ONLINE SHIKSHA

Prof. Harish Kunder1, Arfa Sultana.F2, Thanya PN2
1Alva’s Institute of Engineering & Technology, Mijar, Karnataka, India
2Computer Science, Alva’s Institute of Engineering & Technology, Mijar, Dakshina Kannada, Karnataka, India

Abstract- In the era of globalization and advanced technology the colleges should upgrade the way conducting the tests and examinations. Online Shiksha is a software solution, which allows the particular institute or organization to conduct and manage examination via online. The online examination can be taken through internet, intranet or Local Area Network. The online Shiksha is web based application, is basically intended at developing software for providing online exams. In the current system examination is taken up manually and generation of results is time consuming, sometimes the results generated are erroneous. So to overcome these issues we use this website, in this paper, the construction of a complete online automatic examination system is analyzed. Specifically, open source software was used to construct a dynamic website for automated student examination in order to support an DBMS database. The application development language is the dynamic programming language for web applications, there will be real time testing environment. Test creation will become easier which will be including insertion of new question, deletion and modification of already existing questions periodically. Paper pattern which includes duration of test, number of questions and marking scheme will have flexibility i.e. faculty will have such options. Results and answers will be displayed instantaneously just after taking up examination. The records of the student will be updated in their profile for future references. There will be zero paper work. Depending upon the type of user our project will be divided into 3 modules namely Administrator, Faculty and Student. The student will have to register themselves before taking up the examination.

Keywords- Online Shiksha, Open source software, DBMS, Dynamic programming languages

I. INTRODUCTION

As the technology is constantly improvising, we cannot be devoted to older traditional system where students are simulated to attend classes using attendance points which at the end of a semester constitute to be a part of a student’s final grade. As well as the traditional examination system requires more human resources and investment of time. Online Examination System is considered a fast developing examination method because of its accuracy and speed. It also needs less manpower to handle the examination. Almost all the organizations today have adopted the online examination system as it is more reliable and flexible. Online Shiksha is to take online test in an efficient manner and no time wasting for checking the paper. The main objective of this website is to efficiently evaluate the candidate thoroughly through a fully automated system that not only saves lot of time but also gives fast results. For students they give papers according to their convenience and time and there is no need of using extra thing like paper, pen etc.

II. LITERATURE SURVEY

Literature survey is the process of making a study of the papers related to the system which we are proposing. We have done a brief study of following specified papers.

Web Based Online Examination System by Prof. Rahul Shahane

An Online Examination System is a web software solution, which allows any institute or industry to set up, direct and manage examinations via online environs. Some of the problems faced during manual examination systems are the retard take place in result processing, filing poses a problem, chance of loss of records is more as well as searching records is hard. System Maintenance is also very difficult and time consuming and endeavor. Online examination is one of the essential parts for online educational system. It is effective, fast and reduces the large amount of resource material. An examination system is developing base on the internet. This paper delineate the system principle, presents the main intention of the system, analyzes the auto-create test paper algorithm, and discourse the system security.

A Computer Based Test System (CBTS) by Fagbola ET. Al

CBTS is a web-based online examination system developed to address issues such as lack of timing flexibility for automation candidates log-off upon expiration of allowed time, result integrity, guaranty, stand-alone deployment, need for flexibility, robustness, designed to support the examination processes and overcome challenges framing the conduct of examination, auto-marking, auto- submission , and generation report of examination result

A web-based online examination system called Exam Management System (EMS) by Rashad ET. Al

EMS manages the examination and auto-grading for student’s exams and supports conducting exams, collects the answers, auto mark the submissions, and produce the reports for the test. EMS supports secure login, multi-instructor, and portability features. However, the other features: resumption capability, random question selection, random questions distribution, and random choices distribution are missing.
An online examination system called System of Intelligent Evaluation using Tests for Tele-education (SIETTE) by Guzman and Conejo

SIETTE is a web-based environment to generate and construct adaptive tests. It can be used for instructional objectives, via combining adaptive student self-assessment test questions with hints and feedback. SIETTE supports secure login and portability features. On the other hand, the other features: resumption capability, multi-instructor, random question selection, random questions distribution and random choices distribution are missing.

III. PROBLEM STATEMENT

Since the traditional have many drawbacks such as time consuming, Difficulty of analyzing the test manually, More observers are required to take exam of many students, Results are not accurate since calculations is done manually, The chance of losing exam's result is higher in current systems, Checking of result is time consuming since it done manually, Limitation of no of student can give examination at a time. With the development of information technology and use it in an orderly and properly helps to overcome the existing error in the manual system.

Online examination system saves the exams information in a database, and this make it an easier way to give exam teachers can add theirs exams rules, and student can give exam in a totally automated system.

IV. THE PROPOSED SYSTEM

Online Shiksha is a web application used for taking online examination by the candidates. In comparison to the present system the proposed system will be less time consuming and is more efficient. Analysis will be very easy in proposed system as it is automated. Result will be very precise and accurate and will be declared in very short span of time because calculation and evaluations are done by the simulator itself. The proposed system is very secure as no chances of leakage of question paper as it is dependent on the administrator only. The logs of appeared candidates and their marks are stored and can be backup for future use.

A. Design Architecture

The online examination system uses client or server architecture. At the client by using a web browser can connect via internet or local host with the server where Java and MySQL in the server side are responsible for the preparing exams processes and save and return data from database.

Development Tools:
- Front end as : Html, Jsp
- Back end as : Advance Java
- Server : Apache tomcat
- Database : Mysql
- Querying language : Sql

B. System Architecture:

Design is the abstraction of a solution. It is a general description of the solution to a problem without the details. Design is view patterns seen in the analysis phase to be a pattern in a design phase. After design phase we can reduce the time required to create the implementation.

The Administrator can be done the following:
- Create/delete accounts (add a list of faculty names and list of his student)
- Change password for Faculty/Student
- Create/ delete/update courses (subject).

The Faculty can be done the following:
- Insert questions.
- Specify the answers.
- Update mark of questions and answers.

The Student can be done the following:
- Choose exam.
- Review answers.
- See his exam mark.
Use case diagram:

Administrator

Faculty

Student

View Reports

Registration Process

Insert Questions

Give Exam

Activity diagram:

Administrator

Request Report

Receiving details
Course details
Faculty details
Subject details

Registration Process

Receive master
Course master
Subject master
Faculty master

Faculty

Request Report

View Report

Insert Question

Subject master
Question master
Data Flow Diagram:
V. CONCLUSION

The Online Shiksha System is developed using Java and sql fully meets the objectives of the system for which it has been developed. The system has reached a steady state where all bugs have been eliminated. The system is operated at a high level of efficiency and all the teachers and user associated with the system understands its advantage. The system solves the problem. It was intended to solve as requirement specification.

ACKNOWLEDGMENT

I would like to express my appreciations to our guide Mr. Harish Kunder for his guidance and advice that he gave to me throughout the progress of this project. That enabled me to complete this project, and thanks for all those who encourage me and support me, family, friends.

REFERENCES

[1]. Ivan Bayross, Introduction to Oracle.
[2]. James Goodwill, Pure JSP Java Server Pages (A code intensive premium reference)
[3]. Peter den Haan, Lance Lavandowska, Sathya Narayana Panduranga and KrishnarajPerrumal; Beginning JSP2: From Novice to Professionals
[4]. James Turner, mySQL™ and JSP™ Web Applications: Data-Driven Programming Using Tomcat and MySQL