wildlife, natural scenery, and cultural sites. One of the challenges facing the tourism industry in Uganda is the lack of efficient management systems to cater to the needs of tourists.

The aim of this case study was to investigate the challenges facing the management of tours and travel at Virunga Hotel and Campsite in Kisoro District, Western Uganda. The hotel and campsite were a popular destination for tourists visiting the Bwindi Impenetrable National Park, Mgahinga Gorilla National Park, and other tourist attractions in the area. However, the management faces several challenges in the management of tours and travel, including inadequate information management systems, lack of trained personnel, and insufficient infrastructure.

The study explored how these challenges affect the quality of services provided by the hotel and campsite and how they can be addressed.

Specific Objectives

1. To explore the problems encountered in the Management of the existing Manual Tours and Travel Management System of Virunga Hotel and Campsite in Kisoro District.
2. To develop a web-based system that will make information more detailed, effective, and accurate, and ease the delay hitherto encountered with the existing Manual System of Virunga Hotel and Campsite in Kisoro District.
3. To implement a web-based Tours and Travel Management System that will help people appreciate the state's natural endowment and also serve as a complementary tool for tourism industry in Uganda.

Research Questions

1. What are the problems encountered in the Management of the existing manual Tours and Travel Management System of Virunga Hotel and Campsite in Kisoro District.?
2. How possible can information be more detailed, effective, and accurate, and ease the delay hitherto encountered with the existing manual system of Virunga Hotel and Campsite in Kisoro District?
3. How can the proposed system help people appreciate the state's natural endowment and also serve as a complementary tool for tourism industry in Uganda?

Methodology

Research design

The research employed both descriptive and experimental research designs are interested in answering the how, what, when, and where questions, instead of the why and attempts to establish a cause-and-effect relationship in a situation or phenomenon respectively. Descriptive research directs the researcher to understand the research problem before investigating why it even happens in the first place.

Study population

According to (Hassan, 2022), A research population is generally a large collection of individuals or objects that is the main focus of a scientific query. It is for the benefit of the population that researches are done. However, due to the large sizes of populations, researchers often cannot test every individual in the population because it is too expensive and time-consuming. This is the reason why researchers rely on sampling techniques. While according to (Study Population: Characteristics & Sampling Techniques, 2022), a study population is a group considered for a study or statistical reasoning. The study population is not limited to the human population only. It is a set of aspects that have something in common. They can be objects, animals, measurements, etc., with many characteristics within a group.

Sampling procedure

Sample size

The study sample size was calculated using a statistical formula for sample size estimation by Kish Leslie

(1965) as shown below; The study sample comprised of 54 respondents out of 55 of the total population, and was derived from using the Slovincs formula below;

$$n = N / (1 + Ne^2) \text{ Where } n =$$

Sample size

N = Total population

e = error tolerance of 0.02 $n = 55 /$

$$(1 + 55(0.02)^2)$$

$$n = 55 / (1 + 55(0.0004))$$

$$n = 55 / (1 + 0.022)$$

$$n = 55 / 1.022$$

$$n = 54 \text{ respondents}$$

Hence, 54 respondents were considered to participate in the study. Therefore, in response to the Slovincs formula, 53 respondents were clients and 01 manager of the Hotel. This was because in the population more or less shared similar socio-demographic characteristics and also due to resource and time constraints. The respondents to be interviewed were included clients and the manager of the hotel. Table 1. Shows different Categories of the People that shall be in the Study sample with their Sizes

Table 1. Shows different Categories of the People that shall be in the Study sample with them

Population (N)	Target	sample
manager	1	1
clients	54	53
Total	55	54

Sampling techniques

The researcher employed only a purposive non-probability sampling technique. According to (Study Population: Characteristics & Sampling Techniques, 2022), a purposive sample is the one which is selected by the researcher subjectively i.e., influenced by personal opinions where he/ she attempts to obtain a sample that appears to be representative of the population and will usually try to ensure that a arrange from one extreme to the other is included. The researcher only considered the clients and manager of Virunga Hotel and Campsite. These are expected to provide relevant data in regard to the objectives of the study

Simple random sampling

Simple random sampling is whereby the individuals in the total population have equal and independent chances of being selected as a member of a sample (Study Population: Characteristics & Sampling Techniques, 2022). The respondents in this study were clients as primary respondents. Simple random sampling was used to select respondents in the group of clients within the Hotel. **Purposive sampling**

Purposive sampling was somewhat less costly, more readily accessible, and more convenient and select only those individuals that are relevant to research design. Besides this, there was no way to ensure that the

sample is truly representative of the population, and more emphasis was placed on the ability of the researcher to assess the elements of the population. Therefore, the researcher used this method to consider the clients, and the manager as her respondents.

Data collection techniques

Data was collected with regard to the existing functional systems and literature. These was used to underscore the current system with regard to what may be required as additional features to be integrated into it. Questionnaires, interviews and observation are the techniques the researcher shall use to collect data for verification of the current system.

Questionnaires

The technique uses written questions that are presented to respondents who answer them in written form. The researcher designed the questions that respondents shall answer. This technique was employed because it has great potentialities, in other words respondents are allowed time to think the best answers that address the questions, it is an economical method of accumulating information of significance. It is better for gathering information from a scatter population. It is easy to plan, construct and administer.

Interviews

The technique is also ideal for gathering information about processes of how things are done, this gives room for respondents to highlight their concerns regarding the existing system of work. The technique proves effective for collecting information from respondents who would rather not answer questionnaires, like the ones whose nature of work does not allow time to sit and write. It is also effective for gathering information where observation in itself may not be sufficient especially in cases where explanation of the observations is necessary.

Data analysis

The data was coded, categorized and analyzed using computer software packages SPSS. Quantitative data

was analyzed by SPSS which generates frequency tables, charts and graphs to present the findings. Qualitative data generated from the interviews was analyzed through careful interpretation of meanings and contents and ordering and ranking with descriptive manner. The presentation of data was done using tables, bar graphs and pie charts that was drawn using micro soft excel program

RESULTS

Response Rate

All the 54 questionnaires administered were filled. This gives an approximate response rate of 100 percent. According to Mugenda (2003), 50 percent response rate is adequate, 60 percent good and above 70 percent rate very good. This means the response rate of 93% is satisfactory for the purpose of making conclusions for the study.

Personal information of respondents

Information regarding to the personal background of the respondents included their gender, age, level of education.

Respondents' Gender

The respondents were asked to indicate their gender, this was aimed at establishing whether both genders participated in the study. The gender distribution of respondents of clients were as indicated in Table 2.

GENDER COMPOSITION OF RESPONDENTS

Gender	Frequency	Percentage (%)
Male	37	67.3
Female	18	32.7
Total	55	100.0

Table 2: Table showing the gender composition of the respondents

From table 2: It was found out that, majority of the respondents were males with 67.3% compared to females with 32.7%.

Age of the respondents

Information regarding the age of the respondents was added to questionnaires during the piloting process. The following information regarding the ages of the respondents was analyzed using SPSS Software and presented in form of grouped data as shown in the table 3.

Age of Respondents

Age	Frequency
5-18	8
18-35	35
35 and above	10

Table 3: Table showing the age of respondents (Primary data)

As indicated in the table 3: The researcher found out that the majority 35(66.0%) of the client respondents were aged between 18-35years, 8(15.1%) were aged 5-18, 10(18.9%) were 35 and above years. Thus, the majority of respondents were youths of understanding and knowledgeable age. The hotel manager is above the age of thirty-five giving the person the eligibility of correctly responding to the questionnaire with high level of maturity and understanding.

Respondents' level of education

Respondents (Clients) were asked to indicate their level of education. The results are indicated below in table 4.

Respondent's level of Education

Table 4: shows that the highest percentage of the clients were Degree Holders 23 (43.3%), 18 (33.96%) were Diploma holders, those with a Masters' Degree (5) constituted 9.4% while those with other types of qualifications were 7(13.2%), one respondent declined to identify the level of education. Thus, the total of those that responded fell below 100% by 0.04%.

This indicated that the Hotel mostly receives clients within the elite and employed classes.

Level of computer literacy of clients

Level of computer literacy of the clients of the Hotel.

Level of computer literacy	Frequency	Percentage (%)
beginner	22	41.5
Intermediate	26	49.1
advanced	05	9.4
Total	53	100

Table 4: A table showing the level of computer literacy of the respondents.

Information in the above table indicates that the majority of the clients of the hotel have intermediate computer literacy standing at 49.1%, with novices at 41.9 and advanced users at only 9.4%. This is a clear indicator of the limited use of electronic means of the accessing the hotel services and why they are quite contented with the manual system even with the limitations involved with it.

How is information managed at Virunga Hotel and Campsite?

According to the manager, all information is managed using manual methods although the manager and directors have computers. It was found out that, the highest percentage of system used at Virunga Hotel and Campsite was manual system of registration of 53 (100%) and 0 (00.0%) were in Web-Based Tours and Travel Management System implying that they have been using entirely a manual Tours and Travel management system.

The relationship between Web-Based and manual Tours and Travel management systems used for Virunga Hotel and Campsite in Kisoro district

The data collected from the respondents on the relationship between Web-Based Tours and Travel and manual Tours and Travel in Virunga Hotel and Campsite were presented as seen from table

RATING OF THE EXISTING MANUAL SYSTEM

Rating	Frequency	Percentage (%)	Valid percent (%)
Very good	8	15.1	15.1
Good	20	37.7	37.7
fair	25	47.2	47.2
poor	0	0	0
Very poor	0	0	0
Total	53	100.0	100

Table 5: A table showing the relationship between the manual management system and the Web

Based on the results from the questionnaires, there is a fairly negative correlation between the existing system and the current system in favor of the latter. With the majority of the respondents of 47.2% admitting that the existing system is fair.

The extent of the Tours and Travel management system at your hotel

This subsection contains results of the level of Tours and Travel on management system in Hotels of Kisoro district. The researcher sought to determine the extent to which Tours and Travel has influence a change in records management system in Hotels of Kisoro district, by finding out the percentages of the extent to which Web-Based Tours and Travel has influenced managing of information majorly on clients.

There is improved client's information management system at Virunga Hotel and Campsite

The data collected from the respondents on the improved clients' information by Web-Based Tours and Travel at Virunga Hotel and Campsite were presented as seen from table

4.5.2. What is the influence of internet on Web-Based Tours and Travel Management System of clients at Virunga Hotel and Campsite?

Now, the internet has become an important tool and required by knowledge-based society present the contemporary foe information management, information source, communication, learning and research. Nearly every piece of information about any subject is available on the internet, making it a powerful tool in our daily lives. A borderless world is realized with the internet. The use of internet will make it easier for people to obtain several of information and the latest information quickly and efficiently. The use of internet is helpful to the world especially the clients. Therefore, as a client, advancement of internet technology should be used as profitably as possible while keenly following the available governing rules to avoid abusing the resource.

System Design

This phase follows the data analysis and this stage normally involves two broad stages namely logical design and the physical design. At this period the interaction is between the users and the developers as a key factor to a successful system, which will meet the required information requirements determined by the system analysis.

Characteristics of good design

In accordance with the design objectives defined during the planning, the system was designed in line with the set objectives that is to say; the system should be functional serving to solve the problem at hand, ensuring that the current system is user friendly and easy to use; the system with features that enable novice, intermediate and expert users get the most out of the system. Consistent is yet another critical aspect that was put into consideration during design, this ensures that the specific parts of the system are used for specific functions. Portability, this feature ensures that the current system can be ran on different platforms. This ensures that the system can be ran on computers with different operating systems, flexibility; flexibility ensures that the system has room to accommodate new developments and updates so that it can easily be changed in line with the requirements of the users.

Database design

The stages of the database design include: logical design which is concerned with conversion of logical record structures to data model supported by the system. It involves how the system will appear to the user and the development of the output layout and also physical design includes transformation of the design material into a real computer work by designing the inputs, outputs and processes. Entity Relationship Model (ER Diagram) deals with relationship analysis where conceptual modeling methods are used to identify relationships between different entities within the system to avoid duplication of documents. A relationship is a meaning full association or linkage and according to the Web-Based Tours and Travel management system for Virunga Hotel and Campsite, the researcher had six forms which were linked into one to one and one to many relations.

Interface/web page design

In presentation of a website user interfaces are used which refer to the methods and devices that are used to accommodate the interaction between the system and the users. They consist of the buttons, commands, links, icons that allow users to carry out a given task through clicking on the links and commands

Presentation of a website

This is where the administrator enters in the Access code to register the details.

(ii) Register page

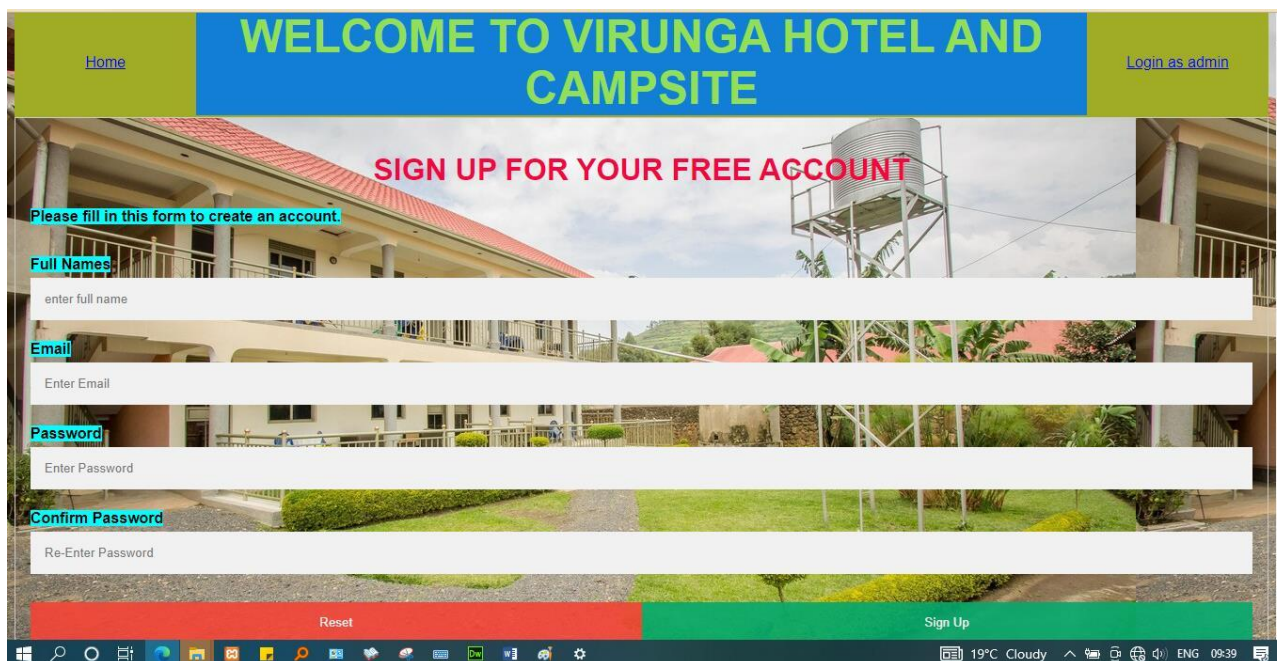


Figure 2: Client Register Page

It is on this page that the client can auto register in order to access services including making bookings, payments etc.

Figure showing the login page

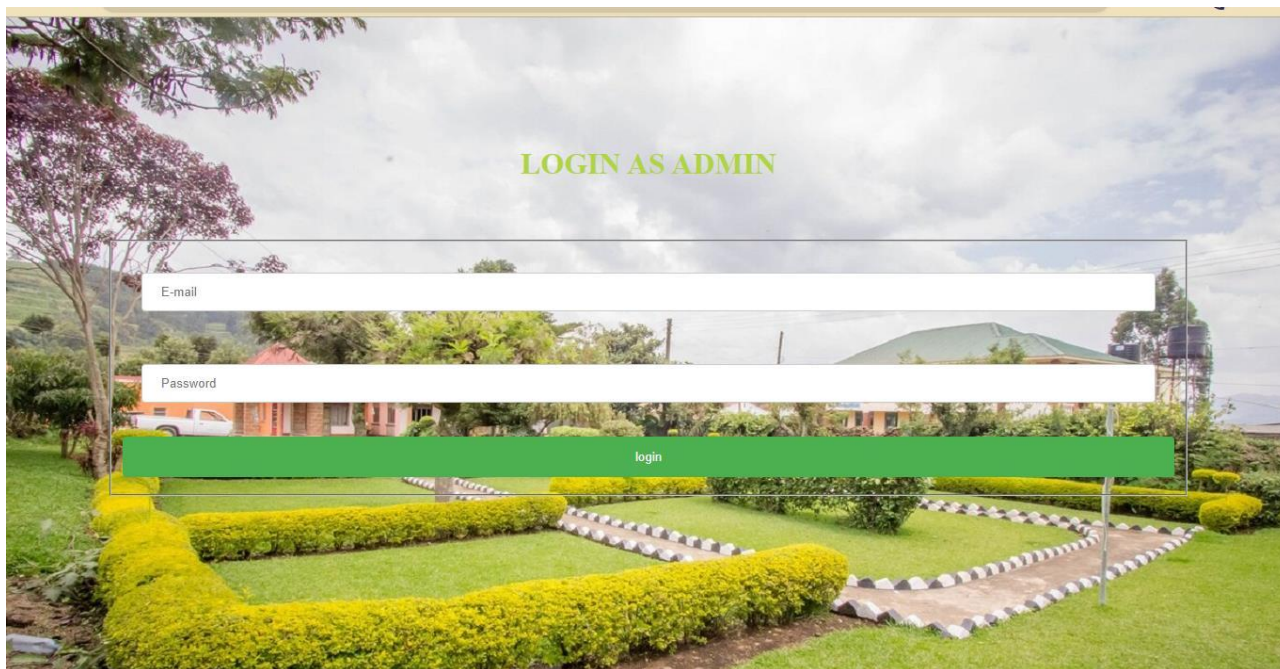


Figure 3: Admin Login Page

This is where the administrator registers his/ her details in the system (iii) Login page

Figure showing the login page

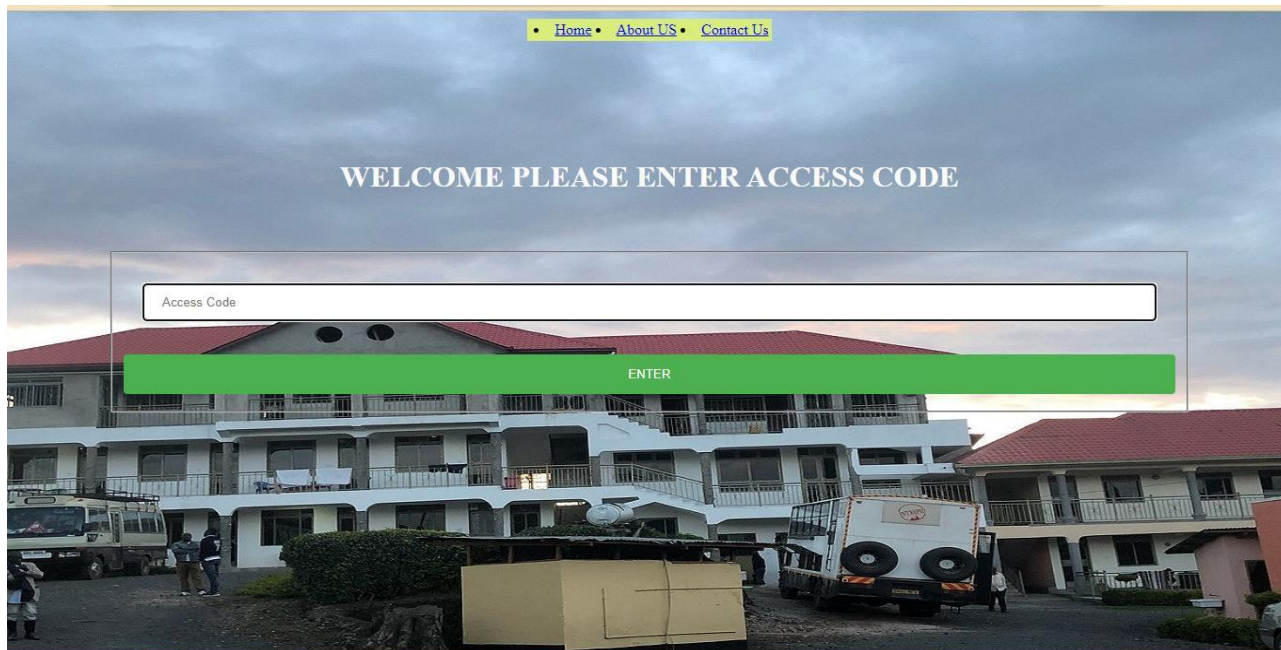


Figure 4: System Access Code Request Page

This is where the administrator is required to enter the access codes before entering email and the password in order to access the information of the Hotel.

Figure showing the registered clients in ODB

[Logout](#)
[Clients:](#)

Clients
Reset

: Display 15
Go

Sn	Client Id	Firstname	Surname	Country Of Origin	Checked In	Check Out	Payment Status	Booking Number	Room Number	Type Id
3	N001	KYLE	KAUNDA	GHANA	12-SEP-22		PAID	23	19	EXTENSIBLE
4	N002	BAKASHABAMUKAMA	PETER	UGANDA	21-OCT-22	10-NOV-22	PAID	12	45	FIXED CONTRACT
5	N025	HENRY	NORTHINGTON	DENMARK	12-JUN-22	05-JUL-22	PAID	34	12	FIXED CONTRACT

[Spread Sheet](#)
1 - 3

VIRUNGA

[Edit Application](#)
[Edit Page 1](#)
[Create](#)
[Session](#)
[Debug](#)
[Hide Edit Links](#)

Figure 5: A table showing a list of clients in Oracle Database Management System

Figure. The using the warp server to set up the database

Implementation

Having designed the Web-Based Tours and Travel management system, the researcher went on to test and validate in order to confirm the new system error free for implementation to be successful. The system has well designed attractive pages that can capture large numbers of users or clients that are interested in joining the Hotel. Implementation involved conversion from the old system to the new system. The system was tested on a local host 127.0.0.1 as the researcher's server connection and it worked well with no registered setbacks.

Conclusion of the findings

The researcher concluded that there is lack of knowledge of the electronic means of managing information by hotel, management. Thus, they rely on the manual system which the researcher found hectic, insecure and not effective on general terms.

Recommendations of the study

Clients are implored to use the web-based tours and travel management system as it is easily accessible from anywhere around the globe as long as one has internet connection. This will improve customer experience as booking becomes very easy and the client can see the services and their quality available at the hotel without needing to physically be present at the hotel.

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