

E-Governance Application Software

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ABSTRACT

In competitive world, it is important to achieve a greater customer satisfaction that requires more productivity with less time. The business process and the progress can be monitored with the daily due of the report submission. This helps in the monitoring of the daily progress in the profit. This can be achieved only with the digital format of data storage. This process helps in easy analysis of data and organized storage of data. The content management system provides this feature of data storage in an organized manner. The system manages the daily reports generated by the workers and stores them in an content management system(CMS). The user connectivity can be established to communicate the process flow and the work progress of various departments. This e Governance system reduces paperwork and increases productivity, also helps in the communication and information retrieval among various departments.

Index terms - Content Management System, Business Analysis, Information retrieval.

I. INTRODUCTION

A **content management system (CMS)** is a computer application that supports the creation and modification of digital content. It typically supports multiple users in a collaborative environment.

CMS features vary widely. Most CMSs include Web-based publishing, format management, history editing and version control, indexing, search, and retrieval. By their nature, content management systems support the separation of content and preparation.

A web content management system (WCM or WCMS) is a CMS designed to support the management of the content of Web pages. Most popular CMSs are also WCMSs. Web content includes text and embedded graphics, photos, video, audio, maps, and program code (e.g., for applications) that displays content or interacts with the user.

Such a content management system (CMS) typically has two major components:

- A content management application (CMA) is the front-end user interface that allows a user, even with limited expertise, to add, modify, and remove content from a website without the intervention of a webmaster.
- A content delivery application (CDA) compiles that information and updates the website.

Electronic governance or **e-governance** is the application of information and communication technology (ICT) for delivering government services, exchange of information, communication transactions, integration of

various stand-alone systems and services between government-to-citizen (G2C), government-to-business (G2B), government-to-government (G2G) , government-to-employees (G2E) as well as back office processes and interactions within the entire government framework.

The rest of the research paper will unfold as follows:

Section two will present related work and section three focuses on the methodologies. The section four contains system design and section five contains our future work. Section six concludes the research

II. RELATED WORKS

[1]From the start of 1990s e-commerce and e-product, there has rampant integration of e-forms of government process. Governments have now tried to use their efficiencies of their techniques to cut down on waste. E-government is a fairly broad subject matter, but all relate to how the services and representation are now delivered and how they are now being implemented.

[2]The political use of e Governance,These, along with 5 degrees of technical integration and interaction of users include:

- simple information dissemination (one-way communication);
- two- way communication (request and response).
- service and financial transactions;
- integration (horizontal and vertical integration);
- political participation

[3]e-Tender Box (ETB) system – ETB system was developed by Government Logistics Department (GLD) to replace Electronic Tendering System. Users can use ETB system to download the resources and gain the service from the GLD.

The strategic objective of e-governance is to support and simplify governance for industry, workers and businesses. The use of local domain, can connect all parties and support processes and activities. Other objectives are to make administration more transparent, speedy and accountable which needs and expectations through efficient public services and effective interaction between the people, businesses and government.

III. METHODOLOGY

The major task to be performed in the application are

1. User authentication and authorization:

The authentication system contains the three major category-Administrator,Manager,Worker.

The administrator has the overall control to the system. He maintains the reports and controls the thread creation for the particular discussion. Administrator is given the access to the video stream and maintenance of the daily reports.

Manager is given access to view the reports submitted by the workers. The corrections to be made will be submitted in the forum and the workers make changes to the file. The database authorization and worker profile creation is given to the manager.

The worker is given rights to upload the daily report generated on the production and machine maintenance. The workers can be of many classification like supervisor, team guide, sales persons and workers.

2.Report Uploading:

The software will collect various report generated at various department and submit the same to the higher official(technical directors etc) for verification through on line web application. During the verification phase, there may be a doubt/clarification raise on the report. The content management system plays the major role in this report management.

3. Report Searching:

The option to search report based on report type, department specific, data specific and person specific must give auto suggestions. Search filter should look for the keyword or phrase to search the file contents if necessary.

4. Report Deleting:

The older reports will be deleted by the administrator when new reports for the day is uploaded. The worker and manager will be consulted before deleting the file. Only after the conformation the report will be completely deleted from the system.

5. Report View:

Typically pdf,excel,word,csv file format will be considered for uploading the report content. Each report may be assigned to a tag that is more helpful in searching the report that align to the tag.

6. Discussion Creation:

The doubts/clarifications raised on the report, the discussion thread is created to discuss the details on the clarifications are discussed with the report generators. A thread may end once the clarification/discussion points are accepted by higher officials.

7. Discussion Reply:

The person who uploaded the report may respond to the thread by reply through the thread option with necessary clarifications. There should be option to search report based on report type, department specific, data specific and person specific.

Frameworks used:

The security to the system is maintained using spring security. Which manages the secured pages and authorization.

C3p0 connectivity helps to maintain the database using Object relational Model. The database used to store the data is postgresQL.

Searching and auto complete:

Autocomplete is a feature which predicts the rest of the word a user types. When the user gets the word he requires He will be able to select the whole word by pressing tab key.

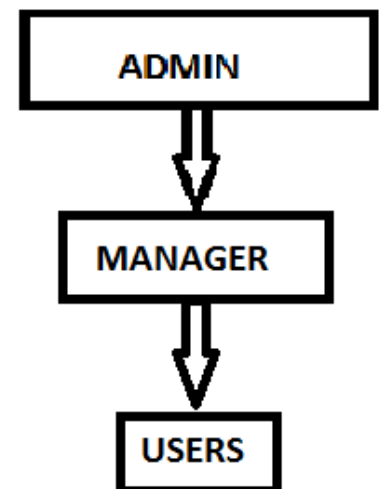
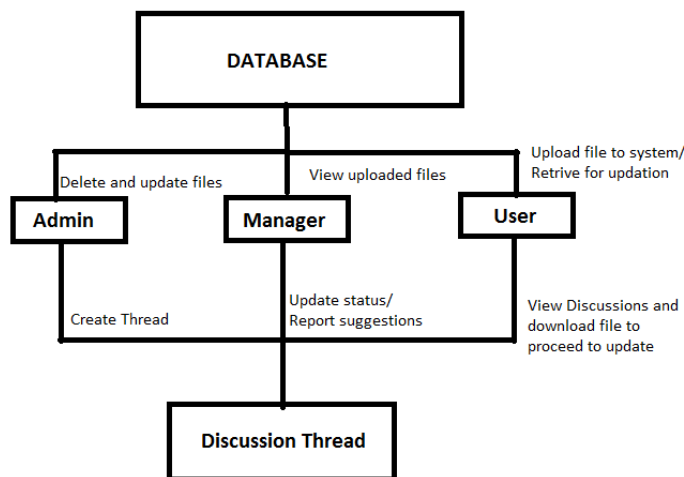
Algorithm:

Autocomplete feature using Trie

Search for given query using standard Trie search algorithm.

1. If query prefix itself is not present, return -1 to indicate the same.
2. If query is present and is end of word in Trie, print query. This can quickly checked by seeing if last matching node has isEndWord flag set. We use this flag in Trie to mark end of word nodes for purpose of searching.
3. If last matching node of query has no children, return.
4. Else recursively print all nodes under subtree of last matching node.

IV. SYSTEM DESIGN



V.FUTURE WORKS

As the current system concentrates only on the storage and management. The reports can be analyzed and used for feedback analysis and business growth.

The sentimental analysis on each product can be analyzed to get customer satisfaction depending on the product sales.

VI. CONCLUSION

Handling large amount of file in database can lead to space complexity. Through the CMS we can reduce the space complexity and time complexity . The autocomplete feature reduces the search time by 20% of actual time taken. Storing the link of the file in the CMS will maintain the structure organized.

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