

## Integrated Examination System

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### **ABSTRACT:**

*For competitive examinations and for various offline and online academic courses, test questions need to be written by human authors. These questions writing tasks take significant manual effort and time. To simplify this effort, we propose an Automatic Question Generation system that focuses on questions that can be generated in English from structured data. This paper explains an approach, which takes a data table as input and generates questions of varying types. The data is preprocessed and categorized according to their class (numeric and non-numeric). Appropriate templates are used to create various kinds of questions. A custom tagger is built, which takes the data entry and assigns it an entity, such that it can be generalized to a particular entity name. For uncategorized or unrecognized entities, options to add or modify entities are also provided. Preliminary experimental work carried out using this template system shows promising results. To the best of our knowledge, this is the first such question generation system based on structured data in the form of tables.*

**Keywords-**Automatic question generation; tuples; templates; structured data.

### **I. INTRODUCTION:**

For a varying range of applications such as examinations (e.g. GMAT, CAT), survey data (employee data, students' data), academic courses and school textbooks, creating test questions is an important requirement. Users (usually students) attempt to answer the questions. These questions are of various kinds:

subjective and objective, short and long, based on recalling facts or interpreting data or providing analysis etc. Creating these questions is an intensive manual effort. The automatic generation of questions could be useful in reducing the effort and cost required to generate questions. It could potentially also help create a wider variety of questions from an input source.

Corporate between the data stored in the server of the Institution and our On-line Exam system. To deal with On-line System in an easy way and an efficient mannered. (connection process) Create strong and secure data base that allow for any connection in a secret way, to prevent any outside or inside attacks. Specify a privilege for each person to allow each person use this system to create his own exam. And have a complete control on his exam. Allow each person to create more than one exam with different way to create variant questions. Our system is agnostic of domain and can cater to any input table irrespective of table content type. Further, it could be tuned to cater to specific domains for better quality of questions. This paper describes an Automatic Question Generation technique to be used for structured data, mainly data tables (e.g. Table I). The methods used to obtain the end result are a combination of systems proposed earlier and a custom tagger built by us.

### **II. LITERATURE SURVEY:**

#### **Automated Question Generation:**

Automatic generation of a test system based on B/S architecture uses a browser as an interface, a test server and a WWW server as the middle layer, to complete editing questions and connection to the database. This is

an important part of how the Internet's information system works; it gives a trend of developing examination systems based on networks for the future

### **Tuples:**

A table has rows and columns, where rows represents records and columns represent the attributes. Tuple – A single row of a table, which contains a single record for that relation is called a tuple. Relation instance – A finite set of tuples in the relational database system represents relation instance.

### **Templates:**

A template is a file that serves as a starting point for a new document. When you open a template, it is pre-formatted in some way. For example, you might use template in Microsoft Word that is formatted as a business letter.

### **Structured Data:**

Structured data refers to any data that resides in a fixed field within a record or file. This includes data contained in relational databases and spreadsheets.

## **4. Implementation:**

### **MODULES:**

We are building new system in which the descriptive examinations are also online. It contains following:

#### **1) Admin:**

Admin can set the subject-topic relationship. Admin can create or edit examination paper patterns. In may also admin can create new question paper which is works like a demo question paper and assign students to specific question paper. Also provides authentication to the examiner and applicant. Admin can create a university type of examination paper (multiple parts, sub-questions, optional, alternatives, etc).

#### **2) Exam head:**

The exam head has authority to publish the various examination information, question paper pattern, and result declaration.

He arranges exams, set question papers and answers paper, declare date and time for the examination, result announcements, result should be after exam or on the spot.

After applying by the candidate, the exam ticket is send to him, it is responsibility of the exam head.

#### **3) Applicant:**

The applicant can register for the various examination information on the site, he decides his interest and according to his interest the exam advertisements are publish to his account.

He can apply for the examination and give the exam.

## **III. Methodology:**

### **JSP:**

Java server pages(jsp) is a technology that helps software developers create dynamically generated web pages based on HTML,XML or other document types released in 1999 by Sun Microsystems, JSP is similar to PHP,ASP but it uses Java Programming Language. JSP is a file extension for Java Server Pages file format.

A JSP is an HTML page containing a reference to Java servlets, or, java server side applets. JSP files help to deliver server side customized content on a webpage through servlets.

### **Servlet:**

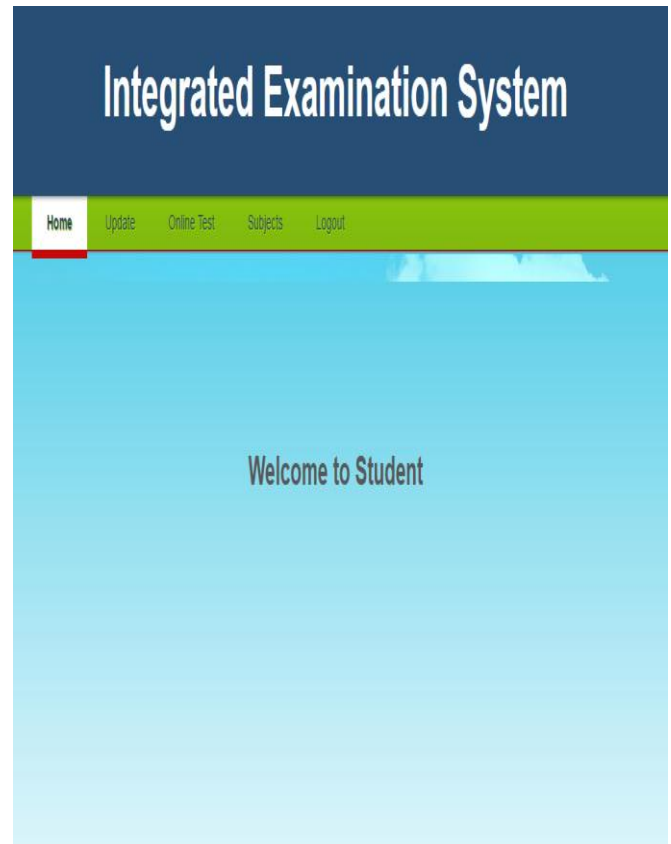
Servlets are Java programs that are already compiled which also creates dynamic web content. Servlets run faster compared to JSP. JSP can be compiled into JavaServlets. It's easier to code in JSP than in Java Servlets.

## **IV. RESULTS:**

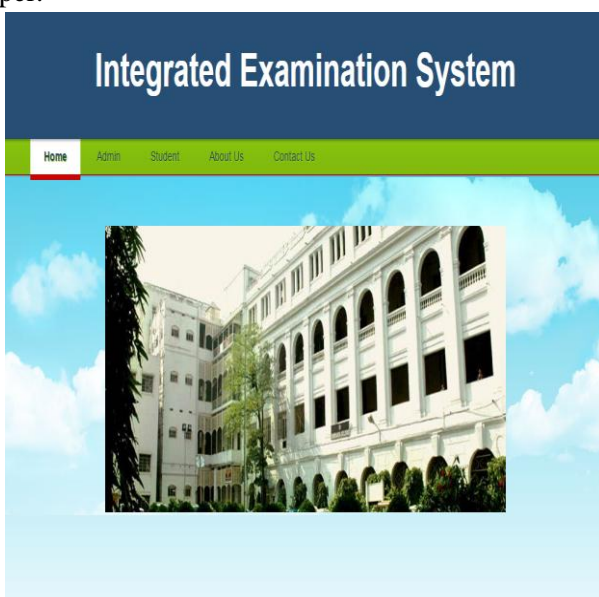
Figures 6(a),6(b),6(c) represents home page, admin page, student page respectively. In this paper it have two login first of applicant and second one is admin. In this when applicant firstly login then applicant menu will be shown to that particular applicant.

In may also applicant can start the exam and give that exam at particular timing cause each student have provide some time related too that exam.

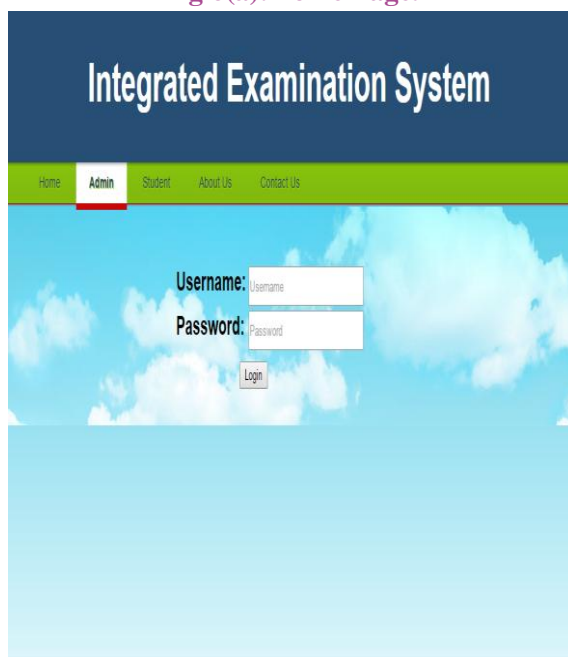
Examiner can provide demo paper for applicant so that applicant can view that and can applicant can see how the exactly exam is taken. In this snapshot examiner can add one/more question related to exam while setting the paper.



**Fig 6(c):Student Page**



**Fig 6(a):Home Page.**



**Fig 6(b):Admin Page**

## V. CONCLUSION AND FUTURE ENHANCEMENT:

The learner's descriptive answer and standard answer is converted into its graphical form and then, to apply some of the similarity measures such as string match, wordNet and spreading process for the calculation of similarity score are the major steps in the proposed algorithm. The algorithm provides a solution for the automation of descriptive answer evaluation process. Automatic evaluation of single sentence descriptive answer would be beneficial for the universities, schools and colleges for academic purpose by providing ease to faculties and the examination evaluation cell.

More analysis would be required for similarity matching. There can be a technique for assessment of handwritten paper by converting it to soft copy using descriptive examination system and voice recognition system

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