

# **DESIGN AND IMPLEMENTATION OF A TRAIN TICKETING SYSTEM FOR TOYLAND THEME PARK**

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**A GRADUATION PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENT FOR THE AWARD OF A DIPLOMA IN COMPUTER SCIENCE**

**AS REQUIRED BY  
KAMPALA INTERNATIONAL UNIVERSITY**

**AUGUST: 2009**

## DECLARATION

**OKABO RONALD** and **KISHMAT AMEGERE**, students at Kampala International University, do here by declare that this research is our original work and that has never been submitted to any University or any other institution of higher learning for any award.

Sign.....

Name: **OKABO RONALD**

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Date.....26/08/2009.....

Sign.....

Name: **KISHMAT AMEGERE**

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Date.....26/08/2009.....

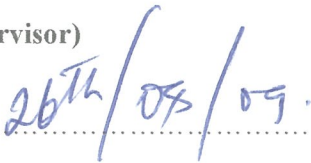
### APPROVAL

I hereby certify that this work was done under my supervision and approved for submission to the University.

Signed.....

Name: MR MUTAASA AHMED

(Supervisor)

Date.....

## DEDICATION

We give thanks to Almighty God for the life and protection that he has granted us. Our parents; Mr Idony Thomas, and Mrs Zaitun Yusuf, brothers; Okabo Samuel Job, Otwani Yusuf, Orone and Mbarak, Sisters; Mariam and Leila and cousins; Okello Eaton, Fatma & Najma, all our classmates and friends, on whose love and support we depend.

## ACKNOWLEDGEMENT

Thanks must be extended to, the almighty God for the guidance and protection throughout our course. My supervisor Mr. Mutaasa who has been instrumental and inspirational in the production of this work. Our parents Thomas and Mrs Zaitun Yusuf ,uncleDr .W.Olila,our entire coursemates,James,David,Kigongo ,Justus , and others who played a great role in financing our studies, special thanks to our families for the love and kindness showed to us during writing of project.

## TABLE OF CONTENTS

DECLARATION.....	i
APPROVAL.....	ii
DEDICATION.....	iii
ACKNOWLEDGEMENT.....	iv
TABLE OF CONTENTS.....	v
LIST OF FIGURES .....	viii
ABBREVIATIONS .....	ix
ABSTRACT.....	x
<b>CHAPTER ONE.....</b>	<b>1</b>
1.0 Introduction.....	1
1.1 Background.....	1
1.2 Research Question .....	1
1.3 Problem statement.....	1
1.4 Aim of the study.....	2
1.4.1 Specific objectives.....	2
1.5 Scope of the study.....	2
1.6 Research Methodology.....	2
1.7 Significance of the study .....	2
1.8 Limitation of the study.....	3
<b>CHAPTER TWO.....</b>	<b>4</b>
<b>LITERATURE REVIEW.....</b>	<b>4</b>

2.0 Introduction.....	4
2.1 Information Technology.....	4
2.2 Information System.....	4
2.2.1 Management Information System.....	5
2.2.2 Organization and Information Systems.....	6
2.2.4 System as planned Organizational change .....	7
2.2.5 Failures / Problems with MIS.....	9
<b>CHAPTER THREE.....</b>	<b>10</b>
3.0 System Analysis and Design.....	10
3.1 Introduction.....	10
3.2 Existing System.....	10
3.1.1 Feasibility Study.....	10
3.1.2 Technical feasibility.....	11
3.1.3 Economic feasibility.....	11
3.1.4 Benefits and beneficiaries.....	12
3.1.5 Operational feasibility.....	12
3.2 Personnel required.....	12
3.3.1 Application programmer.....	12
3.3.2 System Administrator.....	13
3.3.3 Computer instructor.....	13
3.4 Data Entry .....	13
3.5 Data source .....	13

<b>CHAPTER FOUR .....</b>	<b>14</b>
<b>System Design and Development.....</b>	<b>14</b>
4.1 Introduction.....	14
4.2 Design.....	14
4.2.1 Entities and Attributes.....	14
<b>CHAPTER FIVE.....</b>	<b>18</b>
<b>System Testing and Implementation.....</b>	<b>18</b>
5.0 System testing.....	18
5.1 Unit Testing.....	18
5.2 System Implementation .....	23
5.2.1 System Implementation Approach .....	23
5.3 Recommendations .....	24
5.4 Conclusion .....	25
<b>APPENDIX .....</b>	<b>26</b>
<b>REFERENCES.....</b>	<b>35</b>



## LIST OF FIGURES

Figure 1: FLOWCHART FOR BOARDING STATION FORM .....	15
Figure 2: FLOWCHART FOR THE DESTINATION .....	16
Figure 3: FLOWCHART FOR CUSTOMER DETAILS .....	17
Figure 4: BOARDING STATION FORM.....	19
Figure 5: DESTINATION STATION FORM.....	20
Figure 6: CUSTOMER DETAILS FORM.....	21
Figure 7: CURRENCY CONVERTER FORM.....	22
Figure 8: A report showing the output of data .....	23
Figure 9: Sample details of customers .....	24

## ABBREVIATIONS

<b>DML</b>	-	Data Manipulation Language
<b>ICT</b>	-	Information communication Technology
<b>IT</b>	-	Information Technology
<b>MIS</b>	-	Management Information System
<b>Ms</b>	-	Microsoft
<b>PC</b>	-	Personal Computer
<b>TTP</b>	-	Toyland Theme Park

## **ABSTRACT**

The Train Ticketing System is developed to show the effectiveness and efficiency of the park towards its customers who visit the park. It's developed with the aim of providing easy and quick access of the customers to these various attractions through the purchase of the tickets.

The database involves vital information about the parks transactions which are got from the customers who visit the site which so far facilitate in decision making process of the company.

# **CHAPTER ONE**

## **1.0 Introduction**

This project sought to explore the challenges of data processing and management in Toyland Theme Park with an aim of designing a Computerised Train Ticketing System that will help in tracking movements of customers (passengers) who visit the park during their holidays.

## **1.1 Background**

Toyland Park is a major theme park found in Uganda and is owned by Sophie Namakula. Due to its vast increase in size of its site and a range of attractions that the park offers, Customers have found it increasingly difficult to visit the majority of these attraction sites during their holiday stay.

Because of this problem, a series of train stations have been built to enable easy and quick access to these attractions sites for its customers through the purchase of these Train Tickets.

## **1.2 Research Question**

What information system is currently in use and how can the project designers develop a better Computerised Train Ticketing System for Toyland Theme Park

## **1.3 Problem statement**

With computers being ubiquitous as they are today, there's hardly any large business that does not rely extensively on their IT for purpose of planning, management and evaluation. However a company like Toyland Theme Park has been having problems with its customers who found it difficult in visiting various attractions because of the use of both manual and traditional management system in retrieval, storage and dissemination of data that concerns boarding of the train from whichever station. In this study a fully running system is designed where vast amount of data can be entered quickly and easily

onto a computer by a data processor, allowing faster information retrieval, data dissemination and quicker reflexes for data processing and analysis.

#### **1.4 Aim of the study**

The overall objective of this project is to ensure effective and efficient management of Information and Transportation of customers by designing a Computerised Train Ticketing System in Toyland Theme Park.

##### **1.4.1 Specific objectives**

1. To record names of customers boarding the train.
2. To record both the boarding and destination stations.
3. To record the time of departure and arrival.
4. To record the amount of money paid by passengers and the discount given to a family on Board

#### **1.5 Scope of the study**

This study will focus mainly on ticket services, taking into account all the passengers who board the train.

#### **1.6 Research Methodology**

This refers to the techniques the project designer used to gather data tha facilitated the design and development of the new system.

The project designer gathered all the necessary information by consultation of various documents within the Institute and the Internet.

#### **1.7 Significance of the study**

- It will help Train Company in fast data processing, analysis and generation of statistical reports for decision making.
- This study will assist Toyland Theme Park company to manage vast amount of data that concerns ticketing services

- The study will help the company to assess the performance of their business based on the information generated from the transport management system and smoothen their activities.

### **1.8 Limitation of the Study.**

- The project research relied mainly on consultation method documentation and the Internet, therefore achieving accuracy was a challenge. The project designers overcame this by meeting professionals.
- Financial and time constraints were curbed by insistence on convenience during the execution of the project.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This chapter took into consideration the concept and magnitude of Information Systems, Information Technology, the structure and effects of Information Systems in relation to an organization as it addresses the failures of Management Information System in designing a Train Ticketing System of Toyland Theme Park.

#### **2.1 Information Technology**

Information Technology includes all matters concerned with the furtherance of computer science and technology and with the design, development, installation, and implementation of Information System and Applications.

(Avgyris.C.SanDiego State University 1988)

Information Technology architecture is an integrated frame work for acquiring and involving IT to achieve strategic goals. It has both logical and technical components. Logical components include mission, functional and Information requirments, system configurations, and Information flows. Technical components include IT standards and rules that will be used to implement the Logical architecture.

(Buss, Martin D.J [www.ichnet.org/glossary.htm](http://www.ichnet.org/glossary.htm))

#### **2.2 Information System**

Information System can be defined technically as a set of interrelated components that collect (or retrieve), process, store, and distribute ifnformation to support decision making and control in an Organisation. In addition to supporting decision making, coordination, and control, Information Systems may also help managers and workers analyse problems, visualise complex subjects, and create new products.

(Page 99 Managing Digital Firms, 7<sup>th</sup> edition by Kenneth Laudon)

Information system means an interconnected set of information resources under the same direct management control that shares common functionality. A system normally includes hardware, software, information, data, applications, communications and people. ([ostinato.stanford.edu/hipaa-feedback/definaitons.html](http://ostinato.stanford.edu/hipaa-feedback/definaitons.html))

### 2.2.1 Management Information System

Management Information system is a set of interrelated components that collect, process, store and distribute to support decision making at management level.

Management information system is usually used within large organizations and is generally understood as an integrated, user-machine system that converts data from internal and external sources into information that provides a full range of functions.

These functions are associated with the design, development, enhancement and support of the information systems communications, hardware and software applications.

It will communicate this information to managers at all levels, in all functions, to enable them to make timely and effective decisions for planning, directing and controlling the activities for which they are responsible. An organization may have dozens of different information systems, some of which are useful for day-to-day operational decisions, and some of which are used in making tactical and strategic decisions. MIS is responsible for managing and administrating information as well as developing and managing all networking and computer resources.

According to **Jon Sutherland**, therefore the quality of an MIS depends on the design and what is required, which is awareness and understanding of the key principles and functions.

In a recent survey by **Heathcote (1998)**, statistics show that both within the UK and USA existing MIS, often using expensive, advanced equipment, have had relatively little success in providing management with the information it needs. It is a valuable aspect of every business, as it looks at what types of computer systems are needed and adapts them for their requirements.

To be successful a MIS must be designed and operated with some due regard to the organizational and behavioral principles as well as the technical factors.



### 2.2.2 Organizations and Information Systems

Information systems and organizations influence one another. On the one hand, information systems must be aligned with the organization to provide information that important groups within the organization need. On the other hand, the organization must be aware of and open itself to the influences of information systems in order to benefit from new technologies. There are two definitions associated with the organization.

#### **Organization (technical definition)**

A stable formal and social structure that takes resources from the environment and processes them to produce outputs.

#### **Organization (behavioral definition)**

A collection of rights, privileges, obligations, and responsibilities that are delicately balanced over a period of time through conflict and conflict resolution.

The interaction between information technology and organizations is very complex and is influenced by a great many mediating factors, including the organization's structure, standard operating procedures, politics, culture, surrounding environment, and management decisions. Managers must be aware that information systems can markedly alter life in the organization. They cannot successfully design new systems or understand existing systems without understanding organizations. Managers decide what systems will be built, what they will do, how they will be implemented, and so forth. Sometimes, however, the outcomes are the result of pure chance and of both good and bad luck.

This definition of organizations is powerful and simple, but it is not very descriptive or even predictive of real-world organizations. A more realistic behavioral definition of an organization is that it is a collection of rights, privileges, obligations, and responsibilities that are delicately balanced over a period of time through conflict and conflict resolution.

In this behavioral view of the firm, people who work in organizations develop customary ways of working; they gain attachments to existing relationships and they make

arrangements with subordinates and superiors about how work will be done, how much work will be done, and under what conditions.

### **2.2.3 How do these definitions of organizations relate to information system technology?**

A technical view of organizations encourages us to focus on the way inputs are combined into outputs when technology changes are introduced into the company. The firm is seen as infinitely malleable, with capital and labor substituting for each other quite easily. But the more realistic behavioral definition of an organization suggests that building new information systems or rebuilding old ones involves much more than a technical rearrangement of machines or workers that some information systems change the organizational balance of rights, privileges, obligations, responsibilities, and feelings that have been established over a long period of time.

Technological change requires changes in who owns and controls information, who has the right to access and update that information, and who makes decisions about whom, when, and how. For instance, Procter and Gamble's collaborative planning and forecasting system provides both retailers and Procter and Gamble managers with more information to make production decisions. This more complex view forces us to look at the way work is designed and the procedures that are used to achieve outputs.

The technical and behavioral definitions of organizations are not contradictory. Indeed, they complement each other: The technical definition tells us how thousands of firms in competitive markets combine capital, labor, and information technology, whereas the behavioral model takes us inside the individual firm to see how that technology affects the organization's inner workings. However each of these definitions of organizations can help explain the relationship between information systems and organizations.

### **2.2.4 Systems as Planned Organizational Change**

Here we emphasize that an information system is a socio-technical entity, an arrangement of both technical and social elements. The introduction of a new information system

involves much more than new hardware and software. It also includes changes in jobs, skills, management, and organization. In the socio-technical philosophy, one cannot install new technology without considering the people who must work with it. When we design a new information system, we are redesigning the organization.

One important thing to know about building a new information system is that this process is one kind of planned organizational change. System builders must understand how a system will affect the organization as a whole, focusing particularly on organizational conflict and changes in the locus of decision making. Builders must also consider how the nature of work groups will change under the new system. Systems can be technical successes but organizational failures, because of a failure in the social and political process of building the system. Analysts and designers are responsible for ensuring that key members of the organization participate in the design process and are permitted to influence the system's ultimate shape.

New information systems can be powerful instruments for organizational change, enabling organizations to redesign their structure, scope, power relationships, workflows, products, and services

### **2.2.5 Failures/Problems with MIS**

Management Information Systems are generally extremely complex and implementation tends to involve dozens of people from both within and outside the organization. The types of problems that occur are as follows:

- Lack of management involved with the design.
- Lack of management knowledge of ICT systems and their capabilities.
- Undue concentration on low-level data processing.
- Inadequate analysis.
- Inappropriate emphasis of the computer system.
- Lack of team work.
- Lack of management support.

- Cost of maintenance.
- Lack of professional standards. It is also costly to set up and maintain although in the long run it is feasible.

Other tasks include maintaining a log of assets on all computer systems, performing routine maintenance on both hardware and software, keeping all operating systems and programs updated with the latest software, regular data back up procedures, network administrative functions such as user accounts, maintaining security of systems.

There are many benefits and characteristics for an organization because the MIS is useful at every level within the organization. This is so that the design, implementation and operation of the MIS are the result of informed decisions and judgments rather than haphazard development without real regard to organizational requirements. The key features are:

- Producing information of a sophisticated nature;
- Providing information at a crucial period of decision making;
- Aiding in the decision making process;

Processing information stored within databases. This means that there needs to be a close collaboration between the programmers and the managers who need to access the information. Here are some of them:

- It is flexible, allowing many ways of analyzing data and evaluating information;
- It is capable of supporting a range of skills and knowledge.
- If a task is interrupted, for whatever reason, it can be resumed at a later time.
- It is able to capture and report specific information rather than unnecessary information overload.

## **CHAPTER THREE**

### **SYSTEM ANALYSIS AND DESIGN**

#### **3.0 Introduction**

This chapter concentrates mainly on the system analysis, design, data integrity and data processing of the system.

#### **3.1 Existing System**

Toyland Theme Park was initially a park with a very small site but due to the vast increase of its size now and the range of attractions; customers have found it increasingly difficult to visit the majority of these attractions during their holiday stay and to reduce this Toyland has built a series of train stations to enable easy and quick access to these attractions for its customers through the purchase of train tickets to these various hotels, dinner, theme parks which will be achieved through the design and implementation of a Ticketing System.

##### **Expectation of the Ticket System**

- Enable easy and quick access to the various attractions of its customers through the purchase of the tickets.
- Provide a systematic and computerized train enquiry and booking system
- Prevent loss of financial and other confidential documents.
- Provide the management with precise and accurate information necessary for decision making.

##### **3.1.1 Feasibility study**

The project designers believe that a system is considered feasible if it is manageable.

Under this project the following feasibility aspects were put into consideration;

- Technical feasibility
- Economic feasibility
- Operational feasibility

### **3.1.2 Technical feasibility**

This determines whether the project activities can be accomplished with the available equipments, software technology and the available personnel? If new technology is required, what is the likelihood that it can be developed? The following hardware requirements below were recommended to Toyland Theme Park.

#### **Hardware requirements**

- Memory capacity 256MB RAM
- Hard disk 40 GB
- Pentium 4 processor supporting front side bus (FSB) speed.
- LCD monitor 17 inch
- UPS

#### **Software requirements**

The project designer affirms that the system will operate using Visual basic application and Microsoft Excel on windows XP plat form.

The user interface and form will be designed using;

- Visual basic application
- Microsoft Excelas an ideal choice.

#### **Technical know- how**

Basic knowledge of these key areas is a mandate

- Knowledge on Visual basic 6.0
- Knowledge on Microsoft Excel

### **3.1.3 Economic feasibility**

This was meant to determine whether there are sufficient benefits to make the cost acceptable. The project designers discovered that there are sufficient tangible and non tangible benefits in creating this ticketing system.

#### **3.1.4 Benefits and beneficiaries**

- TTP train ticketing system will provide insightful information to the management, staff and users which will enable them come up with policies that improve the services offered.
- TTP ticketing system intends to provide better control of information. This intends to minimize the financial losses incurred due to disorganized information.
- TTP train ticketing system will reduce the waiting period for both passengers / customers during the booking period.
- Ensure confidentiality of financial information that's to say no mysterious loss of financial documents and thus improved services and the general Park's work flow.

#### **3.1.5 Operational feasibility**

##### **System user**

The users are important in a computer system that's to say an information system is no better than its users. The project designers endeavored to ensure that the proposed information system does not receive resistance from the users. Once the Train Ticketing System is developed and fully functional, a positive response is highly expected from the users.

The users are acquainted with the fundamentals of Ms Excel and Visual Basic 6.0.

#### **3.2 Personnel required**

Designing a system demands the involvement of different kinds of people whose joint contribution create excellent results, the required personnel include the Application programmers, system administrators, computer instructors.

##### **3.3.1 Application programmer**

These are professionals who interact with the database system by use of the data manipulation language.

A DML is one that provides a set of operation like delete, search, and insert which are very vital during program testing. Application programmer with atleast a degree in computer science or IT from a recognised University is recommended to handle this system.

### **3.3.2 System Administrator.**

The system administrator has the overall control of the system and decides who should have access to the database and who should not.

### **3.3.3 Computer instructor**

These take the responsibility of teaching the staff how to interact with the new system in order to achieve their required objectives.

## **3.4 Data entry**

Data gathered is entered through data entry forms which are part of the system. These data entry forms ensure high level of data validity as well as the database itself.

## **3.5 Data sources**

The sources of the data were mainly from the documents for example text books from Kampala International University Library, websites professionals in the field of IT which acted as reliable sources from which data about Train Ticketing Systems (TTS) was got.



## **CHAPTER FOUR**

### **SYSTEM DESIGN AND DEVELOPMENT**

#### **4.0 Introduction**

Under this chapter, the project designer shows how the system will meet the requirements identified during system analysis. This stage is normally referred to as the logic and physical design stage.

#### **4.1 Design**

The logical design represents the system using flow diagrams, table and forms. Basically the tables and forms were designed using Ms Excel and Visual Basic 6.0. Ms Excel was used to establish data source for the application. Preferred colours were pink and cream.

##### **4.1.1 Entities and Attributes**

###### **Boarding**

Customer Name

Customer Address

Station Number

Station Name

###### **Customer Details**

Number of Adults

Number of Children

Number of Dependants

###### **Destination**

Station Number

Station Name

Number of stops

FLOWCHART FOR BOARDING STATION FORM

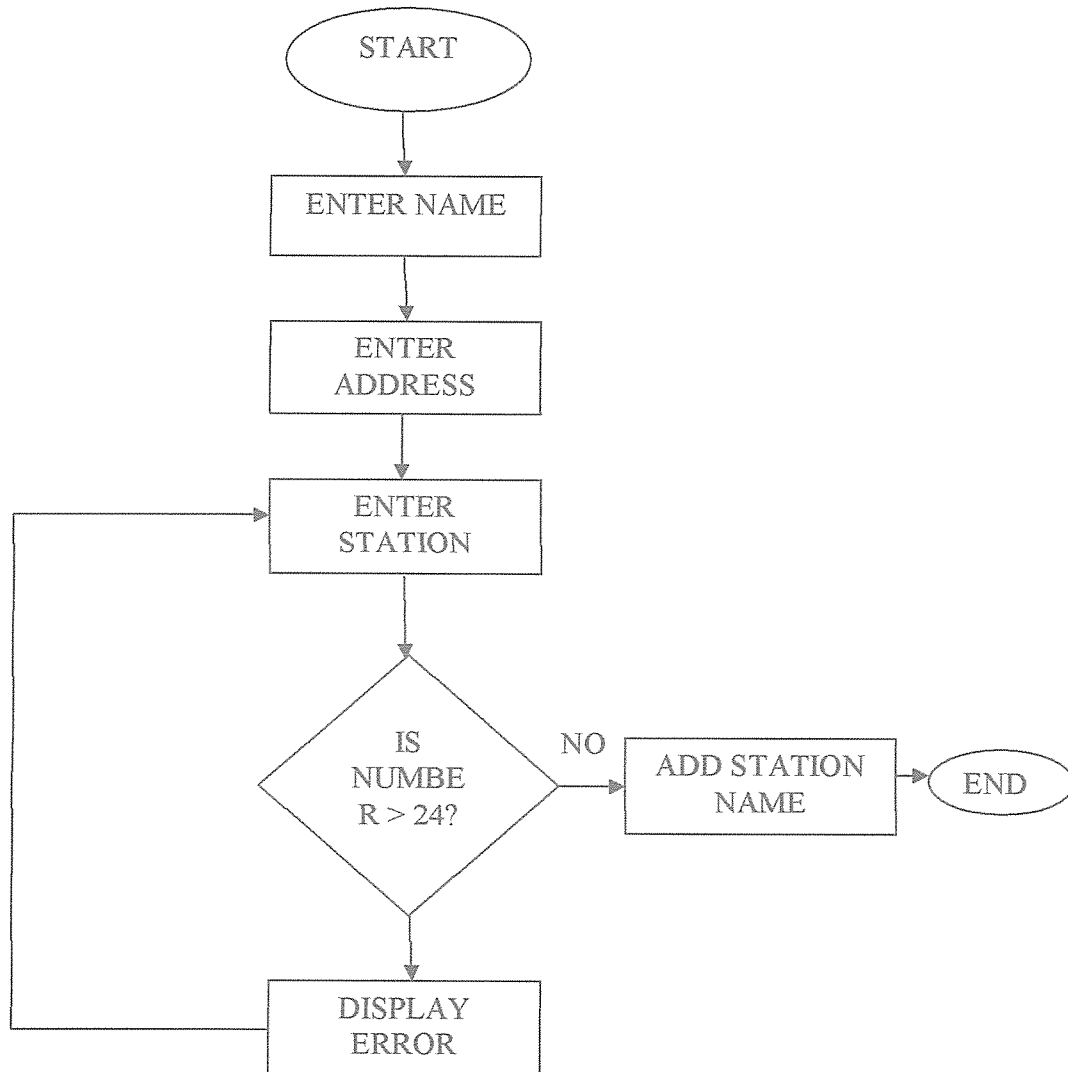


Figure 1

### FLOWCHART FOR THE DESTINATION

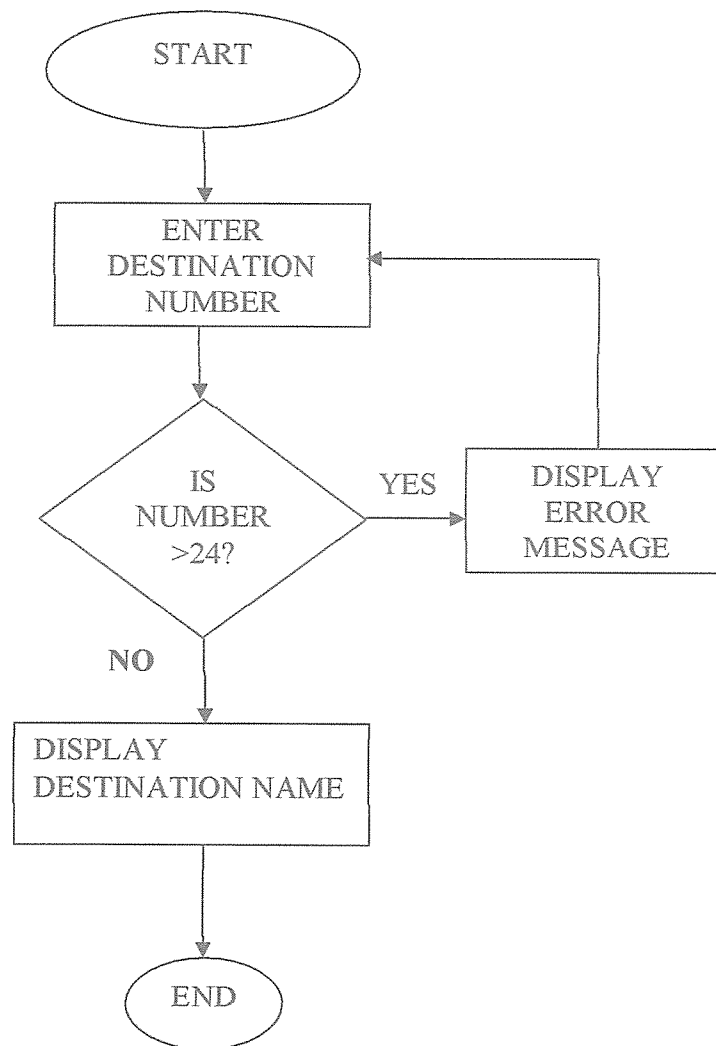


Figure 2

FLOWCHART FOR CUSTOMER DETAILS

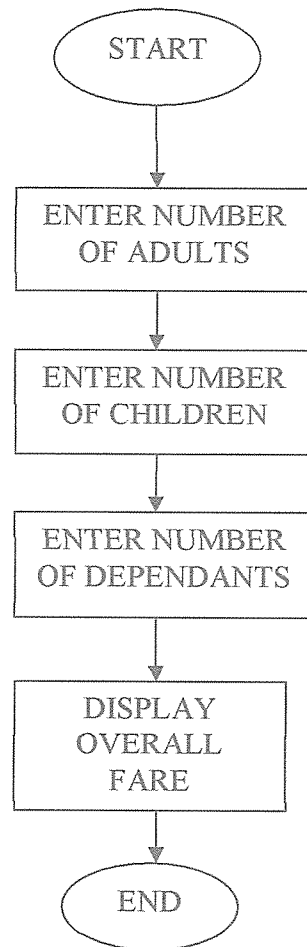


Figure 3

## **CHAPTER FIVE**

### **SYSTEM TESTING AND IMPLEMENTATION**

#### **5.0 System Testing.**

The TTP Train Ticketing System was used experimentally to ensure that the system does not fail.

To ensure that the system runs according to its specifications, special test data was used for processing and the results examined.

#### **5.1 Unit Testing**

Unit testing was preferred ahead of system testing, individual parts of the program were tested using “made up / sample data and a positive response was received for example the command buttons showed consistency without any error reports, program response time was good thus rendering the test phase a success as seen in the sample designs below

The figures below show how successfully data was entered by a user in the form.

### BOARDING STATION FORM

TRAIN TICKETING SYSTEM																																																																																													
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7	CLOCK TOWER																																																																																												
8	OLD TAXI PARK																																																																																												
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Figure 4

## DESTINATION STATION FORM

TRAIN TICKETING SYSTEM

### TOYLAND THEME PARK TRAIN TICKETING SYSTEM

NUMBER	STATION NAME
1	GABBA BEACH
2	BUNGA STAGE
3	SOYA VALLEY FARM
4	KANSANGA AVENUE
5	KABALAGALA WINERY
6	NSAMBYA PRIMARY SCHOOL
7	CLOCK TOWER
8	OLD TAXI PARK
9	CITY SQUARE HOTEL
10	NAKASERO LEISURE PARK
11	SHERATON GARDENS
12	KITANTE HOTEL
13	CHUGAM WILD WEST BONANZA
14	GARDEN CITY WETLAND
15	JINJA ROUND ABOUT
16	MEDIVAL TIMES
17	PIRATES DINNER ADVENT
18	SEA WORLD
19	JAZZEE NITE CLUB
20	KNOTTS BERY FARM
21	BUSCH GARDENS
22	ARABIAN NIGHTS
23	SWAT CLIFF ROAD
24	CROSS GATES STATION AND HOTEL

BOARDING
DESTINATION
CUSTOMER DETAILS

**DESTINATION STATION NUMBER**

**STATION NAME**

**NUMBER OF STOPS**

**Note**

Select the destination number from the list on the left and click the search button. Numbers range between 1 - 24

NEXT RECORD
DELETE RECORD
NEW DATA
ADD

	DESTINATION NO	DESTINATION NAME	NO OF STOPS
	19	Jazzee Nite club	5
*			

EXIT
CURRENCY CONVERTER
VIEW REPORT
PREVIEW EXCEL FILE

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**Figure 5**



## CURRENCY CONVERTER FORM

TRAIN TICKETING SYSTEM

### TOYLAND THEME PARK TRAIN TICKETING SYSTEM

NUMBER	STATION NAME
1	GARRA BEACH
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	ARABIAN NIGHTS
23	SWAT CLIFF ROAD
24	CROSS GATES STATION AND HOTEL

BOARDING	DESTINATION	CUSTOMER DETAILS
DESCRIPTION	NO. OF PERSONS	FARE PER PERSON    TOTAL
		25 shs    75
		50 shs    100
		25 shs    50
		<b>SUB TOTAL</b> 225
		<b>TOTAL FARE PAID</b> 168.75
<div style="display: flex; justify-content: space-around;"> <span>DELETE RECORD</span> <span>NEW DATA</span> <span>ADD</span> </div>		
Dependant:		TTL adults fare    TTL childrens
		75    100

EXIT
CURRENCY CONVERTER
VIEW REPORT
PREVIEW EXCEL FILE

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**Figure 7**

The TTP Train Ticketing system was considered functional and therefore qualified for implementation phase.

### 5.2 System Implementation.

After a number of tests, the project designers of TTP Train Ticketing System recommended the system to be put into use which involved converting the hardware, software, and files to meet the requirement of the new system and training users.



Fore instance new PCs were acquired that meet the system requirements, aplications that worked on the old system were made to work on the new system and the databases updated.

### 5.2.1 System Implementation Approach

The project designners recommended the use of parallel implementation where by both the old and the new system are used comparably.

Below is a Report of the final output of data entered in the database

**TRAIN TICKETING SYSTEM**

**BOARDED AT:**

Name	Kishinet	Address	335
------	----------	---------	-----

Station Number: 2      Station Name: Bunga Stage

Date: 9/21/2009

**TRAVELING TO:**

Destination No: 9      Destination Name: City square Hotel

Number of stops: 7

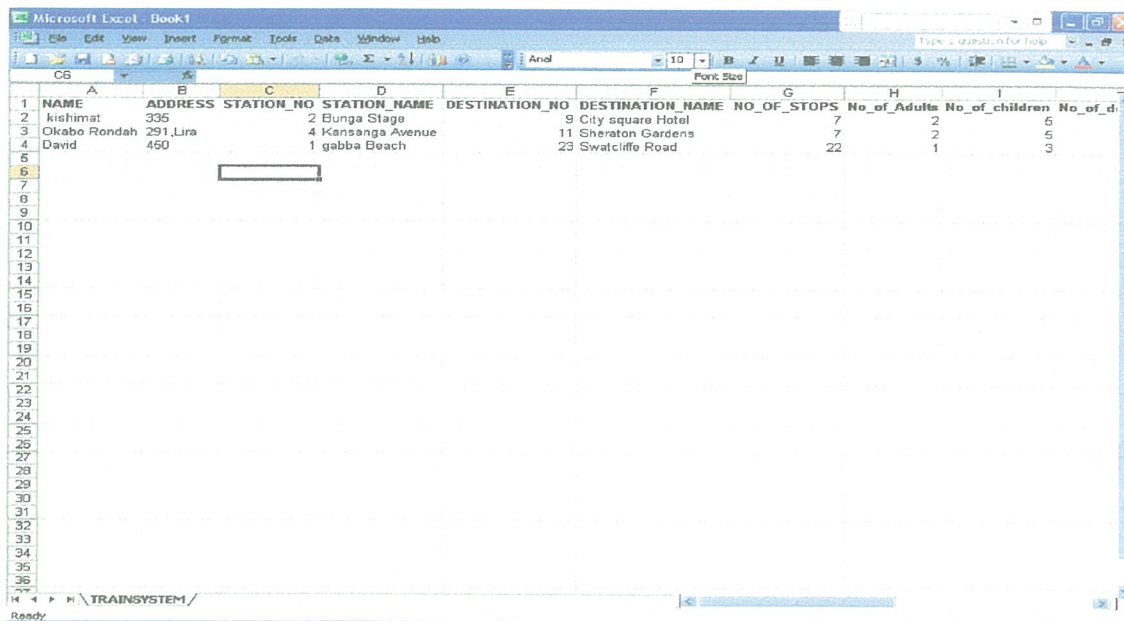
Description	No of Persons	fare per person	line-total
NUMBER_OF_ADULTS:	2	25 shs	50
NUMBER_OF_CHILDREN:	5	50 shs	250
NUMBER_OF_DEPENDANTS:	3	25 shs	75
		<b>Sub Total:</b>	375
<b>Total No of Persons:</b>	10	<b>Total Fare Paid:</b>	281.25

Discount charged: 26 shs

Pages: 1

Figure 8

**Database showing the sample details of customers entered.**



	A	B	C	D	E	F	G	H	I	J
	NAME	ADDRESS	STATION_NO	STATION_NAME	DESTINATION_NO	DESTINATION_NAME	NO_OF_STOPS	No_of_Adults	No_of_children	No_of_d
2	Kishimat	335	2	Bunga Stage	9	City square Hotel	7	2		6
3	Okabo Rondah	291 Lira	4	Kansanga Avenue	11	Sheraton Gardens	7	2		5
4	David	450	1	gabba Beach	23	Swatcliffe Road	22	1		3
5										
6										
7										
8										
9										
10										
11										
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28										
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30										
31										
32										
33										
34										
35										
36										

**Figure 9**

### 5.3 Recommendations

The project designers recommended the following requirements for the system

#### Hardware Requirements

- Memory capacity 256MB RAM
- Hard disk 40GB
- Pentium 4 processor
- LCD monitor 17 inch
- UPS

#### Software Requirements

During installation, the database should be installed first to allow easy access and viewing of the database before the final installation of the software

## 5.4 CONCLUSION

There is truly need to implement the new system because of its added advantages to the customers and the theme park staff / administration at large. Implementation of this system is not easy because of the expenses to be incurred by the company / park in acquiring the system's requirements and specification for efficiency.

The train ticketing system also helps in provision of employments to people who have knowledge of information system in general which is very helpful to the company because it will solve the problem of unemployment to some extent and encouragement to the development of information technology country wide.

## APPENDICES

In the appendix is a sample of codes of what I used to design my system so as to make it function with connectivity to the Excel Database.

```
Private Sub Command1_Click()  
'declare variables for storing name and address  
Dim strName As String  
Dim strAddress As String  
strName = txtName.Text  
strAddress = txtAddress.Text  
'test whether values entered by user  
'much the station numbers  
If Val(Text3.Text) = 1 Then  
Label5.Caption = "gabba Beach"  
Label34.FontBold = True  
Else  
Label34.FontBold = False  
End If  
If Val(Text3.Text) = 2 Then  
Label5.Caption = "Bunga Stage"  
Label35.FontBold = True  
Else  
Label35.FontBold = False  
End If  
If Val(Text3.Text) = 3 Then  
Label5.Caption = "Soya Valley Farm"  
Label36.FontBold = True  
Else  
Label36.FontBold = False  
End If  
If Val(Text3.Text) = 4 Then  
Label5.Caption = "Kansanga Avenue"  
Label37.FontBold = True  
Else  
Label37.FontBold = False  
End If  
If Val(Text3.Text) = 5 Then  
Label5.Caption = "Kabalagala Winery"  
Label38.FontBold = True  
Else  
Label38.FontBold = False  
End If
```

```

If Val(Text3.Text) = 6 Then
Label5.Caption = "Nsambya Primary School"
Label39.FontBold = True
Else
Label39.FontBold = False
End If
If Val(Text3.Text) = 7 Then
Label5.Caption = "Clock Tower"
Label40.FontBold = True
Else
Label40.FontBold = False
End If
If Val(Text3.Text) = 8 Then
Label5.Caption = "Old Taxi Park"
Label41.FontBold = True
Else
Label41.FontBold = False
End If
If Val(Text3.Text) = 9 Then
Label5.Caption = "City square Hotel"
Label42.FontBold = True
Else
Label42.FontBold = False
End If
If Val(Text3.Text) = 10 Then
Label5.Caption = "Nakasero Leisure Park"
Label43.FontBold = True
Else
Label43.FontBold = False
End If
If Val(Text3.Text) = 11 Then
Label5.Caption = "Sheraton Gardens"
Label44.FontBold = True
Else
Label44.FontBold = False
End If
If Val(Text3.Text) = 12 Then
Label5.Caption = "Kitante Hotel"
Label45.FontBold = True
Else
Label45.FontBold = False
End If
If Val(Text3.Text) = 13 Then
Label5.Caption = "Chogam Wild West Bonanza"
Label46.FontBold = True
Else

```

```

Label46.FontBold = False
End If
If Val(Text3.Text) = 14 Then
Label5.Caption = "Garden city wetlands"
Label47.FontBold = True
Else
Label47.FontBold = False
End If
If Val(Text3.Text) = 15 Then
Label5.Caption = "Jinja Round About"
Label48.FontBold = True
Else
Label48.FontBold = False
End If
If Val(Text3.Text) = 16 Then
Label5.Caption = "Medieval Times"
Label49.FontBold = True
Else
Label49.FontBold = False
End If
If Val(Text3.Text) = 17 Then
Label5.Caption = "Pirates dinner Adventure"
Label50.FontBold = True
Else
Label50.FontBold = False
End If
If Val(Text3.Text) = 18 Then
Label5.Caption = "Sea World"
Label51.FontBold = True
Else
Label51.FontBold = False
End If
If Val(Text3.Text) = 19 Then
Label5.Caption = "Jazzee Nite club"
Label52.FontBold = True
Else
Label52.FontBold = False
End If
If Val(Text3.Text) = 20 Then
Label5.Caption = "Knott's Berry Farm"
Label53.FontBold = True
Else
Label53.FontBold = False
End If
If Val(Text3.Text) = 21 Then
Label5.Caption = "Busch Gardens"

```

```

Label54.FontBold = True
Else
Label54.FontBold = False
End If
If Val(Text3.Text) = 22 Then
Label5.Caption = "Arabian nights"
Label55.FontBold = True
Else
Label55.FontBold = False
End If
If Val(Text3.Text) = 23 Then
Label5.Caption = "Swatcliffe Road"
Label56.FontBold = True
Else
Label56.FontBold = False
End If
If Val(Text3.Text) = 24 Then
Label5.Caption = "Cross Gates Station & Hotel"
Label57.FontBold = True
Else
Label57.FontBold = False
End If
End Sub

```

```

Private Sub Command10_Click()
'display report
DataReport1.Show
End Sub

```

```

Private Sub Command11_Click()
'show currency converter form
frmcurrency.Show
End Sub

```

```

Private Sub Command2_Click()
'test whether values entered by user
'much the station numbers
If Val(Text2.Text) = 1 Then
Label61.Caption = "gabba Beach"
End If
If Val(Text2.Text) = 2 Then
Label61.Caption = "Bunga Stage"
End If
If Val(Text2.Text) = 3 Then

```

```

Label61.Caption = "Soya Valley Farm"
End If
If Val(Text2.Text) = 4 Then
Label61.Caption = "Kansanga Avenue"
End If
If Val(Text2.Text) = 5 Then
Label61.Caption = "Kabalagala Winery"
End If
If Val(Text2.Text) = 6 Then
Label61.Caption = "Nsambya Primary School"
End If
If Val(Text2.Text) = 7 Then
Label61.Caption = "Clock Tower"
End If
If Val(Text2.Text) = 8 Then
Label61.Caption = "Old Taxi Park"
End If
If Val(Text2.Text) = 9 Then
Label61.Caption = "City square Hotel"
End If
If Val(Text2.Text) = 10 Then
Label61.Caption = "Nakasero Leisure Park"
End If
If Val(Text2.Text) = 11 Then
Label61.Caption = "Sheraton Gardens"
End If
If Val(Text2.Text) = 12 Then
Label61.Caption = "Kitante Hotel"
End If
If Val(Text2.Text) = 13 Then
Label61.Caption = "Chogam Wild West Bonanza"
End If
If Val(Text2.Text) = 14 Then
Label61.Caption = "Garden city wetland"
End If
If Val(Text2.Text) = 15 Then
Label61.Caption = "Jinja Round About"
End If
If Val(Text2.Text) = 16 Then
Label61.Caption = "Medieval Times"
End If
If Val(Text2.Text) = 17 Then
Label61.Caption = "Pirates dinner Adventure"
End If
If Val(Text2.Text) = 18 Then
Label61.Caption = "Sea World"

```



```

End If
If Val(Text2.Text) = 19 Then
Label61.Caption = "Jazzee Nite club"
End If
If Val(Text2.Text) = 20 Then
Label61.Caption = "Knott's Berry Farm"
End If
If Val(Text2.Text) = 21 Then
Label61.Caption = "Busch Gardens"
End If
If Val(Text2.Text) = 22 Then
Label61.Caption = "Arabian nights"
End If
If Val(Text2.Text) = 23 Then
Label61.Caption = "Swatcliffe Road"
End If
If Val(Text2.Text) = 24 Then
Label61.Caption = "Cross Gates Station and Hotel"
End If
Label62.Caption = (Val(Text2.Text)) - (Val(Text3.Text))
End Sub

```

```

Private Sub Command3_Click()
'declare variables
Dim A As Integer
Dim B As Integer
Dim C As Integer
'assign values to variables
Label73.Caption = Val(Text4.Text) * 25
Label74.Caption = Val(Text5.Text) * 50
Label75.Caption = Val(Text6.Text) * 25
Label79.Caption = Val(Text4.Text) + Val(Text5.Text) + Val(Text6.Text)
A = Label73.Caption
B = Label74.Caption
C = Label75.Caption
Label77.Caption = A + B + C
If Label79.Caption > 6 Then
Label83.Caption = ((100 - 25) / 100) * Label77.Caption
Else
Label83.Caption = Label77.Caption
End If
'save record in the database
Adodc1.Recordset.Save
dgdBoarding.AllowAddNew = True
End Sub

```

```
Private Sub Command5_Click()
'move to previous record in the database
Adodc1.Recordset.MovePrevious
End Sub
```

```
Private Sub Command6_Click()
'move to the next record in the database
Adodc1.Recordset.MoveNext
End Sub
```

```
Private Sub Command7_Click()
'delete record from database
Adodc1.Recordset.Delete
End Sub
```

```
Private Sub Command8_Click()
'add new record in database
Adodc1.Recordset.AddNew
End Sub
```

```
Private Sub Command9_Click()
'declare a new excel application
Dim objexcel As New Application
Dim objwk As New Excel.Workbook
'make excel application visible
objexcel.Visible = True
'open excel application
Set objwk = objexcel.Workbooks.Open("C:\Program Files\TRAINS\SYSTEM.mdb")
End Sub
```

```
Private Sub Form_Load()
'Add two pannels for date and time
'Display date and time
Dim pnl As Panel
With StatusBar1.Panels
Set pnl = .Add(, , sbrDate)
Set pnl = .Add(, , sbrTime)
End With
End Sub
```

```
Private Sub Option5_Click()
'if button is clicked,make the calculation
'display the result
If Option5.Value = True Then
Label7.Caption = Val(Text1.Text) / 3000
```

```

        End If
    End Sub

    Private Sub Option6_Click()
        'if button is clicked,make the calculation
        'display the result
        If Option6.Value = True Then
            Label91.Caption = Val(Text7.Text) / 2100
        End If
    End Sub

```

```

    Private Sub Option7_Click()
        'if button is clicked,make the calculation
        'display the result
        If Option7.Value = True Then
            Label91.Caption = Val(Text7.Text) / 4000
        End If
    End Sub

```

```

    Private Sub Option8_Click()
        'if button is clicked,make the calculation
        'display the result
        If Option8.Value = True Then
            Label91.Caption = Val(Text7.Text) / 26
        End If
    End Sub

```

```

    Private Sub Text2_Change()
        'display an error message if the user
        'enters a station number that doesn't exist.
        If Val(Text2.Text) > 24 Then
            MsgBox " This Station Doesn't exist"
            Label61.Visible = False
            Label62.Visible = False
            Command2.Visible = False
        Else
            Label61.Visible = True
            Label62.Visible = True
            Command2.Visible = True
        End If
    End Sub

```

```

    Private Sub Text3_Change()
        'display an error message if the user
        'enters a station number that doesn't exist.
        If Val(Text3.Text) > 24 Then

```

```
MsgBox " This Station Doesn't exist"  
Label5.Visible = False  
Command1.Visible = False  
Else  
Label5.Visible = True  
Command1.Visible = True  
End If  
End Sub
```

## REFERENCES

Avgyris.C.SanDiego State University 1988

Buss, Martin D.J [www.ichnet.org/glossary.htm](http://www.ichnet.org/glossary.htm)

Managing Digital Firms, 7<sup>th</sup> edition by Kenneth Laudon

Ostinato.stanford.edu/hipaa-feedback/definations.html

Introduction to Data Processing by Carl Feingola

Hoomwood [www.gao.gov/policy/itguide/glossary.html](http://www.gao.gov/policy/itguide/glossary.html)

William J Kattinjen [www.ojp.usdoj.gov/BJA/evaluation/glossary/glossary-i.htm](http://www.ojp.usdoj.gov/BJA/evaluation/glossary/glossary-i.htm)

Using Information Technology by William Sawyer

Oracle Programming with Visual Basic by Nick Snow don

The Microsoft Excel 5 Visual Basic for Application References

Introduction to Programming Using Visual Basic 6.0 4<sup>th</sup> Editions by David I.Schnieder