

ONLINE EVENT MANAGEMENT SYSTEM

A CASE STUDY: FRUITIONS EVENT PLANNERS KAMPALA

BY

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A research project was submitted to the department of Computing

in partial Fulfillment of the requirements for the award of

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DECLARATION

I Nuwagaba Andrew I declared that the information that is in this report is true and it was my own personal findings and it was never been produced by any person for the award of degree or diploma in any other university before. Any errors and mistakes I commit them to myself.

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Name: Nuwagaba Andrew

Signature.

Date . 07 [09 2018 .

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APPROVAL

This report was done under my close supervision and has been submitted for examination with my approval.

Supervisor

Name: Mr. Asiimwe Allan		1	1
Signature	Date	07/09	2018

DEDICATION

I dedicate this work to Mrs. Jane Natwijuka. Thank you for providing and standing by me in all my academic pursuits of life for all these years. Words cannot express how much I love you.

Special dedication to my supervisors Mr. Asiimwe Allan and Mr. Alitweza Joshua and the staff of the department of computing of Kampala International University for their patience, guidance and encouragement during the period of proposal writing.

To my lovely sister Miss. Akankunda Rita and my brothers Alvin and Ronald

Lastly to my dear friends Patience, Ivan, Sheila, and Marvin

LIST OF ABBREVIATIONS

OEMS	-	Online Event Management System
PHP	-	Hypertext Preprocessor
SQL	-	Structured Query Language
MMU	-	Mountains of the Moon University
FEP	-	Fruitions Event Planners

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ABSTRACT

Online event management system is a best way to keep clients engaged with the service as they are on the move. As technology is growing rapidly we are also moving to a technical world where everything we want is to be online. The main aim of this proposal is to develop an online event management system.

To analyze the current management system used by Fruitions Event Planners in order to identify the system requirements.

To gather requirements for designing an online event management system.

To design or model an online event management system and to test, validate and implement the designed system.

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The system will be developed using wamp server, MySQL, and php

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CHAPTER ONE

1.0 Introduction

Online Event management system was web-based application that enhanced project management to the creation and development of large scale events such as festivals, conferences, ceremonies, weddings, formal parties, concerts, or conventions. It involved studying the brand, identifying its target audience, devising the event concept, and coordinating the technical aspects before actually launching the event. The Online Event management system (OEMS) enabled customers/ clients view various packages/products about the event and make booking through the online platform. The process of planning and coordinating the event is usually referred to as event planning and it included budgeting, scheduling, site selection, acquiring necessary permits, coordinating transportation and parking, arranging for speakers or entertainers, arranging decor, event security, catering, coordinating with third party vendors, and emergency plans. Each event was different in its nature so process of planning & execution of each event differed on basis of type of event.(https://www.wikipedia.com/online-event-management-system)

1.1 Background

Fruitions Event Planners (FEP) is an event management company with its main offices located in Kampala and deals in event management and planning countrywide. It operates in districts like Masaka, Mbarara, Kabale, Mubende, and Fort portal, Kasese, Arua, Gulu, and West Nile. Offices have been established in those districts each having finance manager, event planner, human resource manager. The company provides services on a daily basis on various events. Currently, the event planning system available provides services only during the working days meaning that customers have limited time to make reservations for particular services. The customers take their time to travel to the event management offices to book for the event and even going to the bank and pay the money. There is a lot of paper work pertaining the events scheduled and those pending schedules, they also use phone calls. All these challenges require an online event management system that will enable the customer make booking, schedule events online at any preferred time.

The FEP system works as follows the system allows new users to register online and provide registration form.

The system allows the user to login through its first page and Customers use the system to make booking, schedule events online.

The system allows customers to send complaints and feedback and generate transaction reports.

The system allows the printing of transaction reports and also sending notifications to the manager for approving payments.

One of the advantages of Fruitions Event Planners is Reducing workload If you don't already use an online event management system then chances are you spend most of your day tackling a mountain of paperwork. From mailed in (and frequently illegible) registration forms needing to be entered onto your spreadsheet to invoices and confirmation letters that need to be sent out, the paperwork seems never ending.

FEP automates all these tasks meaning no more boring paperwork which lets you devote time to more important tasks that really make a difference to your attendees.

Reducing costs if you have employed expensive temporary staff to help with data entry and handling registration queries you can save here too. Some FEP clients have reported immediate savings of up to 60% per event simply by switching to FEP through reductions in staffing costs!

Instead of paying for printed brochures or leaflets, FEP allows you to place your entire event information package online with no cost until you start accepting registrations. During the registration phase, FEP uses email notifications and generates invoices automatically for attendees to download, again saving you mailing costs.

Get paid faster. FEP allows you to accept credit and debit cards online as well as more traditional forms of payment such as cheques which means you get paid straight away. Unlike our competitors, we connect FEP to your payment processor for free so all the money goes straight to you.

FEP even helps you keep track of who still owes you money too, helpfully flagging up overdue payments for you to chase.

Improved quality and range of collected data. Allowing attendees to enter their own data direct into your database reduces the number of errors compared with transcribing mailed in forms or faxes. With no limit on form length and advanced features that let you build forms which adapt to the individual attendee's choices, you can even ask more questions!

Even better, you can tell FEP to make certain fields mandatory or even create your own custom validation rules to ensure the data you collect is robust for downstream use.

1.2 Problem Statement

Currently Event Management system is manual and only accessible to staff. The client has to travel to the company offices in order to schedule, book and organize an event such as Birthday Party, Marriage, Reception, Ring Ceremony. Clients pay cash to book for an event which is inconveniencing when customers are many at the company. It takes lots of time of customer because they have to search such event organizer and contact them individually so an online event management system is needed which will enable the customer make booking, schedule events online at any preferred time.

1.3 General Objective

To develop an online event management system.

1.4 Specific Objectives

- i. To analyze the current management system used by Fruitions Event Planners in order to identify the system requirements.
- ii. To gather requirements for designing an online event management system.
- iii. To design or model an online event management system

iv. To test, validate and implement the designed system.

1.5 Scope of the study

This includes physical scope which describes the physical area of application where the project will be applied and technical scope describes the functionalities in proposed system.

1.5.1 Physical scope

The study will be conducted at fruitions event planners in kampala

1.5.2 Technical scope

The system will provide the following functionalities;

- User registration: The system allows new users to register online and provide registration form.
 - User login: The system will allow user to login through its first page.
 - **Online reservation of services (event scheduled):** Customers will be able to use the system to make booking, schedule events online.
 - **Customer complaints and feedback:** The system will allow customers to send complaints and feedback.
 - **Report generation:** The system will generate transaction reports.
 - Report printing: The system will allow the printing of transaction reports
- Online Payments Approval: The system will send notifications to the manager for approving payments.

1.6 Significance of the system

The system will be beneficial in the following ways:

- i. The company will be able to send notification to clients regarding status of their events through email or short message system
- ii. Customized alerts to customers upon cancelled events
- iii. Detailed event billing platform on various products and packages
- iv. Display view of Discounts detail on various products

The clients will benefit from the system through;

- i. Easy access to various event packages.
- ii. Online payment platform which is fast and secure
- iii. Feedback to event manager has been made easy. Just send the email to the service provider, quick secure and responsive

- iv. Time management. The clients time lost during the travelling to and fro the company to make reservation has been solved. Thus creating ample time for the client to manage and schedule events.
- v. Backup of file. Customers will have a data backup of their events stored to the database for future reference.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction.

This section summarizes the contents of the literature review that is event management systems defined; online event management systems evolution and trend; event management Architecture; Benefits of OEMS (proposed system).

2.1 Analyzing the existing system

In the existing system customer contacts the company for event management. He provides the details of the event and its requirements. He explains its aims, how long it will last, its format (Presentation/Workshop and/or Exhibition etc.), expected number of delegates/guests, equipment and furniture required, whether any delegate pack or promotional material is to be distributed, and other facilities required.

The Event Manager studies the requirements of the event carefully and using the event management system

The company offers some readymade packages to choose from.

If the customer agrees, the event is booked and the advance deposit is taken by the company. According to the requirements of the event, different bookings are made. A strategic schedule is prepared for smooth conduct of the event. The Event Management System helps the manager in different tasks of planning, scheduling and

Conducting the event. This system provides instant access to event-related information. Thus, resources are;

CHAPTER TWO

2.1 Introduction

Efficiently and economically utilized. Once the event is conducted successfully, the bills are generated by the system. The system is extensible. New functionalities can be added to the system, whenever it is needed due to changing requirement.

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Nowadays, the event industry has played a vital role in our society. People have come up with a lot of occasions for organizing events such as educational events, birthdays, international conferences, company parties etc. Generally speaking, events are also a part of human beings' social life because they get to know and talk with different people with different backgrounds. However, in order to organize a good and successful event, it requires a thorough and detailed planning process. Event managers and event coordinators need to collaborate in order to formulate the most viable plan for events. In order to make events successful and well organized, all of the stages in the entire planning process also need to be in harmony and be correlated with one another. Risk management has been of great importance during the entire planning process. Under no circumstances should risk management be underestimated. Additionally, evaluation process helps event organizers and event managers to realize which aspects should be improved and need further development. (Bowdin, Glenn, 2010)

The event management industry is a dapper of a dandy. Due to the endless changes and sweeping improvements in the current events technology, there's no place for stability.

2.2 Gathering system requirements

2.2.1 Functional requirements

Functional requirements are defined as a set of attributes that describe external system output behavior that are: consistent, unambiguous, non-redundant, non-contradictory.

2.2.2 Non-functional Requirements Definition

The non-functional requirements are the system quality attributes. The non-functional requirements allow the system to work in such a way that allows the functional requirements to be satisfied.

http://www.corbinball.com/articles_future/index.cfm?fuseaction=cor_av&artID=4154

2.3 Designing or modeling the system

System design tools to create systems that meet the needs of stake holders. The tools are used in system designing and modeling are flow charts, use case diagrams, context diagram, flow charts and use case diagrams. A system flow chart is a way of displaying how data flows in a **system** and how decisions are made to control events

2.3.1MySQL

MySQL is a multithreaded, multi-user, SQL relational database server. Programming languages that can access a MySQL database include PHP. MySQL runs on many different operating systems including Linux and Windows. MySQL offers a lot of improvement over previous versions including transactions.

2.3.2 PHP

PHP stands for Hypertext Pre-processor. It is mainly used as a general-purpose scripting language used to develop dynamic web content and can be embedded in HTML. PHP is easy to use and is very similar to structured programming languages. PHP is more than just a scripting language. It is a full programming language and can be used from a command line and also be used to develop Graphical User Interface Applications. PHP runs on many of the major operating systems, including windows and also supports many database systems, including MySQL. One feature that leads to the popularity of PHP is that it is dynamically typed. Variables do not have to be declared and they can hold any type of object.

2.3.3 HTML and CSS

Hypertext Markup Language (HTML) is based on the Standard Generalized Language (SGML). HTML is a language for describing the structure of a document, not its presentation (Lemay, 2001).

Cascading style sheets will be used in designing common application and systems. These provide specific design of web pages. HTML defines a set of common styles for web pages: headings, paragraphs, lists and tables. HTML provides a means by which a documents main content can be annotated with various kinds of meta-data and rendering hits. The rendering hints include specifying scripts, image maps and form definitions for web browsers. Macromedia Dreamweaver is the leading software tools for editing HTML. Content and presentation will be combined using server side scripting languages like PHP to make the final HTML.

2.4 Benefits of OEMS

Reduce your workload

If you don't already use an online event management system then chances are you spend most of your day tackling a mountain of paperwork. From mailed in (and frequently illegible) registration forms needing to be entered onto your spreadsheet to invoices and confirmation letters that need to be sent out, the paperwork seems never ending.

OEMS automates all these tasks meaning **no more boring paperwork** which lets you devote time to more important tasks that really make a difference to your attendees.

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Reduce your costs

If you have employed expensive temporary staff to help with data entry and handling registration queries you can save here too. Some OEMS clients have reported immediate savings of up to 60% per event simply by switching to OEMS through reductions in staffing costs!

Instead of paying for printed brochures or leaflets, OEMS allows you to place your entire event information package online with no cost until you start accepting registrations. During the registration phase, OEMS uses email notifications and generates invoices automatically for attendees to download, again saving you mailing costs.

Get paid faster

OEMS allows you to accept credit and debit cards online as well as more traditional forms of payment such as cheques which means you get paid straight away. Unlike our

competitors, we connect OEMS to your payment processor for free so all the money goes straight to you.

OEMS even helps you keep track of who still owes you money too, helpfully flagging up overdue payments for you to chase.

Improved quality and range of collected data

Allowing attendees to enter their own data direct into your database reduces the number of errors compared with transcribing mailed in forms or faxes. With no limit on form length and advanced features that let you build forms which adapt to the individual attendee's choices, you can even ask more questions!

Even better, you can tell OEMS to make certain fields mandatory or even create your own custom validation rules to ensure the data you collect is robust for downstream use.

Enhanced perception of your organization

Your attendees can access your online event registration pages at their convenience and not just during office hours. Not only can they register themselves, but they get virtually instant confirmation emails, invoices and receipts which all helps to reassure. As an important point of contact between your organization and potential customers, members and donors, you want them to have a great experience and this is what OEMS delivers in spades.

As an additional bonus, the OEMS allows your attendees to come back in at any time and make changes to their registration and/or print out their event documentation.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter discusses the methodology that was used in gathering the data. Here the researcher aimed at identifying the objectives to be carried out and the methods and tools to be used to present and analyze data to get proper and maximum information related to the subject under study.

3.1 Study design

The study employed qualitative approach and descriptive methods to describe the characteristics of the research variables. It was qualitative in that opinions of the people were sought and the researcher had to contextualize them according to his/her understanding. A case study was used at Fruitions event planners (FEP). The existing system was studied to establish its weak and strong points. The information that was acquired from this study gave the basis for the design of the system.

3.2 Target Population of study

The target population for this study will be FEP finance managers (10), event planners (40), human resource manager (9) and clients (200).

3.2.1 Sample size and sampling techniques

The sample size was estimated using the formula (Sloven's formula).

n=	N	where \mathbf{n} is the sample size; \mathbb{N} is the sample population;
	$1+N(e^{2})$	e is the marginal error which is constantly 0.05

According to Sloven's formula the sample size for finance managers is equal to 10, event planners is equal to 40, human resource manager is equal to 9 and clients is equal to 133.

Category	Sample size
Finance managers	10
Event	36
planners	
Human	9
resource	
manager	
clients	133
Total	188

3.2.2 Sampling technique Random sampling was used where all finance managers and clients had equal chances of being selected. This is because the study wants clients with good time spent working with FEPI and therefore have knowledge of their company's operation and thus would provide the required information

3.3 Development methodology

The following steps were deployed to fully understand the current system that was being used. These included; requirement identification; design; implementation, testing and validation. However, the development process will be iterative, though it was depicted as comparing of phases.

3.4 Data Collection Techniques

3.4.1 Interviews

An interview is a process of conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program or situation.

Face to face method of discussion was used to gather information from people who work in the company / organization and get the knowledge to design a responsive system. Arrangements to carry out the interviews with respondents will be made so that they provide the general information concerning how work is done at the company to generate information.

3.4.2 Observation

This technique was used to gather accurate information about how the system actually operates, particularly about processes. This involves the researcher to systematically watch and record the behaviors and characteristics of operations and processes in the company. Although the method is time consuming, it has a number of advantages, which include: It gives more detailed and context related information, It permits the collection of information on facts not mentioned in the interview, It permits tests of the reliability of the responses to the questionnaires, observe operations of a program as they are actually öccurring and can adapt to events as they occur.

3.4.3 Design

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In systems design the design functions and operations are described in detail, including business rules, process diagrams and other documentation. The output of this stage was describe the new system as a collection of modules or subsystems. The design stage takes as its initial input the requirements identified in the approved requirements document. For each requirement, a set of one or more design elements will be produced as a result of interviews, workshops, and/or prototype efforts.

3.4.4 Implementation

During system implementation, the system should be able to run on computers/laptops) and smart phones android OS and it is best suited for windows OS that are running Wampserver and high processor of a considerable speed and performance, considerable amount of RAM and internal memory space for proper functionality of the system

3.4.5 Ethical consideration

Prior to the study a researcher presented an identity card of Kampala international university. This helped the researcher to be identified before the respondents as a student's carrying out a research study to benefit him. At the end of data collection questionnaires note taken and documents collected were compiled and put together which helped the researcher in data processing

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DESIGN

4.0 Introduction

This Chapter points out the study findings, analysis and design of the proposed system. It provides a broad description of what was found out using the methodologies mentioned in the previous chapter.

4.1 Study Findings

According to the data collection methods mentioned in chapter 3, the following was thought to be done to improve on the gaps found in the current system.

4.1.1 The Current System

The researcher did a feasibility study to understand how the current system is being used to carry out, monitor and record all operations and business transactions Fruitions Event Planners. The researcher found out that;

- i. Fruitions Event Planners uses a paper based file system, process and monitor event bookings data, financial data and personnel data. Information about the amount of money collected on a given event are recorded using pens and paper.
- ii. Branch managers are always required to produce a report pertaining the progress and success of the events handled. This requires a financial analysis which is always complicated sincere all transactions are manually done at the offices.
- iii. In order for the customers to place and confirm bookings, they must visit to the company branch office. A booking is confirmed by a cash payment to the office. On receiving the money, a cashier issues a receipt containing the details of the event which include the event name, number of visitors expected, amount paid and the event date.

4.1.2 Weaknesses of the Current System

It was through the information got about the current system that the researcher was able to identify its weaknesses. This helped the researcher in understanding what was to be done in order to develop a new system.

The following weaknesses were found in the current system:

- i. The use of a paper-file system to record, process and monitor event booking data, financial data and personnel data causes a delay in decision making. This is so because managers get limited time to analyze the information for proper decision making process.
- ii. The current method of event booking is time wasting, ineffective and inefficient to the clients who would have rather booked for the events from wherever they are by using online platforms, online payments and mobile money payments.
- iii. Access to Information is very difficult especially when it comes transactions for bookings.
- iv. It's very difficult and time consuming to generate reports at the head office since all support branches must submit their reports first in order to generate the general / final report.

4.2 Requirements Gathering

End-user requirements gathering was carried out using interviews as the main tool. Interviews were conducted with Fruitions event Planners managers, employees and customers who have interfaced with the current system that is being used to carry out, monitor and record business transactions.

4.3 Presentation and Analysis of the findings

From the analysis made, there is need for an online event management system to support the carrying out, monitoring and recording of business transactions of Fruitions Event

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Planners. The current system is unreliable, inefficient and costly. Three categories of stakeholders were interviewed and these included;

The bar chart below gives a summary of the weaknesses of the current system as per the response from the stakeholders.



Figure 4.1 Bar Chart showing interview response for the three Fruitions Event Planners stakeholders

From the above chart, there is an indication that each category of stakeholder puts different emphasis on each of the issues of concern. This required the researcher to do separate data analysis for each category of respondent in order to clearly understand the major issue of concern that should be handled for each category of the Fruitions Event Planners stakeholders.





Figure 4.2 Pie chart showing customers' issues of concern





Conclusions were drawn by the researcher in accordance to the charts above;

- i. It was pinned out that the major issue of the current system is time wastage during travels to do event booking at all branch offices.
- ii. According to employees, most of the time is wasted in cross verification customer's receipts and payment settlement for the particular events.
- iii. Emphasis is put on the time taken by branch managers to submit reports which leads to delayed decision making at the head offices.

4.4 Requirements Analysis (using a use case diagram).



Figure 4.4 shows requirements analysis

4.4.1 Functional Requirements

Functional requirements define the specific functions that the system performs, along with the data operated on by the functions. The functional requirements are presented in

scenarios that depict an operational system from the perspective of its end users. Included are system features and an enumeration of all the specific requirements associated with these features.

- The system incorporated mechanism to authenticate its users
 - The system verifies and validates all user input and notifies in case of error detection and helps the user in error correction
 - The system allows sharing of files in the system
- The system allows quick messages to be exchanged without face to face interaction

4.4.2 Non-functional Requirements

Non-functional requirements address aspects of the system other than the specific functions it performs. These aspects include system performance, costs, and such general system characteristics as reliability, security, and portability. The non-functional requirements also address aspects of the system development process and operational personnel. It includes the following:

- The system was user friendly and consistent
- The system provided attractive graphical interface for the user
- The system allowed developer access to installed environment
- The system targeted customer base

4.4.3 System Requirements

To be used efficiently, the online bus ticket booking system will need certain hardware components and software resources to be present on a computer. These requirements are regarded as minimum for the sake of running the system:

4.4.3.1 Hardware Requirements

Server Computer: Intel Processor - 2.7GHz, Memory – 32 GB, Disk Space – 500 GB.

Client computer: Intel Processor - 1.8 GHz, Memory – 6 GB, Disk Space – 250 GB.

4.4.3.2 Software Requirements

Server computer: Windows 2008 Server, Web Server – Wamp5, DBMS – SQL 5.

Client computer: Windows XP, Mozilla Firefox 54.6.

4.5 System Design

The new online event management system has been designed in line with the user and system requirements that were identified during the data collection and analysis stage. The system will be used by the Branch managers and the customers.

4.5.1 Network and System Architecture

This process supports existing infrastructure requirements and provides specific recommendations for hardware and network solutions based on existing and projected user needs. Application requirements, data resources, and people within an organization are all important in determining the optimum hardware solution. It is represented using a three tier architecture that comprises of user interface, process management and Database Management System (DBMS). It shows the components of the system, the services they provide and the way they communicate to bring about the system functionality.

4.5.2 System Flow Diagram



4.5.3 Context Diagram

This is the highest level of representation of the OEMS. The context diagram shows the system and how it interacts with the external entities. It also shows the data input into the system by the entities and data output from the system to the entities involved. The input and output actions are represented by arrows.



4.6: Data Flow Diagram

1. Data flow diagram is used to show the flow of data from external entities into the system. It is used to represent the physical and logical area of an information system. The data flow diagrams are pictorial or graphical representation of the Online Event Management System. The data flow diagram covers all the processes and data storage area, which takes place during any transaction in the system.



4.7 Database Design

The database is made up of five major entities namely:

- i. Admin
- ii. Customer
- iii. Messages
- iv. Bookings
- v. Special event

4.7.1 Entity Relationship Diagram

The ERD given below is a description of how the different entities listed above are related to each other. It high lights all entities, attributes and associated relationships. This gives critical analysis of the database to avoid redundancy and build a data model

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that will result in a database that is flexible and expandable. expandable.



4.7.2 Physical Database Design

This is a description of the entities listed above. The attributes, data type, field size and constraints of the different entities are given in the tables below.

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Attribute	Data Type	Description	Constraints	Comments
Id	Int(12)	Users identifier	NOT NULL	Primary Key
Username	Varchar(100)	User Names	NOT NULL	
Password	Varchar(100)	Password	NOT NNULL	

Table 4.2: Structure of the Admin table

Table 4.3: Structure of the Customer table

Attribute	Data Type	Description	Constraints	Comments
Id	Int(12)	Customer identifier	NOT NULL	Primary Key
Fname	Varchar(100)	Clients First Name	NOT NULL	
Lname	Varchar(50)	Clients lastname	NOT NULL	
Username	Varchar(50)	Username to access the system	Not NULL	
Password	Varchar(50)	Password to access system	Not NULL	
Contact	Varchar(50)	Clients telephone number	Not NULL	
Address	Varchar(100)	Address where the client resides	Not NULL	
House	Varchar(10)	House number where the client resides	Not NULL	

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Attribute	Data Type	Description	Constraints	Comments
Msg_id	Int(12)	Message indentifier	NOT NULL	Primary Key
Date	Date	Date on which message is sent	NOT NULL	
Name	Varchar(50)	Maximum number of seats	NOT NULL	
Email	Varchar(50)	Model of the bus	NOT NULL	
Subject	Varchar(100)	Subject of the message	NOT NULL	
Message	Varchar(100)	Clients message	NOT NULL	
Response	Varchar(150)	Admin response	NOT NULL	
Responsedate	Date	Date and time for response	NOT NULL	

Table 4.5: Structure of the message table

4.6: Structure of the Booking table

Attribute	Data Type	Description	Constraints	Comments
Iď	Int(20)	Identifier of the reservation	NOT NULL	Primary Key
Date	Varchar(100)	Name of the route	NOT NULL	
Event name	Varchar(30)	Name of the event	NOT NULL	
Quantity	Varchar(30)	How many events should be reserved	NOT NULL	
EventDate	Varchar(30)	Date when the event takes place	NOT NULL	
Number of Visitors	Varchar(30)	Expected number of visitors budgeted for	NOT NULL	

Attribute	Data Type	Description	Constraints	Comments
Id	Int(12)	Routes identifier	NOT NULL	Primary Key
Eventname	Varchar(100)	Name of the route	NOT NULL	
Venue	Varchar(20)	Price set for each route	NOT NNULL	
Date	Varchar(50)	Number of seats in that bus	NOT NULL	
Expectedvisitors	Varchar(50)	Type of bus	NOT NULL	
Budget	Varchar(50)	Time on which the bus is departing	Not NULL	

4.8 Prototype Design

Prototypes were designed for all system user categories. These were used to help the researcher in refining the understanding of the user requirements that were identified during data collection and analysis. This helped the researcher to ensure that the functionalities that were proposed by all the system users during the interview were well captured and incorporated into the new proposed system.

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CHAPTER FIVE

SYSTEM IMPLEMENTATION

5.0 Introduction

The data analysis done in the previous chapter indicates that the automation of the processes of carrying out, monitoring and recording business transactions of Fruitions Event Planners can lead to reduction in cost of doing business, improved data management and quick decision-making process. Details of reliable and timely information about the different events scheduled.

The database used to store the information was separated from the user interface and business logic. MySQL was used to implement the database and a combination of HTML and object-oriented PHP were used for the implementation of the interfaces and business logic.

5.1 Implementation

The table below shows the different activities and deliverables of the online bus ticket booking system.

Activity	Tools Used	Deliverables
Database Implementation	PHP Myadmin 2.9.2, MySQL	Fully operational and working
ц	5.0.22 and WAMP5	Database
Implementation of Interfaces	HTsML, PHP 5.0.27	User friendly interfaces
Implementation of business	Object oriented PHP, Java	System code,
Logic		

Table 5.1: System implementation plan

System Testing	PHP 5.2.1.3, MySQL	System	reviewed,	System
	5.0.22, HTML, Apache	security t	ested.	
-itig	2.0.22 ,			

5.2 Database Implementation

MySQL DBMS and PhpMyAdmin interface were used to create the database and all tables. To ensure that there is no data redundancy and improve data integrity, tables were normalized by use of Primary keys to uniquely identify each entry in the database and foreign keys were also used to show the relationships between different tables. The figure below shows a screen shot of the database and all the tables in the database.

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			Go

Figure 5.1: Database with all the tables

5.3 Implementation of User Interfaces

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Through the use a combination of HTML, Java and object oriented PHP user interfaces were implemented. A variety of user forms were designed to help different user categories to use the functionalities that they wanted the system to provide them with. Below are a number of user interfaces that can be used by different system users.

5.3.1 System Home Page

This is the first interface for the online event management system. This interface can be accessed by all the system users and has information about what has to be done to access the different system functionalities.



Figure 5.2: System Home Page

5.3.2 Customers Personal Details

In order for a customer to place a booking, he/she is supposed to register and login to access the booking interfaces.

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Figure 5.3: Customer Personal Details

5.3.3 Customer Booking Page

The client will login after signing up and make a booking through this page as indicated in the figure below.



Figure 5.4: Customer Booking Details

US)

5.3.4 Customers Payment Details

The third step of the booking process requires the customer select the mode of payment.



Figure 5.5: Customer Payment Details

5.3.5 Customers Event Booking Receipt

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If the payment has been made, a receipt will be displayed as shown below.

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Figure 5.6: Booking Receipt Details

5.3.6 Admin Logon Interface

All the other system users have to login using their username and password in order to access the functionalities that they want to use. There are two system users who are supposed to login in order to access their functionalities and these are; Administrator, Customer. All users login using the same login form and when the username and password entered are correct, they are directed to different interfaces according to the user category and the privileges granted to that category. Below is the admin login form.

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Figure 5.7: Admin Login Form

5.3.7 Admin Logon Error Messages

If nothing is entered in the username or password text boxes, access is denied. A user is given an error message asking him or her to enter the Username or Password as shown in the figures

below.

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Figure 5.8: Empty Username error message

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Figure 5.9: Empty Password error message

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If the entered Username or Password is wrong, the user is again denied access to the system. An error message is then displayed to the user prompting him or her to check the Username or Password and try again as shown in the figure below.

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Figure 5.10: Wrong Username or Password error message

5.3.8 Admin Main Menu

When the Username and Password is correct and the user privilege level is Administrator, the user is then directed to the admin main switch board as indicated below.



Figure 5.11: Administrator main switch board

5.3.11 Adding users to the system

The administrator can also be able to add and (or) edit information about the employees.

This	is	done	from	the	Add	users	form	as	indicated	in	the	figure	below.	
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Figure 5.14: Add routes Form

5.3.12 Add products and Categories of events

The administrator can also be able to add and (or) edit information about the event category and events



Figure 5.15: View / Edit seat inventory Form

5.3.13 Message platform

The administrator can also be able to respond to clients complaints sent at any time. This through the quick reply platform as shown below.

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CHAPTER SIX

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

This chapter contains the discussion of the research findings, the conclusions that the researcher made from the findings of the research and also the recommendations made by the researcher about the research topic. It is a summary of what was achieved by the researcher, the challenges encountered as well as recommendations for future work on the developed system.

6.1 Discussion of Results

The project aim was automating the processes of booking at Fruitions Event Planners through the Design and Development of an online event management system.

The main objective of the research project was to design and develop an online event management system. This objective was achieved and the developed system has the functionalities that were proposed by the different system users.

A number of steps were used to help the researcher achieve the main objectives of the study. These steps are summarized in terms of the four specific objectives as mentioned in chapter one section 1.3.1. The achievement of the specific objectives is explained below;

The first specific objective was to review the current event managements system. This was done in chapter two where a number of literatures relating to the research problem were reviewed which helped in identifying the gaps in the related work that was already done by other researchers.

The requirements of the proposed system i.e. user and system requirements were collected and analyzed using different methodologies as discussed in chapter three section 3.2. The proposed system requirements are explained in chapter 4 section 4.6.1, 4.6.2 and 4.6.3.

Specific objective number two was design the online Event Management System. This was achieved by use of different system design diagrams as explained in chapter 4, section 4.7 and different sub-sections as follows; 4.7.1 system architecture diagram, 4.7.2 system flow chart, 4.7.3 context diagram, 4.7.4 data flow diagram and 4.7.5 database design.

The third specific objective was to develop the online Event Management System. The System was developed basing on the designs presented in chapter 4, section 4.7. Software tools like PHP, MySQL, HTML and Wamp Server were used in the development process.

All the activities mentioned above were done with the main aim of achieving what was proposed by the researcher.

6.2 Challenges

A number of challenges were met most especially at the data collection stage of the system.

- i. Confidentiality. It was very difficult for Fruitions Event Planners administrators
 to allow the researcher to access full details about revenue pertaining the events hosted, managed and planned.
- ii. Having been seen as a threat (spy) to the company, many managers and employees refused to be interviewed.
- iii. It betterment of this project that the researcher had to adopt the use of objectoriented programming which was a new concept and therefore required a lot of time to understand and conceptualize.
- iv. The time that was given for the research was not enough thus all the modules that were suggested by the users of the system were not included.

6.3 Conclusion

This research project set out to design and develop an online event management system that would help in carrying out online event scheduling / booking. For reliability,

effectiveness, efficiency to be realized, the company will need to adopt the developed system.

6.4 Recommendations

Companies like Fruitions should consider investing in information technology platform for easy monitoring and transactions processing. This is because the use of business information systems can help in reducing the cost of doing business and also improve on the decision-making process since information that supports decision making can be accessed in a faster and timely way.

Fruitions Event Planners should ensure that the customer's privacy and security is maximum to avoid losses.

6.5 Suggestions for future research

The development of a mobile application version for this system would be a great innovation as it would sease the processes of accessibility.

REFERENCES

- Amite Sharma et al. / International Journal of Engineering Science and Technology (IJEST)
- 2. ://www.wikipedia.com/online-event-management- https system
- Ramsborg, G.C.; B Miller, D Breiter, BJ Reed & A Rushing (eds), Professional meeting management: Comprehensive strategies for meetings, conventions and events, 2008, 5th ed, Kendall/Hunt Publishing, Dubuque, Iowa. <u>ISBN 0-7575-5212-9</u>
- Bowdin, Glenn; Johnny Allen, William O'Toole, Rob Harris, Ian McDonnell, 2010. Events Management (Events Management S.) ISBN 0-7506-6533-5
- 5. http://www.wikipedia.com/event+management+officail+version.pdf
- 6. https://www.financesonline.com/top-10-event-management-software
- Ramsborg, G.C.; B Miller, D Breiter, BJ Reed & A Rushing (eds), Professional meeting management: Comprehensive strategies for meetings, conventions and events, 2008, 5th ed, Kendall/Hunt Publishing, Dubuque, Iowa. <u>ISBN 0-7575-5212-9</u>
- Roy Want, An Introduction to RFID Technology, IEEE Pervasive Computing, v.5 n.1, p.25-33, January 2006
- R.G. Mair, "Protocol-Independent Detection of Passive Transponders for Near-Field Communication Systems, Instrumentation and Measurement", IEEE Trans. 59, 814 (2010).
- 10. Nicolas T. Courtois. "The dark side of security by obscurity and cloning MiFare
- <u>Classic rail and building passes, anywhere, anytime". In Proceedings of the</u> <u>International Conference on Security and Cryptography, pages 331–338.</u> <u>INSTICC Press, 2009.</u>

- Jan Ondrus, Yves Pigneur, "An Assessment of NFC for Future Mobile Payment Systems", Proceedings of the International Conference on the Management of Mobile Business, p.43, July 09-11, 2007
- 13. ISO 20121 Sustainable events", ISO (www.iso.org), retrieved 2014-30-05
- Bowdin, Glenn; Johnny Allen, William O'Toole, Rob Harris, Ian McDonnell. Events Management (Events Management S.) <u>ISBN 0-7506-6533-5</u>
- 15. <u>Goldblatt, Joe</u>. Twenty-First Century Global Event Management (The Wiley Event Management Series) <u>ISBN 0-471-39687-7</u>
- 16. <u>http://www.corbinball.com/articles_future/index.cfm?fuseaction=cor_av&artID=4</u> <u>154</u>

APPENDICES

Appendix A: Questionnaire

I am a student from Kampala international university perusing bachelor in information technology. As necessity leading to the award degree, every student is required to carry out a research study. I have therefore decided to carry out my research fruitions event planners as my case study about online event management. I kindly request you to offer the necessary information for the success of my research study and any information obtained will be kept confidential. Thank you so much.

Please respond the questions and kindly grade accordingly

1. Gender: ----- female male 2. Responsibility of the respondents Manager-----Receptionist-----Driver-----3 How do you link with your clients? Using phone calls ----making radio adverts-----4. What are the challenges faced while connecting to your clients? It is costing ----time consuming -----5. What are the challenges faced while trying to search and advertise Events Company for market? Time consuming ------Delays -----6. Would you want some changes in the current system?

Yes -----

41

No -----

7. Which type of system do you prefer?

Web based ------ Mobile app------

8. How do you rate the existing system?

Poor ----- Good ----- Excellent ------

Thank you