

Analysis of Multimedia Data Repository For Event Information System

1st Siddiqui Neha Hafiz

dept. of computer engineering

Anjuman-I-Islam's Kalsekar Technical Campus

New Panvel, Navi Mumbai, India

siddiqueneha0101@gmail.com

3rd Ansari Mohd Saeem Mohd Saleem

dept. of computer engineering

Anjuman-I-Islam's Kalsekar Technical Campus

New Panvel, Navi Mumbai, India

ansarisaeem00@gmail.com

2nd Khan Aaisha Imtiyaz

dept. of computer engineering

Anjuman-I-Islam's Kalsekar Technical Campus

New Panvel, Navi Mumbai, India

khanaaisha4009@gmail.com

4th Ansari Mohamadkurban Abdulkayyum

dept. of computer engineering

Anjuman-I-Islam's Kalsekar Technical Campus

New Panvel, Navi Mumbai, India

kurban.ansari999@gmail.com

Abstract—In today's competitive world we have to update our knowledge by attending various events such like conferences, competition, seminars, or training. Those attended events are not just going to upgrade our knowledge but also it help us to update our CVs which is directly connected to our economical side of career. But plenty of times we upgrade ourselves by the knowledge but fail in documenting it. our proposed system is definitely goint to help you to document your knowledge.

Index Terms—Multimedia Data Repository, SHA256, AES, RSA, Gzip, ImageGear, Report Generation

I. INTRODUCTION

Digital media support changed radically the way information is consumed. Nowadays, accessing digital contents is a common task, especially through the Web and its overwhelming size. Also, recent trends give the user an active role on producing contents on different media (blogs, photographs, pod-casts, videos) and establishing relations between media components, instead of just passively consuming information. With such a massive amount of information available, new challenges arise [1]. The proposed system promises to reduce the workload and redundancy caused by the manual work. It mainly resides on two modules, organizing and attending the event [2]. The first module i.e organizing the event will have the functions like the user will ask for the permission of organizing a particular event of his/her choice and the necessary paper work that comes with organizing an event will be done in this module itself therefore eliminating the manual work which takes quite a bit of time. After all the permission work is done a report will be generated whether the proposed event is accepted or not, the main thing that comes in mind during generating the report is how the confidentiality of the report will be maintained, if not anyone can make desired changes which is redundant. To avoid this redundancy we will be providing different user privileges.

Other module is of attending an event, user must be logged in in order to be marked as present we are trying to uses

location services and photo captured by the user for double authentication of the user present in that particular event.

A. MOTIVATION

Being a part of the current institution we have seen many events come and go we participate, some of us win some of us loose. But the main thing that makes an event successful is how it is organized. Nowadays the events are managed manually and the work burden is too much to handle even for bulk of people. To reduce the workload we are proposing a repository of a system which will be doing all the work and much more which is done manually, it will not only reduce the time which is consumed but also prove to be an efficient way of handling the organizing part of the event. [1]. The proposed system promises to reduce the workload and redundancy caused by the manual work. It mainly resides on two modules, organizing and attending the event [2]. The first module i.e organizing the event will have the functions like the user will ask for the permission of organizing a particular event of his/her choice and the necessary paper work that comes with organizing an event will be done in this module itself therefore eliminating the manual work which takes quite a bit of time. After all the permission work is done a report will be generated whether the proposed event is accepted or not, the main thing that comes in mind during generating the report is how the confidentiality of the report will be maintained, if not anyone can make desired changes which is redundant. To avoid this redundancy we will be providing different user privileges.

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B. Objective

By looking at the name of the project one can guess the primary objective of it i.e to maintain the details of all the participants attending the event and the event itself.

Some other objectives are as follows:-

- The system will come with all the necessary tools to store data in any format be it an image of the event in .jpg format or details in .pdf format in a precise and detailed manner
- To take attendance while events are going on. The system will also consist of an attendance module, not just any other attendance managing system but it will record the attendance while the event is going on.
- To make any event a successful one we must be aware of what the audience feels about it, what are the changes should be made in order to make it more interesting and successful, to get all the necessary data the system will be loaded with feedback module.
- As stated earlier we will be generating a detailed report about the event, so the system will display that report to only those users who have been authorized to see or update it.
- As the system is handling the data from cloud server back and forth the main concern is that it should maintain the confidentiality and integrity of the data.

C. SCOPE

The system mainly deals with data related to all the events say where the event is taking place, who are involved in it, when is it going to happen, etc all minute details of the event which deemed important is stored in the system.

The system is designed in such a way that we will be able to gather the attendance of the attendee while the event is going on, the feedback of the user to improve the event, report consisting of details of how the event went down, what was the total number of participation and much more but the most important part of the system is all the data is stored on cloud server and because of that we will be able to access it remotely

II. METHODOLOGY

We are going to implement this project using xamarin which is cross-platform Mobile development use to develop all the native app simultaneously. For making repository database we are using Azure cloud which is faster and can remotely access. Designed for the modern business, the flexible Azure cloud platform allows small and medium sized businesses to build, deploy, and manage applications by leveraging the power of Microsofts global network of datacenters. The flexibility provides businesses with both Platform as a Service (PaaS) and Infrastructure as a Service (IaaS) capabilities. Microsoft Azure cloud services are easily integrated with existing IT environments which allows businesses to leverage the power and scalability of a hybrid cloud IT infrastructure. For hashing the password we are using the SHA256 algorithm. SHA-256 provides better prevention against collision, meaning the same input data always has a different hash

value. For compression, we are using Gzip library. The GZip file is roughly 80 Percentage smaller in size than the text file, but the write and read times have nearly doubled. Still, the GZip is writing to the file at a rate of just over a millisecond per file, which includes the compression time. for Report we are using ITEXTSHARP library. iTextSharp is a free and open source assembly that helps to convert page output or HTML content in a PDF file. Last thing we are using AES, RSA for encrypting and decryption the reports to provide full security.

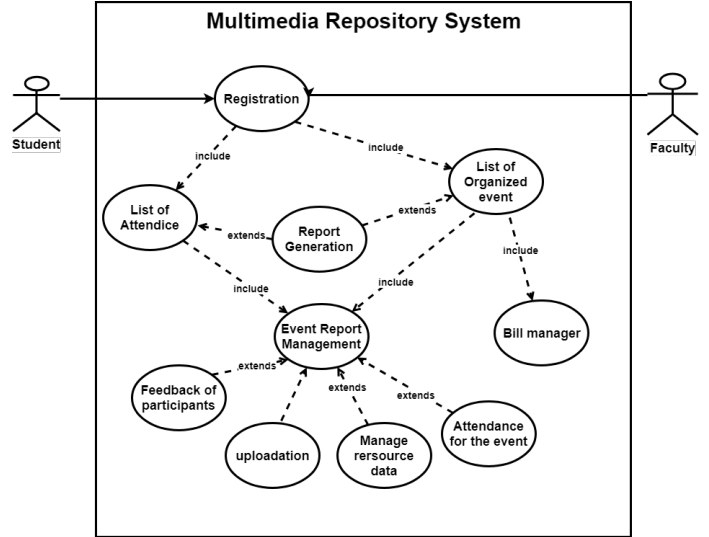


Fig. 1. Use Case

A. Use Case

The system is mainly divided in two views, which is directly related to the type of the user logged inn. The first view is if the user is logged in as a organizer then he/she will have the privileges of uploading the details of his/her events. Second condition is if the user is logged in as a attendee then he/she need's to upload the necessary details as a proof of attending the event. If the user is an attendee then to validate the user's participation in a particular event he/she needs to upload the necessary details of that particular event At the end a detailed report will be generated which will be consisting all the necessary details of the event. The report will consist of modules like feedback of the user, resources of the event, attendance of that particular event etc.

III. OVERVIEW OF THE SYSTEM

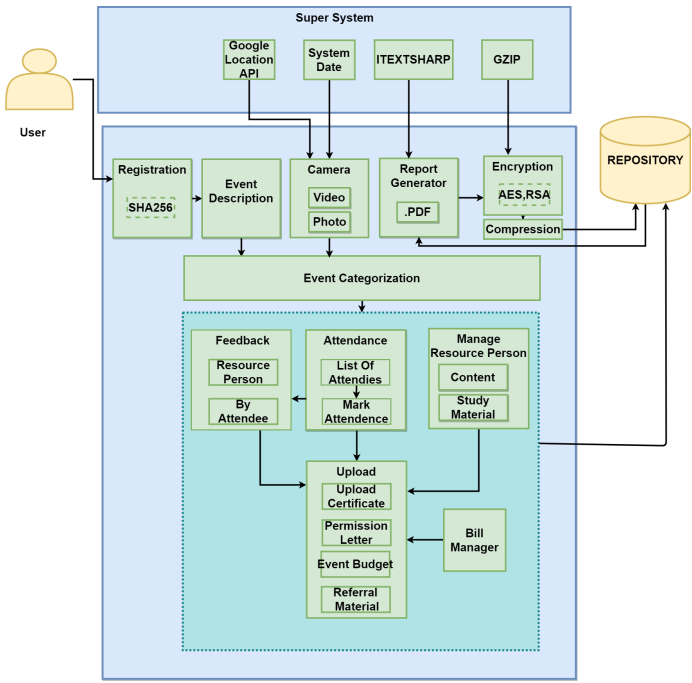


Fig. 2. System Architecture

In order to access / log-into the system the user must be registered and once the user has completed registration the entered data is converted into hash value using SHA-256 algorithm to maintain data confidentiality. After registration process the user might be an organizer or a attendee, say a user is an organizer then that user has the privileges to update, delete or upload a event but before uploading the event user must fill permission letter which is mandatory, if permission is granted then only organizer can upload a new event along with all the necessary details like what type of event it is, budget of it, event poster, etc If the user is an attendee then the user has to upload either the certificate of that event or the picture of the event itself and along with it date-time and location will also be uploaded which will be generated using camera module; to mark the attendance of the attendee the uploaded date-time, location of the event and the actual date-time, location of the event will be compared if the data satisfies the condition then the attendee will be marked as present or else absent. The success rate of the event is measured by the positive feedback of that particular event so the most important part of any event is feedback, the system will consist of feedback module which will be available to the user and on the feedback provided by them the event success rate will be measured. At the end a detailed report will be generated which will include data from all the modules, later the report will be encrypted and decrypted using AES, RSA algorithm followed by compression using GZIP library and it will be stored in the database.

A. User Registration

In the system, we are having multiple roles of users like participants (In-house or Outer), faculty, event coordinators and event organizer. In order to maintain data confidentiality, the details of the users will be converted into hash using SHA256 algorithm.

B. Upload:

In this module, users will upload data which will be either a picture or a video related to events as the data can be of huge volume and can occupy a huge amount of space so to evade this bump data will be compressed and stored into the database

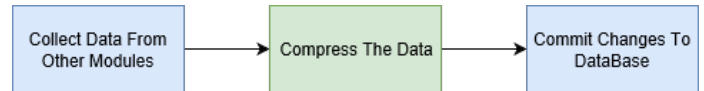


Fig. 3. Modular Diagram of Upload

C. Attendance:

Attendee and organizer both have to upload picture of the event and along with it date-time and location will also be uploaded which will be generated using camera module; to mark the attendance of the attendee and organizer the uploaded date-time, location of the event and the actual date-time, location of the event will be compared if the data satisfies the condition then a list of all the attendees will be displayed and according to that attendance will be marked this all will be done in ATT-08 format.

1) *Modular Diagram For Attendee attendance::* After successfully registering attendee into the system they will upload live event pictures through camera module and with that system date-time, location will also be uploaded. The actual date-time, location and uploaded date-time, location will be compared, if it comes up true then attendee is marked as present else absent



Fig. 4. Attendee attendance Module

2) *Modular Diagram For Attending The Event::* This module comes in with the same functions as that of Attendee attendance module but along with some modifications like: the details will be displayed in ATT-08 format mark the attendance of both the organizer as well as the attendee

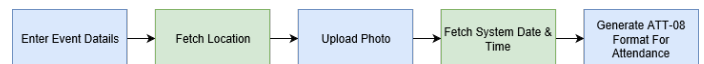


Fig. 5. Event Attendee Module

D. Report Generator

Report Generation is the most important module of the system. Firstly all the details of the event is fetched from the database, the fetched data will only be visible to the event organizer only. The fetched data is later on downloaded and saved in .pdf format using ImageGear library. the report will be encrypted using AES algorithm to maintain data confidentiality and at the end it is compressed using GZIP and stored into the database

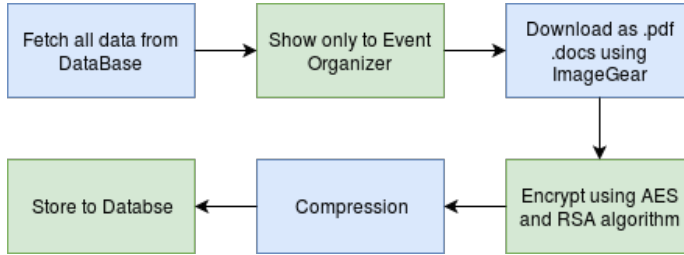


Fig. 6. Modular Diagram of Report

E. Compression

Compression is a technique used to reduce the size of the file and the data which the system is storing in the database is mainly images and videos which in time will occupy more space. So to deal with this ambiguity compression technique is used. It will directly increase the speed and efficiency of the system



Fig. 7. Modular Diagram of Compression

F. Security

As in a repository system the main thing is how the data confidentiality is maintained. There are many techniques/algorithm to attain the same the most popular and safe is SHA-256 algorithm; what it does is that it converts data into one way hash code which is in hexadecimal format, in the system mostly user credentials are passed through SHA-256 algorithm

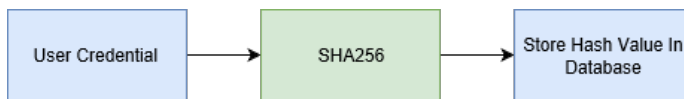


Fig. 8. Security Module

IV. CONCLUSION

This system promises to replace the manual work of maintaining and updating the data at the time, before and after the event. It will include almost everything right from sign-up/log-in up-till feedback, User's attendance is recorder along

with the location and date-time, confidentiality of the data is maintained and much more features. The most important and stand alone feature of this system is generating a detailed and precise report of the event. All of this data is maintained and stored on cloud server.

REFERENCES

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V. ACKNOWLEDGMENT

we would like to take the opportunity to express our sincere thanks to my guide **Prof. Kalpana Bodke**, Assistant Professor, Department of Computer Engineering, AIKTC, School of Engineering, Panvel for her invaluable support and guidance throughout my project research work. Without her kind guidance & support this was not possible.

we also extend our sincere thanks to all the faculty members and the non-teaching staff and friends for their cooperation.

Last but not least, we are thankful to all my family members whose constant support and encouragement in every aspect helped us to complete our project.