SMART ACADEMIC ANALYSIS AND REPORT GENERATION USING OPTICAL CHARACTER RECOGNITION.

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Abstract : In our system we are introducing three modules feedback analysis,Report generation and No dues.(1)Feedback Analysis System is a web based application that provides platform for the college to get feedback. This is the best place to take feedback report given by the various kinds of people. It is efficient place to do feedback analysis and maintain security. Students, teachers and so on will fill feedback using a standard form. In this project, Security is also maintained so that feedback is visible to authenticated user. Feedback is a simplified feature of effective & efficient learning. It enhances & strengthens student learning and improvement of college. The purpose of feedback system is to gather information on learning as well as on lecturer's performance. Clients for this application are people who want to give various types of Feedback. Now based on User, the Feedback Form will be display and user will fill the form and submit it.(2)Report generation is the phenomenon in which the graphical representation of all the result analysis as per the respective departments with first year,second year,third year and last year as per their patterns are introduced and also compared their results with their previous result analysis as pie chart,bar chart and progress chart.This is the best system that offers graphical representation to the particular departments with their proper authentications to HOD,Staff and students.(3) No Dues is the new concept which is going to be introduced first time in any system with proper security and authentication.This module is offering every student a dynamic access to the process with their individual logins and request while issuing the no dues.Specially this module is reducing the human efforts by providing the process online instead of going to issue the approvals for no dues personally.

Index Terms - **Two-stage crawler, Crawler, Deep web, Feature selection URL, IP, Site frequency, Ranking, Personalized searching**

I.INTRODUCTION

In today's world of online interaction, the electronic education is becoming an essential part of the academic domain. As we are facing the problem of strong growth of popularity of online courses, a need arises for a flexible and easily integrated online feedback system. Traditionally colleges have used paper and pencil surveys to collect the feedback. Normally, a portion of a regular lecture session is given to the distribution, completion, and collection of the paper-based surveys. Due to this paper based survey there is lots of paper wastage and time wastage. In order to solve this problem we are implementing smart academic analysis and report generation using optical character recognition which result in less time consuming and easy feedback analysis and report generation.as we all know that every system consist of only one module but here we are introducing three modules by fulfilling three major requirements of the academic database.The report generation module gives a creative representation of every academic report analysis.Most importantly to provide a uniqueness our system is introducing the use concept of optical character recognition third party drivers which helps in scanning the images file for extraction the data from it and to put in the database directly.So this leads to reduced the human efforts and also saves the time as they were used to insert the data physically into the databases.Lastly the no dues module is the additional concept that is being provided by the system to all the students and also for all the departments staff to put and access the request online with their respective logins.This three modules gives all the facilities and fulfill most requirements for the current queries and gives such an identity that lifts the system to the higher level.

II.REVIEW OF LITERATURE

1.   Nivetha Shri,Divya R (2015) Android student result analysis system is used for conducting the exams,analyzing the answers,calculate the grade and displaying the results.This system the students and the faculty to have an access for viewing the marks.The Students can only view the marks if their students authentications are correct.They do not have the permissions to change or update the marks.All this process is done efficiently.This project mark analysis system using android deals with the complete academic details of the student.It compromises of the student name,roll no,marks obtained,total average,alternative percent,feedback.It can be accessed by the faculty who alone can change or update the mark of the students.

2.   Rajvee patel,Omkar Agrawal,Yash gangnani,Ashish Vishwakarma (2018) have developed a faculty feedback system to pr ovide feedback in an easy and consistent manner to the college HOD or Principal.They call it faculty feedback system which delivers via student staffs interface as online system which is acting as a service provider.They believe that the feedback management system approaches all about institutional and educational practices and processes that are taken into consideration,the student concerns of the level of the knowledge they receive.This procedure explains that there is a good relationship between the students learning enviroment and teachers.

3.   Chew Li sa,Dayang Hanani,Emmy Hossain,Mohammed Hossain(2014) Every university have their own management system to manage the students records.Currently even though there is a student management system that manages the students records in university and colleges.no permission is provided to lecturers to access the system.This is because the access permission is only on the top of the management such as deans and the deputy deans of undergraduate and student development due to its privacy setting. Thus this project propose a system named student performance analysis system to keep track of the students result in the faculty of computer science and information technology.

4.   Sompong Panhoon,Suwimon Wonwanich(2014)They believed that feedback is one of the most powerful influences on learning.This system provides an solution of the current state and problems of feedback for teachers and students in primary schools.Data were gathered from national test scores,readliness tests,teachers interviews,teachers self assessments and classroom observation.Descriptive statistics and content analysis were used to analyzed data.All information from the analysis was used to design a feedback system which can be used to design a feedback system which can be used to enhance ist effectiveness in classrooms on teaching and learning.

5.   IJETAE Volume 4,(2014) This paper review explains comparative analysis between random transform and hough transforms,which are applied for error detection and correction.This paper explains implementation of OCR in Matlab,compared with current working method of OCR.This system achieved recognition near about 92%.

6.   IJSR publications,Volume 2(2012) This paper discusses recognition of offline English character.This explains a new model hidden markov model (HMM) fro character recognition.The Novel feature extraction method is used fro implementing HMM.By collecting 13000 samples from 100 writers they have tested performance of OCR technique and got accuracy of near about 94%.

7.   IJARECE Volume 2(2013)This paper implements the OCR technique in Matlab.This paper explains how matlab is more convienient and effective for OCR technique.The performance of OCR has been tested with samples in this approach.

8.   Europeon academic research(2013)This paper discusses the OCR technique with its components.This achieved a good recognition rate by implementing the particle swarm optimizing approach.

9.   International journal of research in computer and communication technology,(2013)This paper explains basic of OCR technique with its components including preprocessing,segmentation,feature extraction and classification.

10.   Applied computational intelligence and soft computing(2012)This paper proposes comparative study of new ideas,particle swarm optimization PSO and Bacterial foraging.

III.EXISTING SYSTEM

In the existing system students can give feedback about the lecturers by doing manually. By this process student can give feedback in online system without wasting his time in writing. After giving feedback by every student papers are collected by the faculty and calculated the overall grade for each subject and each lecturer. After that those all grade report is viewed by the HOD which is given by the faculty. Hence estimating the performance of lecturers and giving feedback to college staff. So, the existing system carries more time to do a piece of work for this reason the online system feedback is implemented. This is the main advantage of the existing system for giving feedback about the lecturers and viewing report of lecturers. Feedback represents information communicated to the learner that is intended to modify the learners thinking for purpose of improving learning. The idea of feedback to make corrective actions based on the difference between the desired and the actual value can be implemented in many different ways. Student feedback on courses is an essential element in quality assurance.

IV.ADVANTAGES

1). Cut your time:
        Giving feedback on Online System saves time as compared to the manual process.

2). Enhance the staff:
        Find the details about the lecturer's interest in teaching to the students.

3). Manage the entire process:
   The entire process of giving feedback and viewing that report can manage easily.

4) OCR use:
   This driver helps in extracting the characters from the image file and copy into the database,reducing the human effort.

5) NO Dues process:
   This is the new module that helps the students to overcome their requirements online instead of visiting each departments personally for approvals.
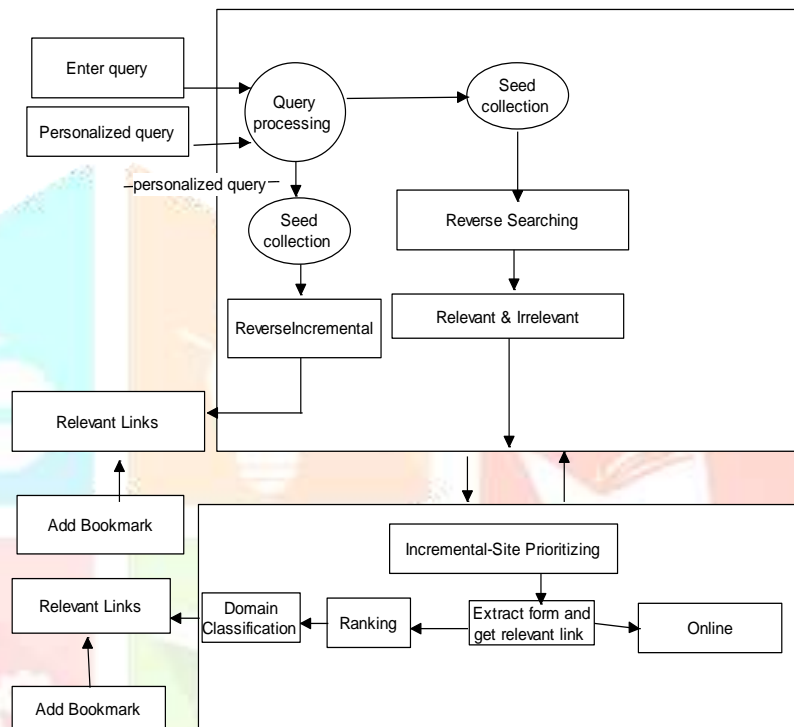
V.SYSTEM ARCHITECTURE

Figure 4.1 System Architecture

VI.SYSTEM OVERVIEW:

To get users expected or required deep web data sources, Smart Crawler is developed in Reverse Searching & Incremental site priority based system .The first site locating stage finds the most relevant sites for a given topics & then the second in site exploring stage uncovers searchable forms from the current site. Specifically, the site locating stage starts with a seed sets of site in a sites database. Seeds sites are candidate sites given for Smart Crawler to start crawling which help to begin by following URLs from selected seed sites to explore other pages & other domains. Seed fetcher get seeds and then performs reverse searching technique in it which matchs user query content in url, then we are going to classify them in relevant and irrelevant links. Then in Incremental-site priority system we are matching the contents of query on form which depends on matching . we are going to classify them in relevant and irrelevant. Page ranking is basically performed & display high ranked results on result page. Domain classification is performed to show the user from which domain how many links are got in it. We personalize the searching according to user profiles so that is easily to get accurate results to user. In pre-query results are displayed according to user personalized result or requirements after placing focus on search box.

VII.CONCLUSION

Smart academic analysis and report generation using OCR system provides most of the functionality that will required for student and faculty. Online college feedback system provides a better way for faster feedback. It is a feedback system which is meant for student and faculty. This project is design in order to minimize burden of maintaining bulk of records of all the student's feedback details.This System also provides the report generation graphically with effective charts.Using of OCR driver is also plays a vital role to enhanced the system by extracting the characters from the image file and copy in the databse format without inserting th data manually.

VIII.REFERENCES

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