UNIVERSITY OF DAR ES SALAAM COMPUTING CENTRE

PROJECT PROPOSAL

Course code: CTT 06206/BIT 06207

FINAL YEAR PROJECT

VISITOR INFORMATION SYSTEM (VIS)

CASE STUDY: TANZANIA BUREAU STANDARDS (TBS)

Done By:

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1.0 INTRODUCTION

A Visitor Information System (VIS) is an evolving concept defined as a systematic collection of visitors' information. It is a record in digital format that is theoretically capable of keeping track of a list of visitors and their details for effective service from both clients and the company.

This system will track the usage of a public office by gathering increasing amounts of information. A visitor information system can record the usage of the facilities by specific visitors and provide documentation of visitors' whereabouts. Since a visitor information system provides a record of the office used and the person visited, this system will often use to complement office security systems and access control systems**. According to Anders M. Nelson of Enterprise Security Architect Said**

'' Good cyber security will always rely on a base of good physical security. Capturing required visitor data, visitor badging, and visitor escorts instantly translate to a holistic increase in the security posture of an organization.''

As electronic visitor information systems become more common and more powerful these systems are taking over many of the functions of office security and access control like gathering information manually.

Thus, managing visitors is an essential access control activity traditionally handled through paper logs or guest books, where visitors sign in at the front desk. The visitor Information system will allow you to modernize your approach, go paperless, and become more efficient. Enroll visitors, assign physical access rights, and track their movements with different A digital visitor information system will do the core job of checking in visits also the System will do many things that paper cants.

1.1 STATEMENT OF THE PROBLEM

After careful analysis of the project the researcher observed that the following problems are mainly encountered by different organization. The present method of visitor information system is mainly based manual recording of visitor information, also the present system makes use of

small or no database for recording of visitor information. Due to the lack of a comprehensive database, accountability is usually very difficult, the present system is time-consuming, and owing to the paper and pen method of recording information visitors may not give out the full information needed at a particular time queuing may occur at the cause of entering the information needed.

1.2 SIGNIFICANCE OF THE STUDY

The study will develop a web-driven database for the Visitor information system and store visitor information using a relational database system (RDBMS). The study aims to automate all manual activity such as report writing, and recording of the visitor's details into a computerized system which will save time. Through a single click, a person can generate a report and can retrieve data from the database. By implementing Visitor Information at the Tanzania Bureau of Standards with the growth of information technology, the study offers numerous values in business premises and revenue payment. The TBS visitors will have high-quality service since the recording requires human information, and with the use of a computer more concrete information will be provided, also It will be easier to generate overall, and report comprehensive and relational database will make the report generation easy and faster. High-Security Environments and assign credentials for your visitors like any other employee, define detailed access rights, specify visitor escorts, and give your staff full control over access to your facilities. It will provide efficient, effective, and timely services, It will reduce corruption and contributes to any organization's security**.**

2.0 OBJECTIVES OF THE STUDY

2.1 GENERAL OBJECTIVE

The general objective of this is to design and implement a web-driven database site to automate manual activity and keep a record of visitors' information for easy retrieval and annual report analysis.

2.2 SPECIFIC OBJECTIVES

1. To record and track visitor's information at Tanzania Bureau of Standards such as name of visitor, purpose of visit, check in time, checkout time.
2. To Design and develop system database to store Visitor information.
3. To Design and develop system interfaces to be user friendly
4. To Design and develop an easier way to filter record attributes
5. To provide instant report and status on every visit at Tanzania Bureau of Standards.

3.0 METHODOLOGY

3.1 STUDY AREA

The study will be carried out at the Tanzania Bureau of standards It is chosen as a case study because of its strategic importance to the country and because the company is well organized in its daily operations. Tanzania Bureau Standards is Located at Ubungo in Dar es Salaam.

3.2 STUDY METHODS

3.2.1 REQUIREMENTS GATHERING TECHNIQUES

In order to achieve the objectives mentioned earlier, the following techniques will be used to get information.

- Unstructured interview method.
- Uncontrolled observation method of requirement gathering.

3.2.2 TECHNOLOGY TO USE

The implementation phase will cover the development of the system modules and in order to fulfill that will need to integrate with the tools such as requirements software.

FRONT-END LANGUAGES

- **HTML5**

  HTML stands for Hypertext Markup Language version 5; This markup language is the fifth, higher, and latest version of HTML to be used. HTML5 will be used to describe the backbone web pages of the system.

- **CSS**

  CSS stands for Cascading Style Sheets; it is the most popular language used to design and style an HTML document that will help make a system look more appealing than just plain or uninspiring pieces of text.

- **BOOTSTRAP**

  Bootstrap is the most popular and powerful front-end framework that includes pre-built HTML, CSS, and JAVASCRIPT components for quick designing and customizing responsive mobile-first sites.

- **JAVASCRIPT**

  JavaScript is the most popular and powerful scripting programming language used to develop a dynamic and interactive experience for the user. Most of the functions and applications that make the internet indispensable to modern life are coded in some form of JavaScript.

- **jQuery**

  is a JavaScript library designed to simplify HTML DOM tree traversal and Manipulation, as well as event handling, CSS animation, and Ajax?

BACK-END LANGUAGES:

- **MySQL Maria DB**

  MySQL is an open-source relational database management system that is based on Structured Query Language (SQL) that runs on a server.

- **PHP**

  PHP is the general-purpose server-side scripting programming language that is used to develop static or dynamic web applications.

SOFTWARES

- **APACHE SERVER**

  Apache is a free and open-source software that will allow to deploy the system on the internet. And is the one of the oldest and most reliable web server software.

- **VISUAL STUDIO CODE**

  Visual Studio Code also abbreviate as VS Code, is a lightweight and powerful source-code editor developed by Microsoft Company help programmers and developers for building and debugging modern websites.

- **GOOGLE CHROME WEB BROWSER**

  Google chrome web browser is a cross-platform web browser developed and maintained by Google. It is free, fast, easy to use and secured web browser.

HARDWARES

- Computer with minimum 8GB of RAM, with a Processor of at least Intel core i5 8th Generation 1.60 GHz speed or above. and storage capacity of at least 250 GB with Window 10 or any Linux Operating System installed.
- Modem or Router for internet access

3.3 STUDY TIME FRAME

3.3.1 PROJECT ACTIVITY PLAN

S/N	ACTIVITY	DECEMBER 2022				JANUARY 2023				FEBRUARY 2023				MARCH 2023			
		W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W

		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	Preliminary Investigation																
2	System Analysis																
3	System Design																
4	System Development																
5	System Implementation																
6	Report Writing																
7	Project Presentation																

3.4 SCOPE OF THE STUDY

The study is carried out specifically at the Tanzania Bureau of Standards. The scope of this project is to design and implement a visitor Information system that models an organizational structure by registering staff into the system, and collecting visitor information on the visit. Reasons for the visit are taking and append to a staff for whom the visitor is there to see. The system will also provide a search engine for easy retriever of visitor records from the database. And lastly, provide a secure interface by granting access to only authorized personnel to use the system.

3.5 LIMITATION OF THE STUDY

Since the system is operating online which means reliable internet access is required to access information from the system and can be made over the smartphone or computer with a web browser and Apache server.

4.0 REFERENCE

Liu, Y.M., Y.D. Dong, and J. Wu. Scenic Management System Based on Number of Visitors. in Advanced Materials Research. 2014. Trans Tech Publ.

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