

**KONNECT TRAVEL WEB BASED SYSTEM**

**A Project Proposal submitted in Partial fulfilment for the requirement of Bachelor of Information Technology and Bioinformatics**.

# **DECLARATION**

**Declaration by the candidate**

I hereby declare that the proposal KONNECT TRAVEL WEB BASED SYSTEMsubmitted to the School of Computer science and Bioinformatics, Kabarak University for partial fulfilment of the requirement for the award of Bachelor of Information Technologyis a result of original work carried out by me.

**Name: KENNEDY NGE’TICH**

Sign………………………………. Date…………………..

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# **ABSTRACT**

The Konnect travel web based system is aimed at automating all the activities and processes of a travel agency. Some functionalities of this system will be enabling tourists to book hotel reservations, access tour packages and also travel advisories among other functionalities. It will also facilitate interactions between travel agencies and tourists.

The tourist or the user will also be able to have full authority to edit his/her or her credentials. The Konnect travel web based system will provide a platform that will enable tourists to access the services in one package with having to travel miles and miles to access them.

The current system which is a traditional or manual system the tourist has to look for travel agencies or go about asking where they can be able to access tour places and packages this method has proven to be very unreliable and inconvenient because the country will end loosing tourists, tourism being the main country’s foreign earner thus leading to low economic growth

Unlike the other kinds of manual systems, the Konnect travel web based system has unique features like views ads, manage booking daily, weekly and monthly reports. It is cost-effective because the tourist won’t incur costs such as transportation cost and also it is less tedious because the tourist won’t travel to be able to access services and thus they can be able to enjoy their stay in the country and tour the country with ease.

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# **LIST OF ACRONYMNS**

CRS - computerized reservation system

IT information technology

GDP gross domestic product

GIS - Geographic Information System

NFC - New Field Communication

DBMS - database management system

LAMP (Linux, Apache, MySQL, and PHP)

PHP - Hypertext Preprocessor

**CHAPTER 1.0 INTRODUCTION**

In the existing system the tourist has to travel to a travelling agency in order to access services such as booking hotel reservations, accessing tour packages and travel advisories.

Konnect travel web based system will curb this menace by automating all activities and processes of a travelling agency and provide a convenient way for tourists to be to book hotel reservations, get travel advisories and packages for tour purposes. In the current system a tourist has to approach various agencies to find details of places and services that travel agencies offer. This often requires a lot of time and effort.

The tourist can be able to create an account providing his/her credentials and he/she has the authority from the administrator to be able change, delete or edit the credentials. When the tourist logs in to the system he/she can be able to access various functionalities or services that Konnect travel web based system offers like booking hotel reservations, tour packages and travel advisories.

The Konnect travel web based system provides approach skills to critically examine how a tourist visits and his/her ability to operate in an appropriate way when dealing with the challenges that tourists face locally such as accessing tour sites, tour advisories and many services that they may wish to access during their stay in the country.

The Konnect travel web based system offers various functionalities like hotel reservations. This contains details of the hotels in which the accommodation of the tourist will be done during the time span that the tourist opts to stay. The Konnect travel web based system provides administrator related functionality like from this module one can add tour packages and travel packages.

The Konnect travel web based system also facilitates the tourist with tour packages available for the tourist. Tourist can select packages from this module he/she can also check the details of various travel agencies. It also offers a functionality thatkeeps track of tourist records. The reports may be daily, monthly or early**.**

The need for the Konnect travel web based system is to develop or come up with a system that will be able to replace the current system which is a manual where the tourist has to cover miles and miles to be able to access services that many of tourist agencies offer. Not only does the Konnect travel web based system automate this activities and processes but also provides a platform that will promote forms of tourism that provide healthy interaction opportunities for tourists and cultures so that they enrich the tourism experience and build pride.

## 1.1 PROBLEM STATEMENT

To come with a web based system that can be able to automate activities or processes of a travel agencies effectively, the web based system ought to be efficient, simple and also a game changer that can solve the challenges faced in the current system. In the manual system tourists had to travel to the various travelling agencies to be able to access services such as booking room reservations, tour packages and travel advisories.

The current system is unreliable, tedious, costly and ineffective and thus there is a great need to be able to come up with a system that will be able to solve these menaces. A system that is reliable, effective, less expensive and very convenient in this current age where technology is growing very fast.

## 1.2 EXISTING SYSTEM

The current system which is a manual system where the tourist had to cover miles and miles to be able to access the services that the travel agencies offer which was very cumbersome and inefficient. In the existing system there is no mechanism where a tourist can be able to access this information in one package without visiting the nearest travelling agencies. Tourism being one of the country’s biggest income entries there is need to provide a mechanism or platform where tourists can be able to access all these services in one package.

It is very hard for the tourists to access this information because they have to travel to travel agencies bearing in mind they are new to the geographical area and thus they tend to get lost most of the time and by which the country ends up losing a lot of the tourists and which in turn leads to low country income. Through the years these manual or traditional system has been rendered very inefficient because of the challenges it faces and by these there is a need to come up with a system that will be able to solve these challenges.

### 1.2.1 LIMITATIONS OF CURRENT SYSTEM

The current system which is a manual system is very costly and inefficient compared to the proposed system, the tourist has to incur a lot of costs such as traveling costs to be able to access services such as booking rooms, tour packages and travel advisories. There is no platform here tourist can be able to access such information. It is very inefficient and inconvenient due to the challenges these tourists face in their quest for searching for relevant information regarding the several sites that the country has to showcase.

## 1.3 THE PROPOSED SYSTEM

The Konnect travel web based system will provide an efficient, convenient fast and easy way for tourists to be able to access all these services in one platform. The system is aimed at developing a web based system which be able to automate all processes and activities of a travelling agency.

This system will provide functionalities or features such as booking rooms, inquiries on tour packages, travel advisories. The administrator will be able to create accounts for the users. The users will also be able to change their passwords at any given time.

## 1.4 THE FEASIBILITY STUDY

### 1.4.1 Technical Feasibility

The technical feasibility requires that the following skills are required for the proposed system. One has to have knowledge in coding in HTML5 and PHP in the development of the web based system.

### 1.4.2 Economic Feasibility

In the development of the proposed system some funds were required in order to ensure the full working of the system.

### 1.4.3 Operational Feasibility

This analysis involves how it will work when it is deployed and the assessment of the environment in which it is implemented. People are usually resistant to change and a web based system is a major twist or transformation when it comes to solving challenges that the tourists face. The proposed web based system is efficient, convenient, simple and flexible for the users who are going to access these automated services and activities of a travel agency and thus many users will probably accept the system because of the many features and functionalities that it has.

### 1.4.4 Physical Feasibility

It involves study to establish the time responses of the new system being created. For example, how long will take for a tourist to be able to access the information that he/she wishes to access. It should be clearly establishing that the new system requirements where its accuracy would be precise.

**1.5 ADVANTAGES OF THE PROPOSED SYSTEM**

**Automation:**

The Konnect travel management system will automate activities and processes of a web based system.

**User-Friendly:**

The Konnect travel management system has a very user-friendly interface thus will be very easy for the tourist to use.

## 1.6 THE SCOPE OF THE PROJECT.

The proposed system will aid in day to day activities of a tourist in the country. The Konnect travel web based system will be able to automate all activities of a web based system. The web based system will fulfil all the functionalities as per the proposed system; it will enable the tourist to be able to book hotel reservations, get travel advisories a reminder for events created. The student notification application will also allow students to take short notes during lectures. Other features considered will include verification, validation, security user friendliness and simplicity.

## 1.7 ENTITIES IN THIS PROJECT:

* Tourist.

**Brief description on the Entities:**

**Tourist:** tourist has the full authority to create, edit, update and also delete his/her own credentials.

## 1.8 MODULES OF THE SYSTEM

1. **Administrator module**:

The module provides administrator related functionality like from this module one can add tour packages, travel packages. This module is developed for the admin of the website and the admin can add, delete, edit and view the data related to places travels, routes and booking from this module.

1. **Hotel module:**

It contains the details of the hotels in which the accommodation of the customer will be done during the tours.

1. **Packages module:**

User can view different tour packages available for the tourist. User can select packages from this module he can also check the details of various travel agencies.

**4. Report module:**

This module keeps track of customer’s records. The reports may be daily, monthly or early.

## 1.9 OBJECTIVES OF THE PROPOSED SYSTEM

### 1.9.1 THE MAIN OBJECTIVE

The main objective of the Konnect travel web based system is to automate all activities and processes of travel agencies.

### 1.9.2 SPECIFIC OBJECTIVES

1. To promote responsible and interesting tourism so that people can enjoy their holidays at the favorable places.
2. To provide a search platform where a tourist can find their tour places according to their choices.
3. To develop a system that will create and promote forms of tourism that provide healthy interaction opportunities for tourists and locals.
4. To come up with a system that will develop tourism with different cultures so that they enrich the tourism experience and build pride.

### 1.9.3 JUSTIFICATION OF THE PROJECT

The Konnect travel web based system aims at ensuring efficiency and accessibility of services to the tourists who tour our country by automating the activities and processes of a travelling agency. The world is growing to be a global village and countries need to keep up with the high tech world in order to grow its economy through tourism and other sectors. The web based system is very reliable and effective because a tourist or a user can be able to access all the services in one package from travel advisories to tour packages The web based system aims at providing an innovative efficient travel system by providing fast services between users and will enhance reliability by providing access to authorized users even in the future. The system should be modifiable depending on the changing needs of the users.

The web based requires the user to create an account in which he/she will be provided a user name and password by the administrator this is done for authentication purposes. This username and password will be required each time the user would want to login in to the system. Authentication of the user is also done to ensure security of all the credentials of the user stored in the based system.

The system also aims at saving cost where users will not rely on travel agencies and also written materials. This is desirable to aim for a system with a minimum cost subject to the condition that it must satisfy all the requirements for the user.

# **CHAPTER TWO:**

# **2.0 LITERATURE REVIEW**

A lot of tourism researchers have put ample emphasis on the use of the Internet in travel and tourism industry. Not only the buyers but suppliers too can get benefitted by the use of Internet. They can promote their offers on their portals and in turn, can sell the products at any time to any customer globally. They can also control the servers to display information on their services/products at an electronic speed (Ink pen, 1998; Law, 2000). A travel agent can see the benefits of using the Internet for promoting services that they offer in many ways as he experiences a significant drop in distribution costs, an increase in revenues, and an increased market share. In the same way, use of the Internet allows travellers to interact freely with the tourism suppliers for the necessary information, and to make themselves ultra-comfortable in order to access services offered by travelling agencies at any time and any place (Alameda and Sheldon, 2001).

But there are a lot of researchers, who think that extensive use of internet may very well, one day, be able to end the role of travel agents or for that matter, the travel agencies. Internet is being used as a disinter- mediating agent as it doesn’t allow the participation of a middlemen in the traveller-agent-destination/supplier network in the travel industry. But what these researchers ignore that travel agencies provide personal information and advice to the travellers and as far as their capability of giving advice and information doesn’t get diminished, they are not going to extinct in the aforementioned network. Furthermore, if they use internet as a facilitator and helper which can give them a lot of information absolutely free, their position in the market will get more strengthened.

Though the Internet is currently leading the way as the most used medium for tourism-purpose, only few decades ago, there wasn’t such a good system at the tourist’s disposal, the technological developments in the fields of automobiles, ships and aircrafts has fuelled the desire of tourists to roam across the globe. Sailors were the earliest tourists and their boats were the earliest means of transport and the invention of steam powered automobile, commercial steamers and first successful locomotive further provided several means of mass transport. But it was the invention of air transportation which completely changed the picture of international tourism during twentieth century. It marked a revolution in the field of international tourism. The distances between the nations now became a matter of few hours.

Over the years, our world has witnessed a tremendous growth in terms of use of computers, Internet and [computer](http://myassignmenthelp.com/computer_engineering_assignment_help.html) related technologies. IT services are leading the way everywhere. A computerized reservation system (CRS) is another major product of the ongoing IT revolution in the world. Tourism Industry has been benefitted in big way by the introduction of this new system. This system is mighty effective in its operations and very efficient. With the help of CRS, we can book a ticket for our favourite holiday destination from anywhere. We can check the status of our flight or train-whether its late or right time, seat availability in it, any extra value-added services etc. With the help of this system, we can also make reservations in hotels, theatres, various cultural and sporting events. In this way, IT has made a big change in the way a person books his/her tickets. Making reservations has become simpler now. This is only one product we’ve discussed here which is the invention of IT phenomenon; there is still plenty of IT products left to be discussed which have made our life very easy.

Travelling is a natural human habit. However, its intensity has increased in the last few decades owing mainly to the Technological revolutions in the last few decades and the consequent changes in the social systems. Today tourism has come a long way and grown into a habit rather than being a simple hobby. It’s become a billion-dollar business now. And to cater to its customers, they spend huge amount of money. It’s up to the customers now how well they know these marketers and their strategies. Today a traveller wants every information about his destination and thanks to internet they have this knowledge on their fingertips. Information like the social customs in the country, climate change, famous tourist spots, most suitable seasons for travelling are always on the radar of the travellers.

As we know that the consumers are at the centre of every marketing strategy, they are the ones who get most benefits from these marketing activities and for attracting such travellers, the most famous destination nations compete fiercely between each other. Every now and then, they come up with attractive packages containing very entertaining features. Travellers in turn, get the most of these offers and enjoy exceptionally good privileges. Since these activities generate a lot of revenue for these countries and extremely beneficial for their GDPs, these countries leave no stones unturned in their way to impress the prospective customers.

There are two types of information which a tourist generally needs- static and dynamic information. That information which does not change over the course of time is known as static information and it includes detailed information about location, climate, attraction features, history, facilities available, of a particular place. And the information which changes very rapidly and frequently is known as dynamic information. Information about airline, train and bus schedules, and accommodation units and current availability of such facilities is considered as dynamic. And since these information change pretty quickly, they must be stored on a real time basis. Information pertaining to air, rail and accommodation sectors is stored in the computer reservation systems.

Some few years back, the tourism industry across the globe was using quite a lot of things to spread the word in the media about their products and services. They were pamphlets, brochures, directories, guide books, etc. These marketing tools were used by every major destination nation. All these sources are being employed even today though their use is pretty discrete and are regarded the most inefficient and ineffective means of information.

Over the course of last few decades, the world has witnessed the application of computer and communication technologies in the field of tourism. After all the pondering over the integration of ITs into tourism sector, there is no denying to the fact that ITs have become very significant in the today’s competitive environment. Every industry is using ITs to gain a foothold in the market and tourism industry should be one of them. According to Ma, Baha’is and Song (2003), an exciting development in the field of information technology has completely changed the fabric of tourism industry. The practise of integrating IT to existing business is not only being practised in Europe and America but even in the developing areas of Asia like India, Sri Lanka, Thailand, Malaysia etc. (Ma, Baha’is and Song, 2003). According to Baha’is (1998), the introduction of information technology to the tourism industry has not only brought the opportunities but challenges too to it. If the tourism industry wants to achieve exponential growth and competitive advantage, they can use the tools and techniques of IT but if they are going to shun the use of IT, their identity could be lost forever as there are several other players in the industry who will try to cash in such a precarious situation (Baha’is, 1998). Further, tourism industry needs to show a sense of urgency in maintaining and improving the tourist information Wei (2011).

There are several advanced tools in the market like New Field Communication (NFC) technology through which they maintain their database. Travellers also use modern technologies like Geographic Information System (GIS) to update themselves and for tracing important locations across the popular tourist destinations. These extraordinary measures have been possible only because of the rapid advancement in the field of technology and this in turn suggest practising ITs across all the business units in an organization, particularly if it is a tours and travellers company for its sustenance in the market (Wei, 2011).

# **CHAPTER** **3.0 RESEARCH METHODOLOGY**

## 3.0 METHODOLOGY

Methodology is the systematic, theoretical analysis of the methods applied to a field of study. It comprises the theoretical analysis of the body of methods and principles associated with a branch of knowledge. Typically, it encompasses concepts such as paradigm, theoretical model, phases and quantitative or qualitative techniques.

## 3.1 DATA COLLECTION METHODS

I intend to use two methods to collect data: primary and secondary sources of data collection. The primary method included:

* Questionnaire.
* Interviews.

### 3.1.1 Questionnaire.

It’s a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents. Questionnaires are very convenient because of the following merits. They are cost efficient Questionnaires are one of [the most affordable ways](http://orangegrouprsmet.blogspot.bg/2010/11/advantages-disadvantages-of.html) to gather quantitative data. Especially online and mobile surveys have a very low cost and a generous reach. There’s no printing cost, you don’t have to hire surveyors to ask people the questions, not do you have to buy stamps to send out your paper survey. Still, no matter what type of survey you pick, it will be more affordable than outsourcing. It is also practical next to being expensive and flexible they can be targeted to groups of your choosing and managed in various ways. It will be able to offer a way to gather vast amount of information of data on the subject data.

I chose to use questionnaires because It’s quick and easy to collect results with online and mobile tools. This means that I can be able to gain insights in as little as 24 hours, depending on the scale and reach of the questionnaire. It will also allow me to gather information from a large audience. Online, I can literally distribute questions to anyone, anywhere in the world provided they have an internet connection. This means that for a relatively low cost, i can target a city or a country. Geography no longer stands in the way of market research. It’s important to be aware of cultural differences between people and countries when conducting worldwide research. It also provides Online and email surveys and [allows respondents to maintain anonymous](http://surveys.umn.edu/best-practices/conducting-the-survey-ensuring-security). Mail-in questionnaires also allow for complete invisibility, which maximizes comfort for those answering.

Even phone interviews are not face-to-face, thereby making it a more private communication. This concealment puts respondents at ease and encourages them to answer truthfully.

However, there is still a human touch to these phone interviews. Digital questionnaires give the best sense of anonymity and privacy. This type of questionnaire is great for all sorts of businesses and subject matter, and results in the most honest answers. I’ll be sure to get results that are more accurate when using this method.

Despite the fact that the method is very reliable it has its own drawbacks. Dishonesty the respondents might not be 100 percent truthful with their answers this may be so probably because of social desirability another drawback is difficulty in understanding and interpretation of data the trouble with not presenting questions to users face-to-face is that each may have different interpretations of your questions. Without someone to explain the questionnaire fully and ensure each individual has the same understanding, results can be subjective. Respondents may also have trouble grasping the meaning of some questions that may seem clear to the creator. This miscommunication can lead to skewed results. The best way I intend to combat this situation is to create simple questions that are easy to answer.

### 3.1.2 Interviews

This involved a face-to-face interaction with the visually-impaired. From this the researchers learnt of the challenges they had with the existing system. In this method of research, the researcher asks a standard set of questions and nothing more. It is a face-to-face interview which has a distinct advantage of enabling the researcher to establish rapport with potential participants and therefore gain their cooperation any misunderstanding and mistake can be rectified easily in an interview because the interviewer and interviewee physically present before the interview board. Relation between the interviewer and the interviewee can be developed through an interview. It increases mutual understanding and co-operation between the parties.

Interview can help to save time to select the best suitable candidate. Within a very short time communication can be accomplished with the interviewer, it is less costly than other process of communication. It is very simple, prompt and low cost method of communication. It also has its drawbacks such as. Incomplete process Suitable candidate cannot be selected by interview only. The written test is more important than the interview. In the case of the interview some confusion may be arisen in the future as, there is no evidence actually that have been discussed at interview. Lack of attention much attention is required for a good interview. But sometimes it is observed that both the interviewer and the interviewee are less attentive. That is why real information cannot be collected.

### 3.1.3 Observation

In this method of data collection, the researcher visits the proposed system and observes, records the flow of activities interested in. It is more likely used when the validity of data collected by other methods is questionable. Observation will therefore bring more insight on how the manual system.

## 3.2 Secondary Data

Secondary data refers to data that was collected by someone other than the user. are second hand information. So they may be relatively less accurate than the primary data. Secondary data are generally used when the time of enquiry is short. A secondary form of data that I intend to use is the internet sources this will involve the use of online magazines, newspapers, journals and even statistics from the road users. The merits of the internet sources is that it has information on various levels of study and also information on every subject imaginable

# **CHAPTER 4.0 ANALYSIS AND DESIGN**

## 4.1 CONTEXT DIAGRAM

TOURIST

Enter registration details

View packages and

Hotel information

Create, update or delete users

Enter travel packages

TRAVEL AGENT

SYSTEM

ADMINISTATOR

View booked packages

View users

View Booked Rooms

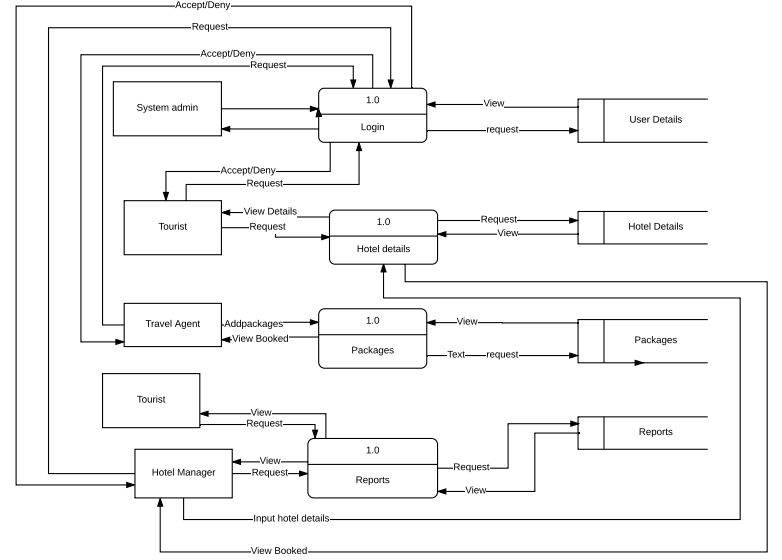
Add hotel information

Add free or empty rooms

Hotel MANAGER

#### FIGURE 4.1 Context Diagram

## 4.2 DATA FLOW DIAGRAM



#### FIGURE 4.2 Data Flow Diagram

## SYSTEM DESIGN

All input to the system will be done through the keyboard and other input devices. Data will be filled into forms which will automatically generate the reports which are the outputs of the system.

The system module provides administrator related functionality like from the administrator module one can add tour packages, travel packages. This module is developed for the admin of the website and the admin can add, delete, edit and view the data related to places travels, routes and booking from this module. The tourist or user can be able to get the details of the hotels in which the accommodation of the customer will be done during the tours. User can view different tour packages available for the tourist. User can select packages and he/she can also check the details of various travel agencies. It also provides reports and keeps track of customers records. The reports may be daily, monthly or early where the student can make changes on how and when notification will be provided been entered and also through print outs. This can be explained using context and data flow diagrams.

## 4.4 DATABASE DESIGN

A database is a collection of information that is organized so that can it can be easily accessed, managed and updated. In one view, databases can be classified according to types of content bibliographic, full-text, numeric images. This logical data model contains all the needed logical and physical design choices and physical storage parameters needed to generate a design in a data definition language, which can then be used to create a database. A fully attributed data model contains detailed attributes for each entity.

The term database design can be used to describe many different parts of the design of an overall database system. Principally, and most correctly, it can be thought of as the logical design of the base data structures used to store the data. In the relational model these are the tables and views. In an object database the entities and relationships map directly to object classes and named relationships. However, the term database design could also be used to apply to the overall process of designing, not just the base data structures, but also the forms and queries used as part of the overall database application within the database management system.

### 4.4.1 Advantages of a database management system

* **Controlling Data Redundancy**

In non-database systems each application program has its own private files. In this case, the duplicated copies of the same data are created in many places. In DBMS, all data of an organization is integrated into a single database file. The data is recorded in only one place in the database and it is not duplicated.

* **Sharing of Data**

In DBMS, data can be shared by authorized users of the organization. The database administrator manages the data and gives rights to users to access the data. Many users can be authorized to access the same piece of information simultaneously. The remote users can also share same data. Similarly, the data of same database can be shared between different application programs.

* **Data Consistency**

By controlling the data redundancy, the data consistency is obtained. If a data item appears only once, any update to its value has to be performed only once and the updated value is immediately available to all users. If the DBMS has controlled redundancy, the database system enforces consistency.

* **Integration of Data**

In Database management system, data in database is stored in tables. A single database contains multiple tables and relationships can be created between tables (or associated data entities). This makes easy to retrieve and update data.

* **Integration Constraints**

Integrity constraints or consistency rules can be applied to database so that the correct data can be entered into database. The constraints may be applied to data item within a single record or they may be applied to relationships between records.

* **Data Security**

Form is very important object of DBMS. You can create forms very easily and quickly in DBMS. Once a form is created, it can be used many times and it can be modified very easily. The created forms are also saved along with database and behave like a software component. A form provides very easy way (user-friendly) to enter data into database, edit data and display data from database. The non-technical users can also perform various operations on database through forms without going into technical details of a database.

* **Report Writers**

#### Most of the DBMSs provide the report writer tools used to create reports. The users can create very easily and quickly. Once a report is created, it can be used may times and it can be modified very easily. The created reports are also saved along with database and behave like a software component

* **Control Over Concurrency**

In a computer file-based system, if two users are allowed to access data simultaneously, it is possible that they will interfere with each other. For example, if both users attempt to perform update operation on the same record, then one may overwrite the values recorded by the other. Most database management systems have sub-systems to control the concurrency so that transactions are always recorded with accuracy.

* **Backup and Recovery Procedures**

In a computer file-based system, the user creates the backup of data regularly to protect the valuable data from damage due to failures to the computer system or application program. It is very time consuming method, if amount of data is large. Most of the DBMSs provide the 'backup and recovery' sub-systems that automatically create the backup of data and restore data if required.

**Data Independence**

The separation of data structure of database from the application program that uses the data is called data independence. In DBMS, you can easily change the structure of database without modifying the application program.

**Performance:** - The overall performance of the application is also dependent on the design of the database.

**Maintenance:** - This is by far the most important issue. A database should be well-designed so that it is easy to maintain.

## 4.5 PROPOSED TABLES

#### Table 4.1 **Login Table**

|  |  |  |
| --- | --- | --- |
| **Fieldname** | **Data type** | **Constraint** |
| Username | Varchar(25) | Primary Key |
| User\_type | Varchar(10) | Not null |
| Password | Varchar(25) | Not null |

#### Table 4.2 **Booking Table**

|  |  |  |
| --- | --- | --- |
| **Field Name** | **Data type** | **Constraints** |
| Booking\_id | Inter | Primary key |
| Tourist\_name | Varchar(50) | Not null |
| Package\_id | Integer | Not null |
| Package\_name | Varchar(20) | Not null |

#### Table 4.3 **Package Table**

|  |  |  |
| --- | --- | --- |
| **Field Name** | **Data type** | **Constraints** |
| Agent\_ Name | Varchar(25) | Not null |
| Agent\_Number | Varchar(50) | Not null |
| Package\_type | Varchar(20) | Not null |
| Tour\_place | Varchar(20) | Not null |
| Category | Varchar(50) | Not null |
| Tour\_place | Varchar(50) | Not null |
| Tour\_id | Numerical (18,0) | Primary key |

#### Table 4.4 **Question Table**

|  |  |  |
| --- | --- | --- |
| **Field Name** | **Data type** | **Constraints** |
| Question \_id | Integer | Not null |
| Option 1 | Character | Not null |
| Option 2 | Character | Not null |
| Option 3 | Character | Not null |
| Answer | Character | Not null |

## 4.6 INPUT AND OUTPUT DESIGN

**(i) Input-**

Input design is equally important for a system designer. This is because output from a system is regarded as the foremost determinant for defining the performance of a system. The output of the system greatly affects the input design of the system.

**(ii)Output: -**

This is how data from the particular forms are displayed or output.The proposed system is able to produce output on key stroke or on mouse click as printed out from a printer or can be seen on the monitor.

**FORMS TO BE USED**

**Input design**

. **Login form**

This is the form that enables users to access the system. Users will provide username and password.

**Reservation form**

This form allows the tourists to be able to access or book hotels at any given time.

**Package form**

Enables the user to book access different package types and choose the tour package of their choice

This form allows the human resource to post new posts or vacancies.

**Travel agency form**

This form allows tourists to view ads, gallery and also facilities them with a functionality of updating their profiles.

**OUTPUT REPORTS**

**Login reports**

Stores data of all users that log in to the system

**Reservation reports**

Stores data details for the hotels that the tourists have reserved

**Package reports**

Stores details about the package type and tour place

**Travel agency reports**

Stores details of the tourist

## 4.7 CODING

The Konnect travel System will be a web based built using HTML as the interface script and PHP as the logic, server site script and the connection string. MySQL will be used to develop the database for the backend system; also the system is hosted locally with the help of Wamp server application.

**Advantages of PHP**

**1: Simple and easy to learn**

PHP scripting is definitely one of the easiest, if not the easiest scripting language to learn and grasp for developers. This is partially due to the similarities PHP syntax has with C and Java. Even if the only knowledge of development that you have is with HTML, picking up PHP is still fairly easy. For developers just starting out, PHP is often the first scripting language they learn because it’s clear and easy to understand.

**2: Support**

PHP is so popular and widely used, finding help or documentation for PHP online is extremely easy. The best part is the support is free through forums, PDFs, blogs, and social media. The fact that its open source also contributes to the large support community of PHP and LAMP (Linux, Apache, MySQL, and PHP) in general PHP has the largest user base of any scripting language.

**3: Freedom**

When comparing PHP to a language such as ASPX, the level of freedom you get is far superior.PHP is open source. You can use any text editor in order to code PHP such as Notebook++, edit, IMac’s, Bluefish, or even just Notepad if you feel inclined. If you want to develop applications with ASPX, you’re going to be limited to Microsoft Visual Studio. Restrictions are never a good thing, especially with coding.

**4: Free**

There are no costs associated with using PHP, including updates. Keeping costs down is a goal of any business and developers as well. So the fact that you can code programs with PHP for free is a huge benefit that you won’t get with JPS, ASP, or other scripting languages that require paid hosting. There are no licenses, restrictions, or royalty fees involved at all. PHP is 100% free for anyone to use.

**5: Integration**

PHP is used for so many web applications and actually powers over 30% of the web. Systems such as MongoDB, Me cache, and Pusher all integrate with PHP. Almost any industry you can think of uses PHP applications in some fashion including banks, hospitals, government, and large corporations.

**6: Frameworks**

Almost every benefit of PHP seems to go back to the fact that the community is so large. The number of PHP frameworks available is even further proof of how strong the PHP community is. Whether you’re looking for database access libraries, session management, or code reuse, you will have no problem finding PHP frameworks to give you a helping hand.

**7: Easier to fix problems**

When it comes to web application development, you’re bound to run into issues and come across the occasional ‘fail’. But the benefit you get with PHP is that problems aren’t as difficult to find and fix as they are with other languages. This is because with each request, PHP cleans up and starts over. So an issue with one request will not necessarily disrupt another.

**8: Scalability**

In the world of IT, the word scalability is like gold. Whether you’re dealing with databases, hosting, or in this case, programming, scalability is never a bad thing. Due to the way PHP is built, you can easily increase your cluster size by adding more servers as your projects grow.

**9: Object Oriented**

PHP actually has the ability to call Java and Windows COM objects. In addition to this, you can create custom classes. Other classes can actually borrow from those custom classes as well which extends the capabilities of PHP even further.

**10: Speed**

Since PHP does not use a lot of a systems resources in order to run, it operates much faster than other scripting languages. Hosting PHP is also very easy and lot of [hosts](http://www.webnethosting.net/web-hosting) provide support for PHP. Even when used with other software, PHP still retains speed without slowing down other processes. Being that PHP is a mature language, it is also fairly stable because all the kinks have been worked out over the years.  
**4.8 Testing Procedure**

**White-Box Testing**

The testing procedure that will be used will be the white-box testing. White-box testing is the detailed investigation of internal logic and structure of the code. White-box testing is also called glass testing or open-box testing. In order to perform white-box testing on an application, a tester needs to know the internal workings of the code. The tester needs to have a look inside the source code and find out which unit/chunk of the code is behaving inappropriately. Internal software and code working should be known for this type of testing. Tests are based on coverage of code statements, branches, paths and conditions.

**Black-Box Testing**

The technique of testing without having any knowledge of the interior workings of the application is called black-box testing. The tester is oblivious to the system architecture and does not have access to the source code. Typically, while performing a black-box test, a tester will interact with the system's user interface by providing inputs and examining outputs without knowing how and where the inputs are worked upon.

**Unit Testing**

This type of testing is performed by developers before the setup is handed over to the testing team to formally execute the test cases. Unit testing is performed by the respective developers on the individual units of source code assigned areas. The developers use test data that is different from the test data of the quality assurance team.

The goal of unit testing is to isolate each part of the program and show that individual parts are correct in terms of requirements and functionality.

**Acceptance Testing**

This is arguably the most important type of testing, as it is conducted by the Quality Assurance Team who will gauge whether the application meets the intended specifications and satisfies the client’s requirement. The QA team will have a set of pre-written scenarios and test cases that will be used to test the application.

**Beta testing**

These will be done to give partial or full version of a software package for free to the potential customers with understanding that they will report errors revealed during usage

# **CHAPTER 5.0 SYSTEM REQUIREMENTS**

## 5.1. 5HARDWARE REQUIREMENTS

PROCESSOR : PENTIUM IV

PROCESSOR SPEED: 2.6 GHz

COPROCESSOR : BUILT IN

RAM : 2GB

HARD DISK : 80 GB

## 5.2 SOFTWARE REQUIREMENTS

FRONT END : PHP/HTML

BACK END : MYSQL SERVER

OPERATING SYSTEM : WINDOWS 10

VALIDATION : JAVASCRIPT

ENVIRONMENT : WAMP Server

## 5.3 BUDGET ESTIMATE

|  |  |
| --- | --- |
| **ITEM** | **AMOUNT IN KSHS** |
| Computer | 30,000 |
| Software-Operating system: windows -10 | 6000 |
| Storage device | 6000 |
| Data Collection | 3500 |
| Other expenses | 2000 |
| Travelling | 1000 |
| TOTAL | 48,500 |

## 

## 5.4 GANTT CHART

Adequate time has been allocated in order to come up with automated tourism management system reservation system and because of the available expertise in developing it the specified deadline is dimmed realistic. The time frame is as shown in the Gantt chart below.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | ACTIVITY | JAN | FEB | MAR | APRIL | MAY | JUNE | JULY | AUGUST |
| 1 | SOFTWARE  REQUIREMENT |  |  |  |  |  |  |  |  |
| 2 | LOGICAL DESIGN |  |  |  |  |  |  |  |  |
| 3 | PHYSICAL DESIGN |  |  |  |  |  |  |  |  |
| 4 | CODING |  |  |  |  |  |  |  |  |
| 5 | TESTING |  |  |  |  |  |  |  |  |
| 6 | DOCUMENTATION  AND  PRESENTATION |  |  |  |  |  |  |  |  |

Table 5 GANNT CHART

# **CHAPTER 6.0 CONCLUSION**

Konnect travel web based system that will be able to automate all activities and processes of travelling agency It is tedious for a customer to plan a certain activity and having it executed properly with accessing a platform where they can be able to access the services that they actually require. Not only does the Konnect travel management system offer a platform where one can be able to access it also offers interactivity between tourists and travel agencies thus ensuring better and adequate service. Thus it can be concluded Konnect travel web based system enables tourists to access the services that the travel agencies offer in one platform.

# 

# **APPENDIX**

**Questionnaire**

1. Which type of the system do you use to search travel destinations?

Manual Automatic

1. Do you often get detailed information about the above system?

Yes No

1. Is all the information found in one platform?

Yes No

1. What time does it take to get all the information about the travel destinations?

Very long time Average time Short time

1. Is the available information up to date?

Yes No

1. Evaluate the system in terms of speed.

Fast Slow

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