A WEB BASED PAPERLESS MEETING MANAGEMENT SYSTEM

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Abstract- The university system faces many difficulties when scheduling and conducting meetings. The proposed system aims at the design and implementation of a Web-based paperless meeting management system for the university. The system provides a technological solution to utilize such meeting management systems. The system consists of the development of a web-based paperless meeting management system with a data table management option. The proposed system will provide a meeting arrangement may have Kotelawala Defence University (KDU) to get details of the meeting or notify alternatives meeting that can be used through the system. Also, this system provides a meeting room direction map, participants can check meeting details online. Within the day of the meeting attendance mark through Quick Response Text (QR). Provide the special section for out participants to participate in the meeting. To accomplish this, the Web-based paperless meeting management system (WBPMMS) was developed Hypertext Mark-up Language (HTML), JAVA, Android Studio, MySQL, Extensible Markup Language (XML), Cascading Style Sheet(CSS), JavaScript and Web services Description Language (WDSL). The outcome of this study also offers solutions to overcome issues that may occur in the process of manual meeting management. Many industries use QR codes to attract participants and get their information stored in a private database. Further development of the solution will enable of handling the system in android platform.

Keywords- Paperless Meeting management system, Web-Based, Quick Response Text (QR)

I. INTRODUCTION

A typical meeting is led by a chairperson, and minutes which are the recorded deliberations of the meeting are generated at the end. Under the corporate legislation, two classifications of meetings are general meetings and special or extraordinary meetings. These meetings require a quorum, minimum number of members present to make the legally operative. Decisions are taken by the number of votes the assenting and dissenting parties can muster. In the past, before technology played a significant role in our lives, conducting a meeting was a challenging task. The major reason for this weakness was the underdevelopment in the field of telecommunication. Meetings could not be held punctually. Meetings held are not done effectively and efficiently due to poor communication channels among persons. In other words, a meeting with poor ICT interaction was a mere waste of time and energy. Currently, there is no any application software that schedules meetings inside KDU. The traditional method is being used. Up to now, higher management gives instruction to the secretary wants to arrange a meeting. The secretary print meeting minute and distribute or else send an email to staff members regarding the meeting. Therefore, this study focuses in-depth study find solutions for the problems that arise during minute distributions, how the emails are being used to inform the meeting schedules and what if these emails do not either reach the inbox or mistakenly sent to an irrelevant person. Moreover, the problems of displaying the date, time and venue of the meetings on notice boards and most participants do not have an effective impact when they
The purpose of the project is to develop a paperless meeting schedule application. We have identified the following objectives:

- Identify the available methods that used for holding a meeting and the problems encountered.
- Identify the available technologies for holding meetings in a paperless manner.
- Design the software solution to address research problems with available technology at present.
- Conduct testing and evaluate and improve the system to meet all functional requirements identified.

II. LITERATURE REVIEW

Through the review, it will be thought about regarding the procedure and available observes in what are the problems of conducting the meeting, technologies as well as what are the existing systems for meeting management.

Meeting has different interpretations and definitions according to the various scholars. Meeting meetings for solving problems or exchanging information it is important to gather for an organization that has analyzed and analyzed all the important decisions (MARUTHAIAH, 2010).

By determination, each meeting the date and place, the system will participate in the system using JavaScript, CSS and MySQL. Using Meeting management system in an organization can improve an efficient timetable and resources for the meeting (Sultan et al., 2009), (Erik Timmerman and Shik Choi, 2017).

Meeting of most meeting rooms or management system meeting in meeting rooms is basically based on a specific date. PIR sensor fusion devices and Ethernet connectivity allows frustating since there is not always a specific date. PIR motion sensors are currently installed in multiple rooms on campus as per a pilot project (Al-Ratrout et al., 2010).

The new hybrid multi-agent architecture tests the troublesome problems that are not generated by the non-programmers to verify the algorithmic functionality of the small representative agents of small representatives of multiple representative agents capable of running on small devices on the mobile device. The algorithm is active and provides the operating system for the hood device (Al-Ratrout et al., 2010).

Meet-me Representatives help mobiles to find time by using cell phones meet meeting Planning System. The current implementation basically will review the timing of participation with the algorithm with an algorithm. The Meet-me prototype platform for Android developed (Niederer and Schatten, 2009), (Erik Timmerman and Shik Choi, 2017), (K. Clark, 2018).

III. METHODOLOGY

A. Approach

In the Analysis of the Meeting Management Problems and web base meeting System process first user should log in to the Web application by providing user’s name (email address) and password to the system. The web-based method is suitable for in-house users and Mobile application used for outsiders. All outsiders register with the administrator. The external user will need the link of the android application and the information required by the administrator to his email address. Then the outsider can log in to the meeting through a mobile application.

The external person can find out all the information conferring to the meeting (Date, Time, Venue and who will be participating in the meeting). The participants will be selected by the initiator of the event, Meeting minutes also upload by the initiator to the system. According to the number of participants, the system selects the appropriate location for the meeting. And the web application will send a notification for the user whether the information sends successfully or not and give a compliment for the sender for his service. Each information that users send will stores in MySQL database successfully and for the work with the application it required the continuous internet connection. (Figure1)

B. Technology Adopted

It is necessary to use the new technological methodology for the system. It is very important to use acceptable tools to develop the productive system. Use of any unsuitable tools can solely end up in developing a system with unnecessary errors and faults and use of those badly chosen technologies additionally can end up in crashed when the new system implementation. Badly chosen technologies which can be extremely advanced and complicated will enable manufacturing a system with a top quality, however, these technologies may result in developing a system that spends lots of time and resources to perform a task that is anticipated by the system. It is very important to use an application programming language and the other necessary tools to develop a productive system. Therefore, these technologies and tools can help to develop the system among a minimum development time the most objective of developing this type of an application is to produce the users more efficient work system instead of doing manual approach. Because of that, we should use the most applicable tools available in the market to develop the system. Technological considerations - followed during the development of the system Efficiency and Performance Re-usability and flexibility object-oriented development support so according to the meeting management System java and android studio used to develop the mobile application as well as web application. According to that requirement, the system has developed by using Java and using MySQL database to run on the Windows operating system. This chapter includes the details about the technologies that we are going to use to develop A web-based paperless meeting management system.

- Web Application

The programming language that is going to apply as the developing language for the system development turned into significantly trusted accuracy, performance. When considering all these technologies which can be associated with the A web-based meeting management system the proposed system can be applied a web-based technology. The spring and hibernate Framework consists of the common language runtime and the Java class library. You can think of the runtime as an agent that manages code at execution time, providing core services such as memory management, thread management, while also enforcing strict type safety and other forms of code accuracy that promote security.

- Database Selection

Consistent with the above eventualities most of the structures are used the square database to keep facts. It seems it is simple to control and perform. So, the database put in force on the server must able to supply efficiencies operations. Consequently, the proposed system decided on the MySQL server as server. MySQL server is the inspiration of delivering challenge critical performance with in reminiscence technology and quicker insights on any information, whether on-premises or in the cloud. MySQL Server provides an environment used to produce databases that can be accessed from workstations, the Internet, or other media too. Database management or DBMS, store user’s data and enables them to transform the information into statistics. Those systems allow users to create, replace and extract facts from their database. A database is an established collection of information. Facts refer to the characteristics of human beings, things and activities. Square server stores every statistic item in its very own fields. In square server, the fields related to a character, thing or occasion are bundled collectively to shape a single
complete unit of records, known as a document. Each record is made up of some fields. No two fields in a record will have the equal area name.

Throughout an MySQL server database design project, the evaluation of your project wishes identifies all the fields or attributes of interest. If your commercial enterprise desires trade through the years, you outline any extra fields or alternate the classification of present fields.

C. System Architecture.

System architecture is divided into main three layers. They are Application Layer, Presentation Layer and the database Layer. (Figure 2 and 3).

D. Software Design.

There are three user levels in the system. They are Initiator, Participants (external and Internal) and Technical officer. External participants will access the android application. (Figure 3) Admin (Initiator, Internal participants) will access the web application. (Figure 4). For internal participants system will provide the Barcode No (Figure 5).

E. Functional Requirements.

- A "meeting initiator" can update the require documents according to the meeting.
- System should have version control of the documents that update by a "meeting initiator".
- System should have capable to add reviews for the documents during the meeting.
- The system shall keep participants informed about meeting schedules and their changes.
- The initiator can inform users of meeting date & time or else any schedule changes.
- Participants should be able to Inform the attendance to the initiator
- System should be able to provide attendance summary

F. Non-Functional Requirements.

- Efficiency:
  - Performance - minimum 512RAM, Space - minimum 1GB
- Security:
  - Privacy rules should be enforced, a meeting participant should not be aware of limitations stated by other meeting participants. Password protected DB.
- Reliability:
  - Meeting locations should be convenient, and information about meetings should be secure.
- A person may not be at two different places at the same time; a meeting room may not be allocated to more than one meeting at the same time.
- Flexibility:
  - The meeting date and location should be as convenient as possible, and available as early as possible, to all participants.

IV. EVALUATION

In this, we describe an evaluation of our approach and the developed system while evaluating the objectives achieved how the project deviated from its original specifications and the circumstance identified during the time of the project. This chapter will give the idea of the measure that has been taken to handle the problem occurred and knowledge which have been gathered by supplying solutions for such issues. A determinative evaluation a method for adjudicating the worth of a program while the program activities are forming (in progress). This evaluation is done with the user requirements or the functional requirements. Cumulative evaluation refers to the assessment of participants where the focus is on the outcome of a program. It is done with a high-fidelity prototype to assess the achievement of a product more progressive.

V. CONCLUSION

The results and outcomes engendered in relative to the specificity of the problem domain are enlarged into wider concepts depending on logical assumptions. This chapter aims to clearly accentuate the outcomes and findings of the project and to determine the way of these outcomes and findings can be matched in different contexts that are similar to the problems which are solved by the developed A Web-based paperless meeting management system. In the rest of the chapter, a total summary of the development of the system is given. Furthermore, future enhancements for the developed System have suggested finding out ways to give in additional features to the system and using it outside the business subject in use. The purpose of the project is distributing meeting minutes in the correct manner and get detailed reports. The development team implemented this system in order to determine its ability to satisfy the entire functional and non-functional requirement with special qualities such as flexibility, reliability efficiency and etc., to overcome the drawbacks identified in the system. The study found out that it is feasible to use the language Java and MySQL as database and java in the android studio used to develop the mobile application to develop the project.

It’s a mobile application and web-based project, so this mobile application offers a user to install the application and enter data. This is very helpful for the user to enter the desired information through so much simplicity. The user is mainly more concerned about the validity of the data, whatever he is entering. In Web Server, Initiator provides the option of monitoring the records entered earlier. Data storage and retrieval will become faster and easier to maintain because data is stored in a systematic manner and in a database. Decision-making process would be greatly enhanced because of faster processing.
of information since data collection from information available on the computer takes much less time than a manual system.

This system allows getting information about History of the meetings as well as upcoming meeting. This gives efficient and cost-effective. The mobile application can be access by defined user categories.

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