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A Mobile App to Help the College Students based on Cloud Computing

Pranay Lad[1], Atul Karpe[2], Yadnesh Konadkar[3], Prof. Manivannan P.[4]

[1,2,3]Student, Dept. of Information Technology Engineering, M.G.M. College of Engineering and Technology, Kamothe, Maharashtra, India

[4]Asst Prof. Dept. of Information Technology Engineering, M.G.M College of Engineering and Technology, Kamothe, Maharashtra, India

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Abstract – *Over the years colleges or institutes does not have any centralized system which they provide all the information to the students. Many colleges use manual system to provide information which is lot of time consuming or not suitable for the students. To overcome this problem, we are developed cloud-based app which help to the students as well as college or institutes. This system helps to the colleges to manage all the information pertaining to its student. Also, through this app student can able to access the e-books of their academic years, also while studying students can apply for internships through our platform. Overall, our app will be a one stop solution for the students where we trying to tackle which student faces during the college life. In this paper we are presented how to we'll planned, analyzed designed this application in cloud computing environment.*

Key Words: Cloud computing, Mobile App, IaaS, PaaS, SaaS, e-learning, cloud based system, internship platform for students.

1. INTRODUCTION

This Cloud based application developed for the students Which can be all the information provided regarding their class, stream, department and branch. This Cloud based application provides all the data to the students to related their course, class and year. In this Cloud based application all the data sorted by the operators. Cloud computing may be relies on sharing resources to achieves coherence and economical scale.

The idea is implemented through Android mobile app that focuses on design and development of cloud based this application. This app is capable to provides all the data the students, faculties. The data are well protected for personal use and makes data processing very fast. In this application we can also take the security concern of student's data and make sure data are well protected.

This application includes registration, once registration done user (faculty, students) should be able to access the information. In this application every user entered through username and password. All users should be given the username or passwords for identity [1]. Logged in users are able to access all the data related their academics. In this application teachers are able to upload the exam notices, previous year question papers, Notes, study material also exam form or admission form. The data can be retrieved easily.

In this project we are also providing document section which can students are uploaded their documents. So whenever they needs, documents they can easily access it. This Cloud based application integrated end to end administrator and user that provides relevant information across the college or institutes.

The severe consequences visual presents on certain capabilities related to this application:

1.User friendly interface (require visibility between user and admin)

2.Less Paperwork.

3.Estimating peer to peer system (Central Co-ordination)

4.Efficiency and Flexibility.

2. PROBLEM STATEMENT

Many of the college uses the manual system to provide all the information to the students. This manual system is time consuming and does not sufficient to the students. Sometime students are Unware about the information like college notices, exam schedules or any other events. In manual system the faculties provide all the details through the paperwork. In the colleges many lot of student with the different courses, class, stream or years. So some time challenges arise to the faculties to provides the details to the students. That's why we are developed this cloud based application to provide which can managed all the data centralized manner.

3. EXISTING SYSTEM

The basic need of this application is designed which is automated the process and maintain the students details earlier this work should be done manually. By developing package a lot of burden removing from the college, which was maintaining students details. It improved the efficiency, reduced the cost and time need to work manually. In Existing system earlier all the information/ data pertaining to the students was maintained manually or we can say it was on paper. Hence, it was creating problems to the colleges or institutes, for how to manage it properly. With help of this system college or institutes able to maintain the data properly and accurately. In this system cost of maintaining data are bigger and huge as well as large man power are required. The procedure was error prone it was not accurate. Manual system was not suited for electronic exchange of data [3].

In this system all the work are manually done but proposed system was we have to computerized all the data maintain in traditional way.

- Lack of security data.
- More manpower.
- Time consuming.
- Consumes large volume paperwork.
- Needs to manual calculations.
- No direct role for higher officials.

4. LITERATURE SURVEY

This [1] system has comes more functionalities to provide and manage all the data/ information of the students. In this system administrator should be mange the all the activities and also provides the all the details to the user. Administrator takes responsibility to system to ensures data security also provides the data integrity. In this system students will get all the information related their college like exam details, study material, notes, Previous year question paper, exam form notices, University notices and admission details etc.

In this system we are also facilitate to students to upload their documents which is stored on cloud [2]. Whenever needed they can access. We are also provide additional programs to the students like video lecture, internship program, online workshop, courses etc. As we know todays market students have to be paid for the courses, internships. In our system we will give all the facilities free for students.

In [3], this system faculties should be able to upload the details in the system. Faculties should plays the role of admin in this system. They are upload the notices, exam form, study material. In this system admin should be manage all the activities and maintains the stability of system. Admin should be able to add the users, delete users, update the information, manage and sorting the database. In this system students and faculties should be login through mobile app.

In [4], a method is proposed system where the all the database should be manged through cloud. In the cloud computing we can stored data through Microsoft Azure, SQL Database, Amazon Services, Xeround, Dyanamo DB, Relational database services, Google Cloud SQL, ClearDB all this options that capabilities to store large amount of unstructured text, video, audio and input etc.

This paper helps to understand the actually system and provides the end user navigation to the application [5]. Data could be stored and retrieved. This model provides functionalities for students to participate or enrol for various courses also students able to ask the their doubts in this system. In future we will try to able to upload the university results, online exam fess payment etc. The main aim is that to reduce the manual system.

Gradle is open source build automation system that makes easy to add third party libraries with one line up code. Gradle mainly used for android software development using java, but there is always groovy and gala plugins[6]. Android studio provides code editing, debugging and testing tools which is easy to drag and drop interface. The emulator runs android apps on computer.

5. PROPOSED SYSTEM

Proposed methodology of object/obstacle detection works in a way that it involves several processes from problem statement and provides sufficient way that can be users are friendly to the application. The cloud should store the large data of students. Mobile application provides the security concerns to the users. Which can be their data should be secured. In addition, we are programmed for the students to video lectures, Courses and internships. The students should be able to the ask their doubts through this application. Faculties also uploads or posted the notices, study material, notes The aim of proposed system is developed to a system which is improved a facilities in the system. The proposed system overcomes all the limitations

of existing system. The system provides the proper security and reduce the manual work.

Advantages of Proposed System:

- It is trouble free for use.
- Security of data.
- Ensures data accuracy.
- Better efficiency.
- Better services.
- Minimum Time required.
- User Friendliness and interactive.
- Minimum time needed to various processing.
- Minimize manual data entry.
- It is relatively fast approach to upload and access the information.
- It is highly reliable, approximately result to the user.
- Efficient user interface.

5.1 Cloud Computing

Cloud computing is on demand availability of computer resources, especially data storage (Cloud Storage). In our Cloud based application system, we have to use cloud for the storing the data of both students and faculties. Cloud computing term generally used to describes the Data center available to the many users to the internet. In our Cloud based application all the data should be centralised with the help of public cloud. Cloud Computing poses the security concern because service provider can access the data that is at in the cloud. There are three types of cloud- Public Cloud, Private Cloud& Hybrid Cloud.

Private cloud is cloud infrastructure operated for single organization. Under taking Private cloud project requires significant engagement to virtualized business environment [3]. Public Cloud are delivered over public internet and they may offered as a paid subscription, or free of charge. Hybrid Cloud is the composition of public and private cloud.

5.2 App Development

The initial task of this application is app development app. Here In this system we can developed the mobile app which is act or process for mobile devices, such as personal digital assistance, enterprise digital assistance or mobile phones. These applications Pre-installed on phones using manufacturing platforms, or delivered as web applications using the sever side and client side for the processing.

YOLO (You Only Look Once) for development this app we are first understand the requirements of the system, then analyse the entire the system. Then with help of proper planning developed this system. After the developing this system we are also test the app and removes the bugs. We are also focused on the security concerns.

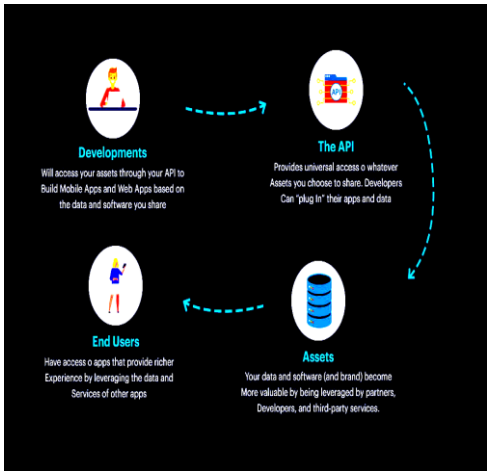

Fig -1: Mobile App System flow

5.3 Mobile App System Flow

Here the object-based or object-oriented classification uses both spectral and spatial information for classification. The process involves development process, The API, End users, Assets and End Users. The Development that is required from the side of server is the backend. Mobile app backend used to store, secure and process the data.

Backend development focuses on storing information in remote database scripting to add interactivity and creating Architecture that makes it quick and easy sort through information.

The API provides the access to the assets. In API developers can be Plug-in their apps and data. In assets your data is valuable by being leveraged by partners, Developers, and third party services. At the last Assets provides the access to the End Users.

5.4 Information Generation

We will be generating info according to the classification of the objects in the frame. These instructions will be sent to the text to speech system and then communicated to the user using input data. In the Information Generation system the system should get the input from the user. This input should pre-process with the help of database. The database should be Maintain the feasibility in processed data and removes the bugs as well as provide efficiency to the Input.

Then the information generation system provides the output to the user.

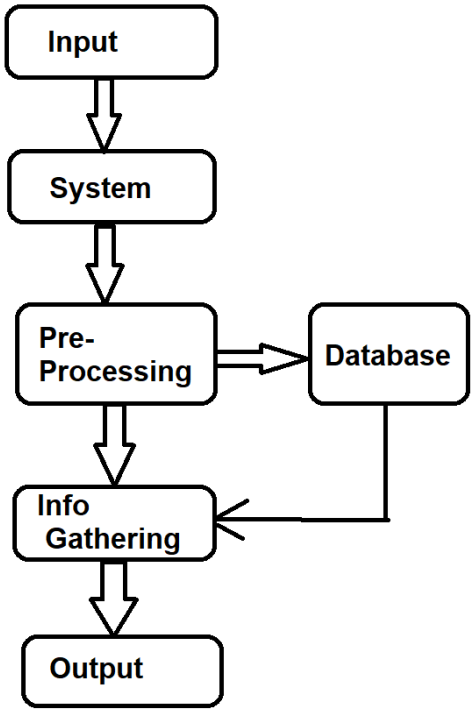

Fig-2:Information Generation

6. IMPLEMENTATION

6.1 User Flow

In this user flow system Admin, Web Admin Panel, Backend Server, Web Application, Mobile App and students are the objects in this system. They doing different tasks to flow of the system.

- Admin: User flow system admin does the add / delete / update the users data. Admin manage the data in the Web Admin Panel. Web Admin Panel all this data are sorted and managed efficient way.
- Backend Server: Backend server all the information stored information in remote database scripting to add interactivity. Backend server also process, secure the data.
- Mobile App: Mobile app get data to the backend server and notified the data in the front of users.

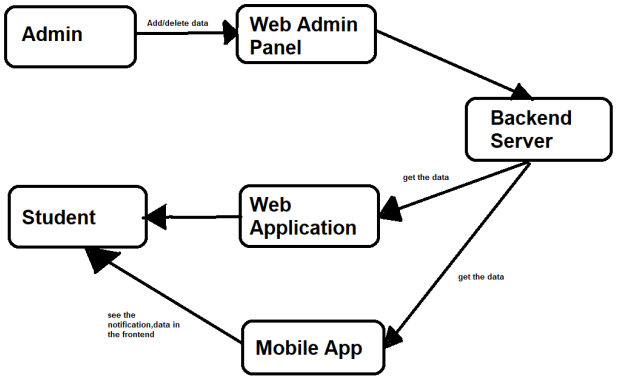

Fig-3: User Flow diagram

6.2 Cloud Computing Models

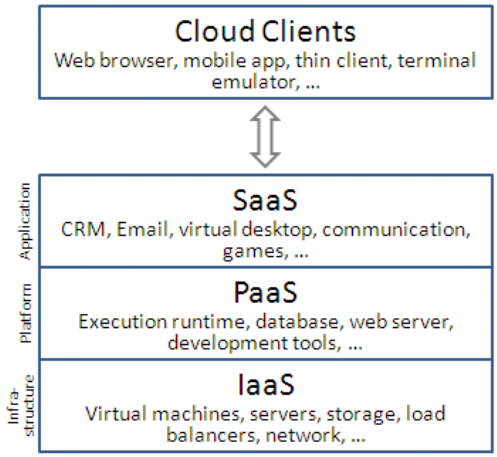

Fig-4: Service Model

"Infrastructure as a Service (IaaS) model refers the online services that provides high level API that are used to abstract low level details of underlying network Infrastructure like physical computing resources, data partitioning, scaling, backups etc. IaaS Offers the resources like Virtual Machine, Severs, Database, Storage, Load Balancer and Network.

"Platform as a Service (PaaS) vendors offers the development environment to the application developers. Cloud providers delivers the computing platform, typically including operating system. PaaS offers the resources like Execution Runtime, Database, Web Server, Development Tools etc.

In "Software as a Service" (SaaS) users gain the access of the application software and database. Cloud

providers manage the infrastructure and platform that runs the application. SaaS sometimes referred as "On-demand Software". Software as a Service offers the resources like CRM, Virtual desktop, Communication, Games Etc. [6]

7. RESULT

1) At first, we are registered first in system then we have to logged in this system. At the registration time we use otp based mechanism to verified user data. When user logged in through username and password, then admin Check the user identity and allow to access the data.
2) This connection is done by a app which is installed in the mobile phone of the user. In the app home screen will shown different sections for the users. The user can access the information once he is registered.
3) The system in laptop will test it using its APIs and SSD ALGORITHM and it provides the privacy of user.
4) After testing the app we will generate the output.

8. CONCLUSION

The technologies like cloud computing and App development plays a vital role in the development of the IT sector. We have made use of these technologies for the visually impaired students as well as faculties so that they too can able access all kind of information related their college or class. The friendly user interface of this application helps to manage and maintains the system flow. In we are provide additional functions to the students which they can able to access all of information. The development of the proposed system if is completed, it can serve the visually challenged to the students and faculties with a better service.

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