

ONLINE SUBJECTIVE ANSWER CHECKER

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Abstract—We are pleased to present Online Subjective Answer Checker that will ease out the process of checking of answer papers with accuracy. The system will let students give exam online, calculate the results automatically as well as produce a record for the administrator. The paper will focus on correcting on the basis of certain keywords that every answer will contain and give marks to the students according to the presence of the keywords in the answers. This system will help reduce all human errors thereby making the system more efficient.

Index Terms—Answer checker, Online examination, Result history, Students, Subjective based answers, Teachers, Text matching.

1 INTRODUCTION

The Online Examination is very helpful to users. The aim of this project is to provide quick, immediate and easy way to appear the exam. It can provide special advantages to the students/applicants that can't be found anywhere else through partnerships with agencies/boards that are conducting the multiple choice type examination. Its working is that students allow registering for the exam and teacher allows registering for conducting the exam. This will continue to grow ultimately providing a wide breadth of services for beneficial to the students. Tests can be created on a random basis per student. The online examination system can automatically add the marks allocated in each question to determine the total mark for the test. The online examination system limits the number of times a student can write a test. Students can be forced to go through all the questions at least once, before exiting the test. Students can be allowed to exit the test before completing all the questions. The objective is to check and mark written answers similar to a human being. This software application is built to check subjective answers in an online examination and allocate marks to the user after verifying the answer. The system requires you to store the original answer for the system. Once the user enters his/her answers the system then compares this answer to original answer written in database and allocates marks accordingly. Both the answers need not be exactly same, word to word. Examiners get bored by checking many answer sheets, hence the system reduces their workload by automating the manual checking process accurately to provide unbiased results.

2 BACKGROUND

2.1 Why did we choose online system?

The need for online examination aroused mainly to overcome the drawbacks of the existing system. The main aim of the project is to ensure user friendly and more interactive software to the user.

The online examination brings an easy interesting working environment, more clarity in presenting apt information to the user and also it gives faster access and retrieval of information from the database.

Through this new system, the drawbacks that have been seen in the existing system can be neglected. Under this system questions can be stored and retrieved so that preparing of

questions papers each time can be avoided.

2.2 Why did we select the online subjective answer checker?

Examiners get bored by checking many answer sheets, hence the system reduces their workload by automating the manual checking process accurately. The system calculates the score and provides results instantly. It removes human errors that commonly occur during manual checking. The system provides an unbiased result. Thus the system excludes human efforts and saves time and resources. This system can be used in schools, colleges, coaching and institutes for checking answer sheets. The system can also be implemented in different organizations that conduct regular exams.

System is:

Load Balancing:

Since the system will be available only the admin logs in the amount of load on server will be limited to time period of admin access.

Easy Accessibility:

Records can be easily accessed and store and other information respectively.

User Friendly:

The system will be giving a very user friendly approach for all user.

Efficient and reliable:

Maintaining the all secured and database on the server which will be accessible according the user requirement without any maintenance cost will be a very efficient as compared to storing all the customer data on the spreadsheet or in physically in the record books.

Easy maintenance:

AI Answer Verifier system is design as easy way. So maintenance is also easy.

The project report entitled "online subjective answer checker" has come to its final stage. The system has been developed with much care that it is free of errors and at the same time it is efficient and less time consuming. The important thing is that the system is robust. Also provision is provided for future

developments in the system. The entire system is secured. This online system will be approved and implemented soon.

3 METHODOLOGY

3.1 Working

Online examination is the use of the Internet for examination activities, or we can say, it is the process by which a student learns via the Internet with the help of a subject expert or an examination.

How it works?

This examination technique involves use of several web-based programs to achieve its goals. Some of these programs or applications are email, an instant messaging, online whiteboards, etc.

An automatic answer checker application that checks and marks written answers similar to a human being.

This software application is built to check subjective answers in an online examination and allocate marks to the user after verifying the answer.

The system requires you to store the original answer for the system.

This facility is provided to the admin. The admin may insert questions and respective subjective answers in the system. These answers are stored as notepad files.

When a user takes the test he is provided with questions and area to type his answers.

Once the user enters his/her answers the system then compares this answer to original answer written in database and allocates marks accordingly.

Both the answers need not be exactly same, word to word.

The system consists of in built artificial intelligence sensors that verify answers and allocate marks accordingly as good as a human being.

The system will consist of the following elements:

Login:

The proposed system will have two login facility:

User login:

The user login is the login allocated for the students.

As soon as you click the student login button you will be asked to enter login id and password.

The system will check for the id and automatically display students name, email id and phone num for verification.

The user login will be able to write answers with respect to the question uploaded.

The system will show marks scored as soon as you enter the next button

Admin login:

The admin login will let the teachers login.

The admin login's each user will have his own password and id through which they can login in.

The admin can add subtract questions, check for students marks and so on. Just like the teachers can do manually.

Answer checking:

Suppose the question is

“who is hitler?”

Case 1:

Was a cruel ruler

Found the narzi party.

In this case the anwer will get 10 points for correct answer

Case 2:

Was a cruel ruler.

Found the BJP.

In this case the statement 1 is right and 2 is wrong so will be given 5 points out of 10 as only half of the answer is correct.

Thus depending on answers the points of the answers will be set by the admin.

3.2 figure

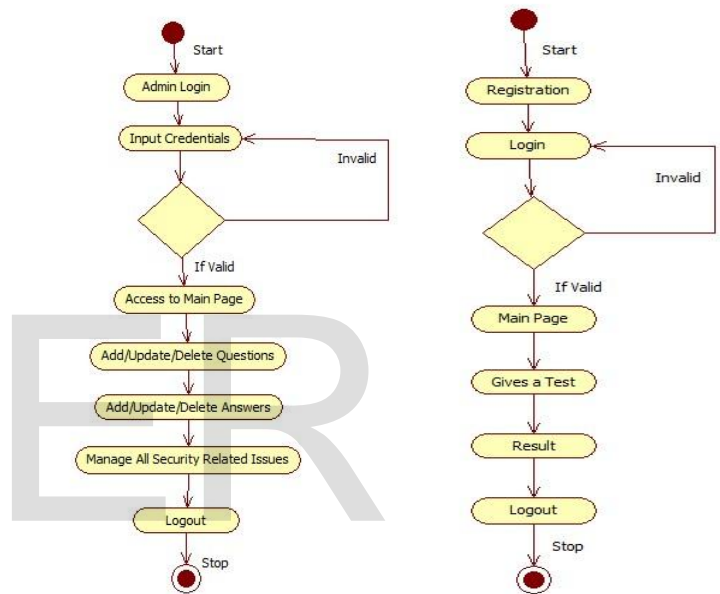


Fig 2.3 activity diagram for admin and student.

4 ALOGRITHM

Step 1: Start

Step 2: Login into system as student or admin

Connection Established with database using SqlConnection con

= new SqlConnection();

If the student has already registered then grant access. Go to step 3

If admin is verified grant access.Go to step

Step 3: After Login

The student has two options to choose from –see reports/previous test results or else give test paper.

Step 4: After selecting choice , if the user proceeds for test

Code for answers:-

```
public class Add_Question : System.Web.UI.Page
{
    SqlConnection con=new SqlConnection();
```

```
protected void Page_Load(object sender, EventArgs e)
{
    if (Session["Add"] == "Add")
    {
        Page.ClientScript.RegisterStartupScript(GetType(),
        "msgtype", "alert('Data Added !!!)', true);
        Session["Add"] = "";
    }
}
```

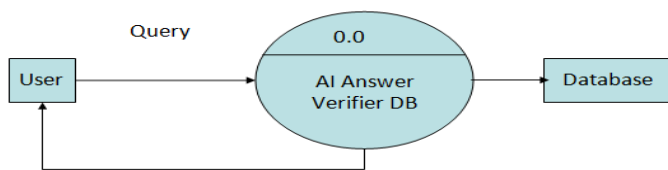
Step 5: After submitting test Answer selected by student (String1) is compared with the answer stored in database(String2)
 If String1= String2 then score=+1 or else score=0.
 Step 6: After processing the results of the test into database the results are displayed to the student
 step 7: If student selects results goto step 11.
 Step 8: If the admin logs in: he is either allowed to add question or view results
 step 9: to add question:

```
public class Add_Question : System.Web.UI.Page
{
    SqlConnection con=new SqlConnection();
    protected void Page_Load(object sender, EventArgs e)
    {
        if (Session["Add"] == "Add")
        {
            Page.ClientScript.RegisterStartupScript(GetType(),
            "msgtype", "alert('Data Added !!!)', true);
            Session["Add"] = "";
        }
    }
}
```

 step 10: to view results database goto step 11.
 step 11: database of results will be displayed.
 Step 12: End .

5 HELPFUL HINTS AND FIGURES

5.1 Figures



5.1.1 Database detail

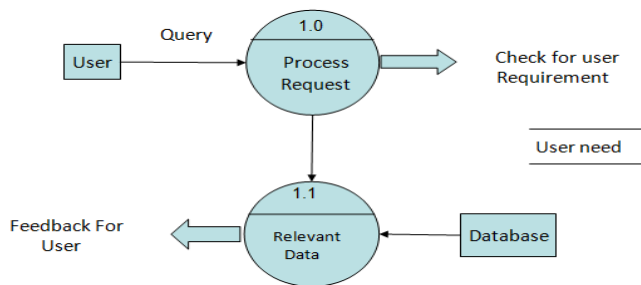


Fig 5.1.2 DFD level 1

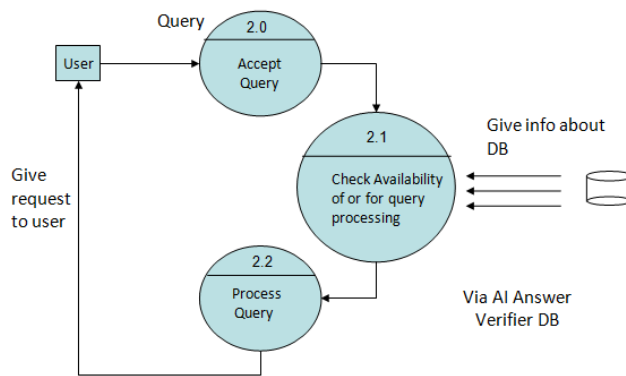


Fig 5.1.3 DFD level 3: prediction

6 CONCLUSION

The project report entitled "Online subjective answer checker" has come to its final stage. The system has been developed with much care that it is free of errors and at the same time it is efficient and less time consuming. The important thing is that the system is robust. Also provision is provided for future developments in the system. The entire system is secured. This online system will be approved and implemented soon

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8 REFERENCES

Technical papers:

- [1] Judy McKimm, Carol Jollie, Peter Cantillon, "ABC of learning and teaching Web based learning" <http://www.bmj.com/>
- [2] Yuan, Zhenming, et al. A Web-Based Examination and Evaluation System for Computer Education. Washington, DC: IEEE Computer Society, 2006.
- [3] Effie Lai-Chong Law, et al. Mixed-Method Validation of Pedagogical Concepts for an Intercultural Online Learning Environment. New York: Association for Computer Machinery, 2007.
- [4] Lan, Glover, et al. Online Annotation- Research and Practices. Oxford UK: Elsevier Science Ltd, 2007.
- [5] Sophal Chao and Dr. Y.B Reddy Online examination Fifth International Conference on Information Technology: New Generations, 2008
- [6] Hanumant R. Gite, C.Namrata Mahender "Representation of Model Answer: Online Subjective Examination System" National conference NC3IT2012 Sinhgad Institute of Computer Sciences Pandharpur.