Digitization of Department Information

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Abstract: The digitization of documents which is of crucial importance to data processing, storage and transmission, because it allows information of all kinds in all formats to be carried with the same efficiency in accessibility, storage, collaboration editing, manipulation , preservation of manuscripts with cloud as the service. With the cloud storage, data is stored on multiple third party servers rather than on the dedicated server used in traditional networked data storage. Cloud computing uses the internet technologies for delivery of IT-Enabled capabilities as a service to any needed users i.e., through cloud computing we can access anything that we want from anywhere to any computer without worrying about anything about their storage, cost, management and easier disaster recovery, that makes cloud computing an attractive option.

Keywords: **Digitization, Cloud Service, Information System.**

I. INTRODUCTION

Documents play an important role in the organization. They contain information that is critical to the smooth operation of an organization. Organizations use documents to keep records, convey information and run day-to-day activities. Estimates show that 80-90% of organizational information resides on paper while the rest is stored in electronic format. Without a good system, documents are hard to find, hard to share and easily lost. Some lost documents are impossible to reproduce[1]. To overcome these limitations of the manual document management, digitization of documents make curriculum resources more accessible and to promote data access to a wider and increasingly diverse people.

A computing Cloud is a set of network enabled services, providing scalable, normally personalized, inexpensive computing platforms on demand, which could be accessed in a simple and pervasive way. Cloud computing characteristics enhances On-demand self service, Broad network access which allows services to be offered over the Internet or private networks, Pooled resources allows customers draw from a pool of computing resources, usually in remote data centers. Services can be scaled larger or smaller; and use of a service is measured and customers are billed accordingly. Deploying digitized information system on to the cloud will help improving the efficiency of the document management.

A. Domain

DIMS is developed using scripting like such as HTML5, CSS3, JQUARY, JAVA SCIPT, PHP. And for deploying the system on to the cloud we have used 000 webhost.

HTML5 is a markup language used for structuring and presenting content on the World Wide Web. It is the fifth and current version of the HTML standard. It includes detailed processing models to encourage more interoperable implementations; it extends, improves and rationalizes the markup available for documents, and introduces markup and application programming interfaces (APIs) for complex web applications.

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language. Along with HTML and JavaScript, CSS is a cornerstone technology used by most websites to create visually engaging web pages, user interfaces for web applications, and user interfaces for many mobile applications.

JavaScript is a high-level, dynamic, untyped, and interpreted programming language. It has been standardized in the ECMA Script language specification. Alongside HTML and CSS, it is one of the three essential technologies of World Wide Web content production; the majority of websites employ it and it is supported by all modern Web browsers without plug-ins.

PHP is a server-side scripting language designed for web development but also used as a general-purpose programming language. PHP code may be embedded into HTML code, or it can be used in combination with various web template systems, web content management system and web frameworks. PHP interpreter implemented as a module in the

web server or as a Common Gateway Interface (CGI) executable. The web server combines the results of the interpreted and executed PHP code, which may be any type of data, including images, with the generated web page.

000webhost.com, is an industry leader in providing top class free web hosting services without advertising,There are no hidden costs, no adverts, and no restrictive terms. Lightning fast speeds, maximum reliability and fanatical user support.

B. Organization of The Paper

This paper is organized as follows: Section II explains Methodology. Section III Results and Section IV Conclusion.

II METHODOLOGY

A. Architectural Design

The architectural design of a system emphasizes on the design of the systems architecture which describes the structure, behavior, and more views of that system and analysis.

B. Proposed System

Proposed system is 2 tier architecture consisting of client and server. DIMS contains four modules i.e., Faculty, Student, Placement and Research portal which are developed using scripting languages and deployed on to the cloud using 000 webhost website which is more secure than the traditional document management.

As we are using cloud as the storage, it is based on the Internet Protocol (IP), so for an application to be considered, it must use IP as its communication mechanism. While there are many protocols that can be run over IP, the use of Transport Control Protocol (TCP) is preferred
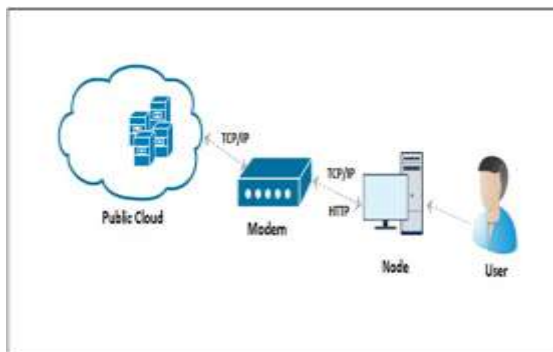
C Deployment diagram

Fig 1 Deployment diagram

D.steps for Deploying on cloud(000webhost)
- Setup a account.
- Setup a domain.
- Go to list accounts,to open the file manager and upload the website,click on go to CPanel .
- Then at the Cpanel ,click "another file manager"
- Create the folder that you need,and upload all the website files

E. Detailed Design

Detail design is narrative and graphical representation of the software design for the project which includes use case models and sequence diagrams, dataflow diagram [2].

Navigation Diagram
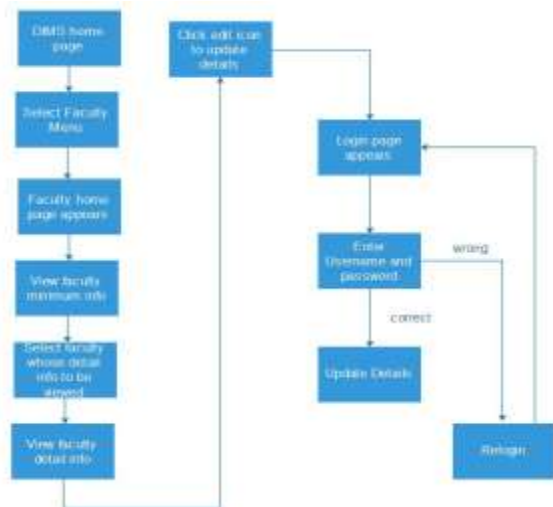
Faculty Module

Fig 2 Faculty module

- In Faculty Module User can view the faculty profile, and if faculty wants to update the profile then user must login by entering username and password.
- If username and password are incorrect then user is redirected to login page.
- If user wants to search any related details then user must enter keyword for searching.
- Admin must login to perform insert,
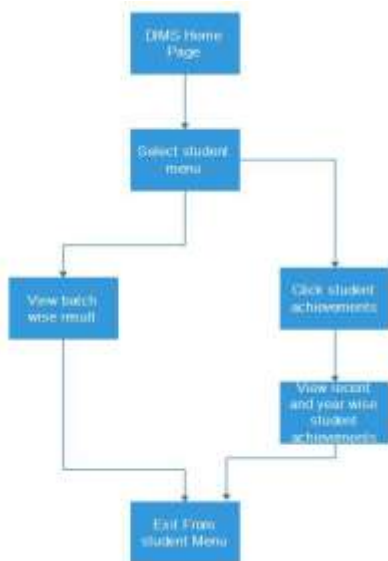 Delete and update the faculty details using   username and password.

Student Module

Fig 3 student module

- User can view batch wise results and students achievement details.
- Admin must login to perform insert, delete and update the faculty details using username and password.
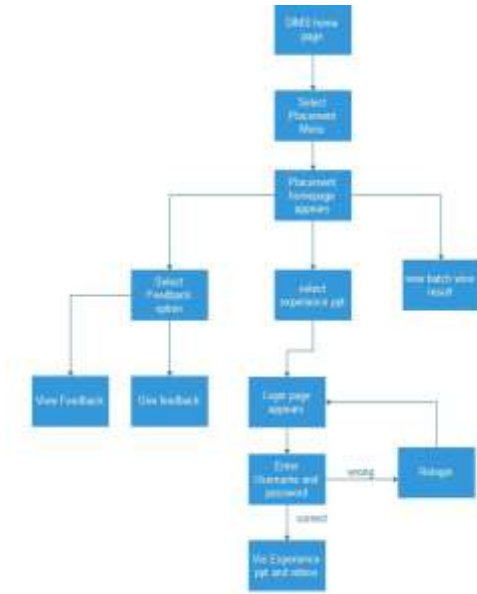
Placement module

Fig 4 Placement module

- User can view batch wise placement results
- Students can give feedback and view feedback of respective companies by logging using username and password.
- If login details are invalid then login page for students is redirected.
- Admin must login to perform insert, delete and update the faculty details using username and password.

F. User Classes and Characteristics

Sl.no	User class	Characteristics
1.	HOD	HOD has the privilege of adding Research guides.
2.	Research guide	Can add scholars under him/her.
3.	Research scholars	Can upload their publications, presentations, modify profile.
4.	Students	Students can view the various information of department, they can give feedback.
5.	Staff	They can update their profile
6.	Global Users	They can view various information related to department

III. RESULTS AND ANALYSIS

We Compared the Traditional Document that is paper document management with our information management system, efficiency of maintaining the document of the department is high, reduction in storage cost, flexibility in storage, enables greater access to document of all types.

Following table shows comparision between digitization and traditional document management

Parameter	Digitization	Traditional
Accessibility	Multiple access	Only one user
Availability	24/7	Restricted time
Maintenance cost	low	high
Backup and restore	Easy	Difficult

Fig 5 Home page

Above interface represents home page of DIMS which includes information about department , and buttons for different modules is provided.

Fig 6 Placement page

Above interface represents the graph related to number of placed students with respect to year and company.

Fig 7 Research Home page

Above interface represents the research home page which will display research related information in brief such as projects, publications, guides, areas of research.
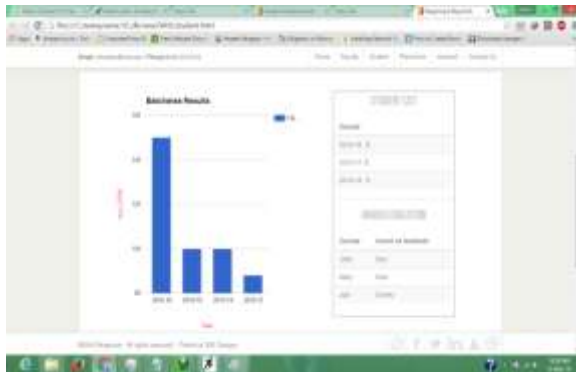

Fig 8 Student Result Page

Above interface represents Batch wise result of the student with respect to years. Download option o result of particular year is provided for the user .

IV CONCLUSION

Digitization of department information by developing information system and deploying it on cloud helps to manage and organize the data of the department in more efficient manner. All the stakeholders, students
faculty and management can get the required information easily .Information is secure and efficient than the manually maintained documents.

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