**CHAPTER TWO: LITERATURE REVIEW**

**2.0 INTRODUCTION**

Multimedia is content that uses a combination of different content forms such as text, audio, images, animations, video and interactive content. Unlike the normal text medium for sharing content, multimedia allows messages to be shared in different formats.

A Multimedia E-bulletin Board system is an online web application that allows the dissemination of information, between different people, it is a place where people hold conversations in form of posted messages, A user can perform functions like reading of messages, news, information, bulletins and also exchanging messages with other users either by checking the different public message boards, reading through the threads created by other users, or direct chatting with another user.

The Multimedia e-bulletin board system allows the exchange of text, audio, images, animations, video between different individuals using different computers.

**2.1 THEORETICAL BACKGROUND**

Our proposed system is structured using the MVC architecture which is Model, Views, and Controllers. This is done with regards to the best practices of separation of concerns and also in line with the DRY (Do Not Repeat Yourself) structure. These structures enhance system scalability, improves system performance and also makes code and system maintenance easy.

In order to achieve the best results, we will adopt some of the modern technologies used in the design and production of high-quality scalable systems. Some of these technologies include HTML, Bootstrap CSS, PHP (Laravel ), and VueJs. For the robust database system, we will use a relational database system, MySQL since the data to be captured are relational in nature. Some examples of existing e-bulletin board system include USENET, Textfiles etc.

Textfiles is one of the BBS that still happen to be alive, it is a bulletin board system managed by Jason Scott, and since to show how old bulletin board system looks like before the emergence of recent advance bulletin board systems, the only disadvantage of textfiles is that it only convey information that is in text format, and information is being disseminated by only one individual, which is the administrator.

The Usenet is another medium of distributing information through the use of computer systems, the use of Usenet, however, may see complex for the non-computer geeks, or average computer users, as such Usenet is rarely used from disseminating information needed by the general public.

Other Bulletin Board systems that are still exiting includes:

http://open-sez.me/: This is a place when default passwords used by people are stored, it is more like an archive for commonly used passwords.

Tommy Holiday Camp BBS: This is another BBS that try to emulate the look of older BBS, though it is still active, it is rarely used for sending information.

TUCoPS 3.0: It is a bulletin board system that is seen as the digital underworld, and it houses a lot of information regarding various hacks, the URL is tucops.info/tucops3/

The problem with a majority of existing BBS is that information is only sent by one individual or a set of individuals, without giving other people the change to contribute or to share information too, another problem is that information that is spread is based on one niche.

**2.2 REVIEW OF RELATED LITERATURE**

On February 16, 1978, the first electronic bulletin board system was created [1], It was the first public dial-up bulletin board system that was built, and it was built by both Randy Suess and Ward Christensen, it was referred to as computerized bulletin board system (CBBS)[1] and the main object for building it as at that time was for Christensen and other computer hobbyists to be able to exchange information between each themselves.

Since the emergence of the electronic bulletin board system, many scholars, as well as many tech individuals, have released different articles and research about the bulletin board system.

According to Hyunmo Kang [2], the three systems most commonly used for sending asynchronous information within a group are the online bulletin boards, electronic mail, and online searchable storage archives, As the technology world evolved, the systems also evolved, with a lot of improvement being made, as opposed the previous types, He referred to the multimedia e-bulletin board as being designed and implemented as a next-generation asynchronous information system that enables rich communication and collaboration among people using multimedia objects such as text, image, moving picture, sound, voice, and web[2].

Elizabeth F. Churchill [3] during a research at FX Palo Alto Laboratory that is supposed to look at the best way of communication within the organization, discovered that since most people in an office are not always in their desk, or the distance between different offices are far, In the building, about 7 cork-boards(poster board) were used in sending information, with each board having different area of concentration. It was discovered that most people tend to have more interest in some of the poster boards that their content changed frequently. After the research, it was discovered that an online information sharing site would be more preferable, as most people in the building or office spent the majority of their time on the computer screen working, Although, email exists, they are said to have limitations, especially when it involves sending information for general interest. At the end of the research, it was discovered that communication and content sharing with colleagues in an organization is valuable.

In 1992, another research was carried out to explore how technology might facilitate inquiry[4], inquiry in this context is said to be a key to the scientific study that allows a fresh examination of ideas and involves the learner actively in the process of investigation.

The researchers investigated how students and experts can collaborate over networks about natural phenomena[4], using digital video to share observations and ask questions, In that same year a trial of the multimedia bulletin board was conducted with a class of fourth graders who were studying weather, Students worked in groups and used a video camera to observe and film real-world weather phenomena. At the end of the research, it was discovered that access to remote information sources and scientific expertise motivated the students and get them excited to learn more.

In other to improve on how information is being sent and received, using the multimedia e-bulletin board system, more researches are being carried out by several organizations and most new bulletin board system are also being built.

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