

Web based online examination system

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Abstract - Online examinations contents providers to focus on creating effective assessment questions and focusing on exam's feedback delivery to students. In the paper we present techniques that are pertinent to the elements of assessment process: answers submission, computerized grading, and feedback after submission. As the modern organizations are automated and computers are working as per the instructions, it becomes essential for the coordination of human beings, commodity and computers in a modern organization. The administrators, instructor, Students who are attending for online examination can communicate with the system through this projects, thus facilitating effective implementation and monitoring of various activities of Online Examinations like conducting Exams as per scheduled basis and delivering result to that particular user or student. And the details of students who attempted Online Examination are maintained at administrator.

keywords - Online, Examination, System, Auto-grading, Web-based, Result Processing.

1. Introduction

Online examinations are an important method of evaluating the success potential of students. This research effort the individuals under consideration were students who would be enrolling in computer courses or Technologies Registrations. A prototype of a web-based placement examination system is described from the standpoint of the research effort, end user, and software development. An on-line educational system including exam processing and electronic journal features. An instructor builds a course based questions which on-line contain in identification of assignments. Which are compiled into an on-line exam syllabus?

Users enrolled in the platform may access the electronic details they provided and perform various functions with the on-line educational system in order to participate in the on-line examinations. Users can receive an on-line exam, having multimedia content, for the course, and they can electronically provide answers for the exam. And after Completion of their duration of exam they are provided the grade or marks secured in their examinations.

2. EXISTING SYSTEM

Existing system is a manual one in which users are maintaining books to store the information like Student Details, Instructor Details, Schedule Details and feedbacks about students who attempted exam as per schedule.. It is very difficult to maintain historical data.

Disadvantages:

The following drawbacks of existing system emphasize the need for computerization:

- A lot of copies of question papers have to be made
- A lot of correction work hence delay in giving the results
- A lot of tabulation work for each subject results

3. PROPOSED SYSTEM

This application is used to conduct online examination. The students can sit at individual terminals and login to write the exam in the given duration. . The questions have to be given to the students. This application will perform correction, display the result immediately and also store it in database. This application provides the administrator with a facility to add new exams. This application provides the instructor add questions to the exam, modify questions in the exam in a particular exam. This application takes care of authentication of the administrator, Instructor as well as the student.

Objective of the System:

The objective of the Online Examination tool is to provide better information for the users of this system for better results for their maintenance in student examination schedule details and grading details.

4. METHODOLOGY/SOFTWARE METHODOLOGY

The software methodology followed in this project includes the object-oriented methodology and the application system development methodologies. The description of these methodologies is given below.

Application System Development – A Life cycle Approach

Although there are a growing number of applications (such as decision support systems) that should be developed using an experimental process strategy such as prototyping, a significant amount of new development work continue to involve major operational applications of broad scope. The application systems are large highly structured. User task comprehension and developer task proficiency is usually high. These factors suggest a linear or iterative assurance strategy. The most common method for this stage class of problems is a system development life cycle modal in which each stage of development is well defined and has straightforward requirements for deliverables, feedback and sign off. The system development life cycle is described in detail since it continues to be an appropriate methodology for a significant part of new development work.

The basic idea of the system development life cycle is that there is a well-defined process by which an application is conceived and developed and implemented. The life cycle gives structure to a creative process. In order to manage and control the development effort, it is necessary to know what should have been done, what has been done, and what has yet to be accomplished. The phrases in the system development life cycle provide a basis for management and control because they define segments of the flow of work, which can be identified for managerial purposes and specifies the documents or other deliverables to be produced in each phase.

The phases in the life cycle for information system development are described differently by different writers, but the differences are primarily in the amount of necessity and manner of categorization. There is a general agreement on the flow of development steps and the necessity for control procedures at each stage. The Online examination system includes below three modules;

1. Admin Module
2. Instructor Module
3. Student Module

5. EXPERIMENTAL RESULTS

The Experimental results/outputs has screenshots below ;

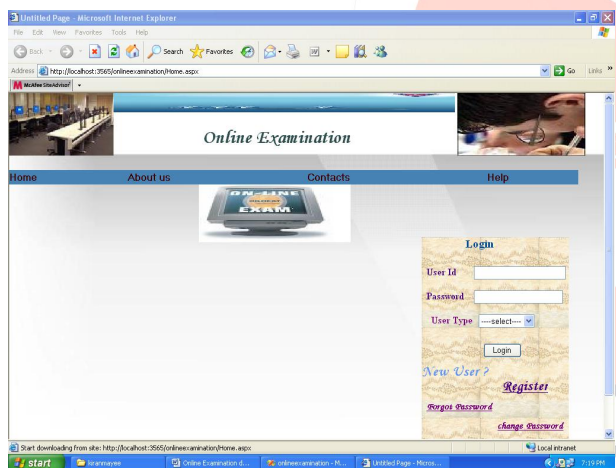


Fig 1:Home Page

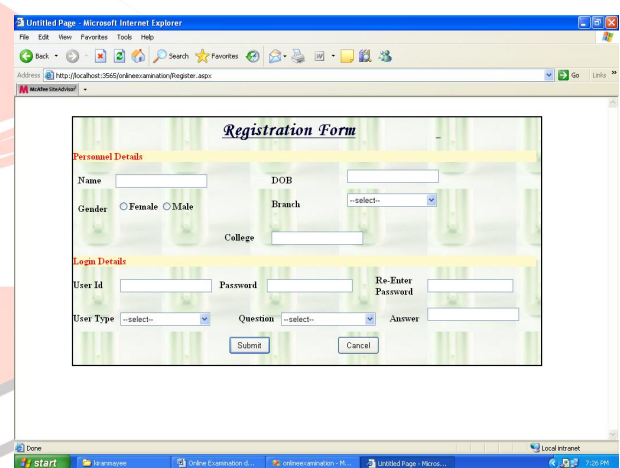


Fig 2:User Registration



Fig 3:Administrator Home page



Fig 4:Instructor Home page

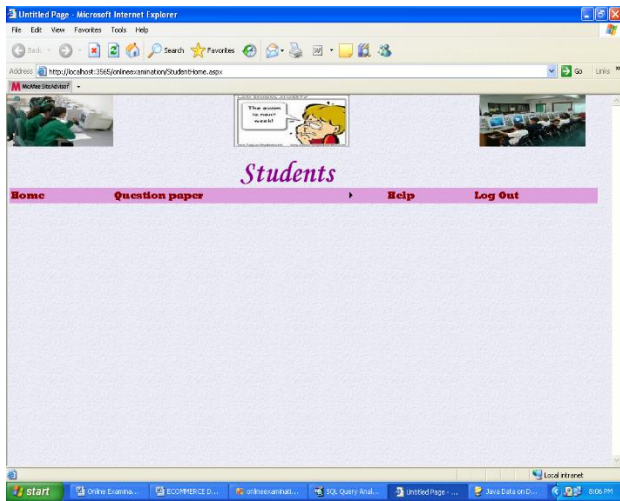


Fig 5: Student Home page

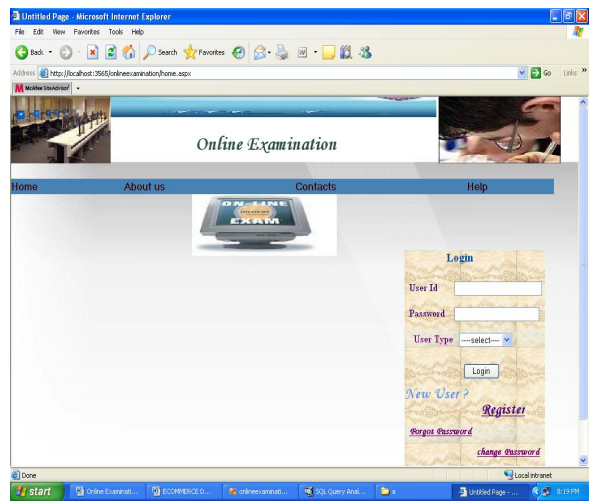


Fig 6: Student Logout

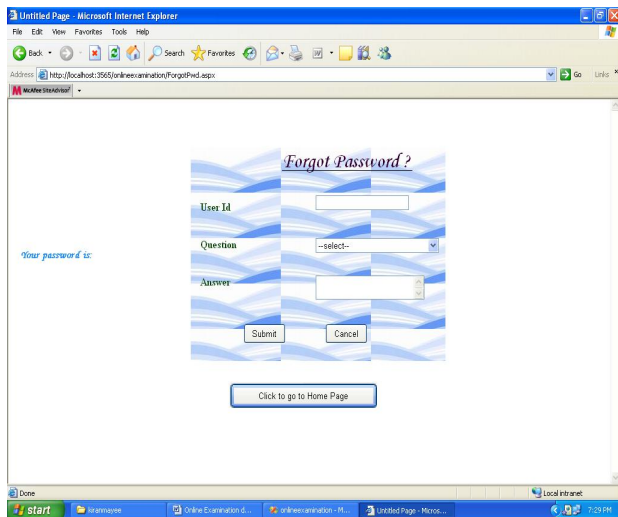


Fig 7: Forgot Password

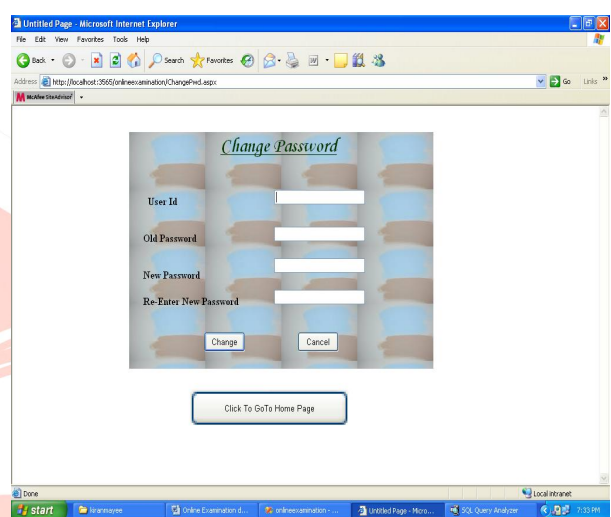
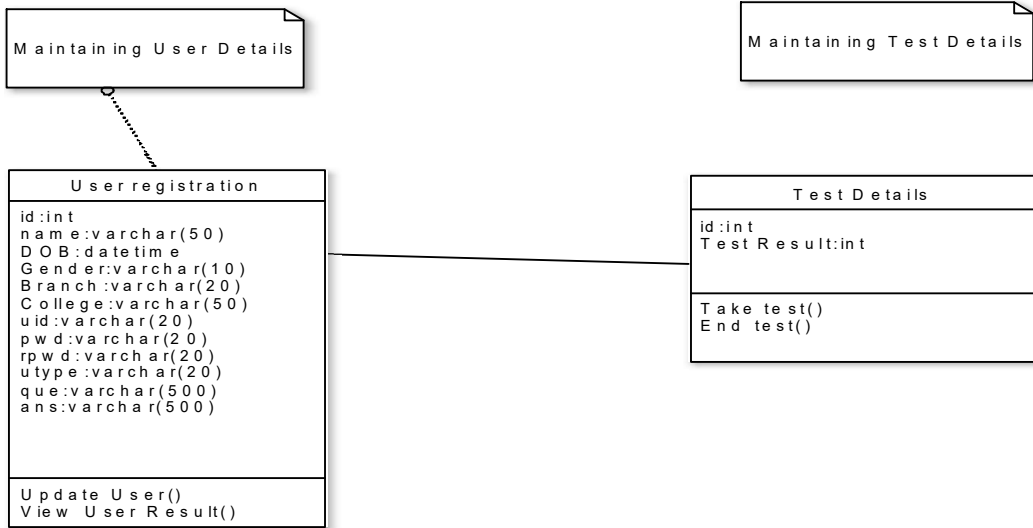


Fig 8: Change Password

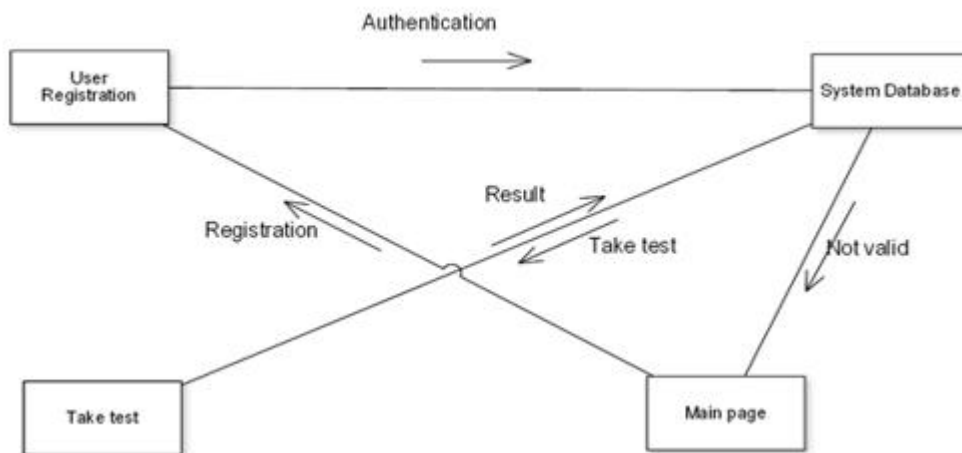
CLASS DIAGRAM:

Class is nothing but a structure that contains both variables and methods. The Class Diagram shows a set of classes, interfaces, and collaborations and their relating ships. There is most common diagram in modeling the object oriented systems and are used to give the static view of a system. It shows the dependency between the classes that can be used in our system. The interactions between the modules or classes of our projects are shown below. Each block contains Class Name, Variables and Methods. Class is a description of set of objects that share the same attributes, operations, relationships, and semantics.



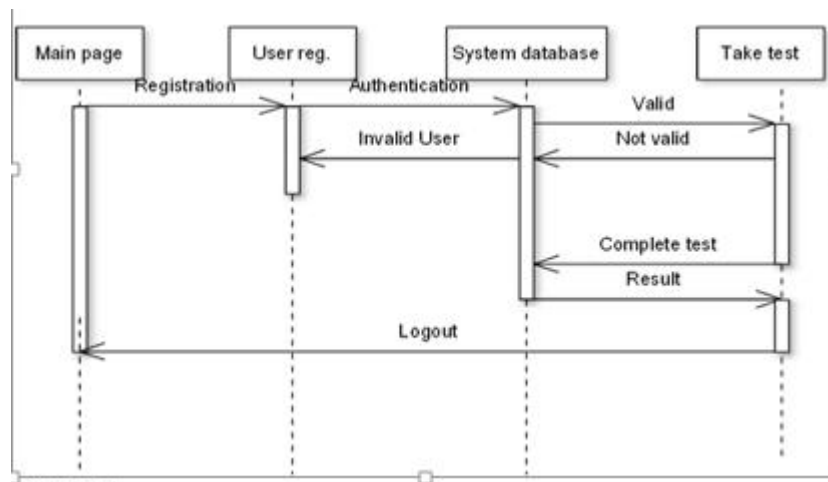
COLLABORATION DIAGRAM:

A collaboration diagram is an introduction diagram that emphasizes the structural organization of the objects that send and receive messages. Graphically a collaboration diagram is a collection of vertices and arcs.



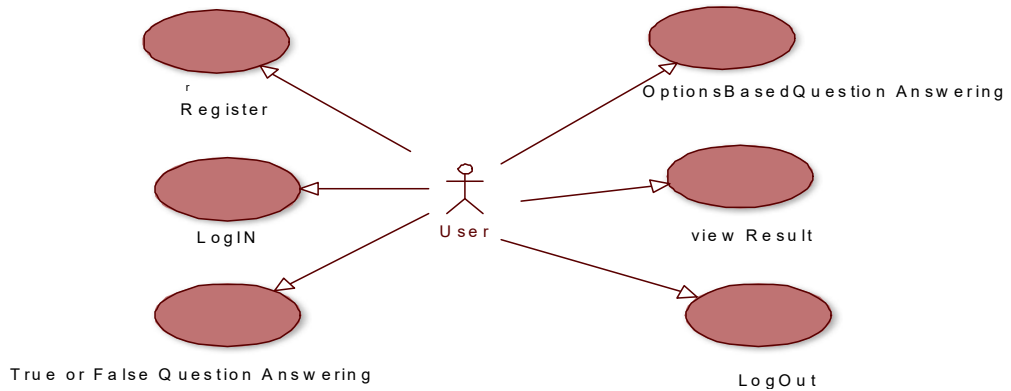
SEQUENCE DIAGRAM:

Sequence diagram and collaboration diagram are called interaction diagrams. An interaction diagram shows an interaction, consisting of set of objects and their relationship including the messages that may be dispatched among them. A sequence diagram is an introduction that empathizes the time ordering of messages. Graphically a sequence diagram is a table that shows objects arranged along the X-axis and messages ordered in increasing time along the Y-axis.



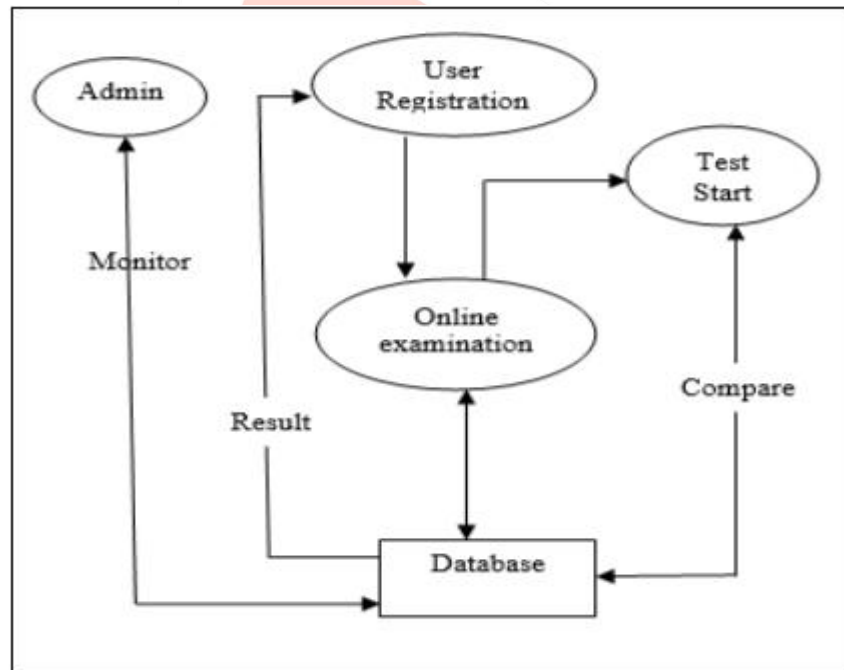
USECASE DIAGRAM:

A Use case is a description of set of sequence of actions. Graphically it is rendered as an ellipse with solid line including only its name. Use case diagram is a behavioral diagram that shows a set of use cases and actors and their relationship. It is an association between the use cases and actors. An actor represents a real-world object. Primary Actor – Sender, Secondary Actor Receiver.



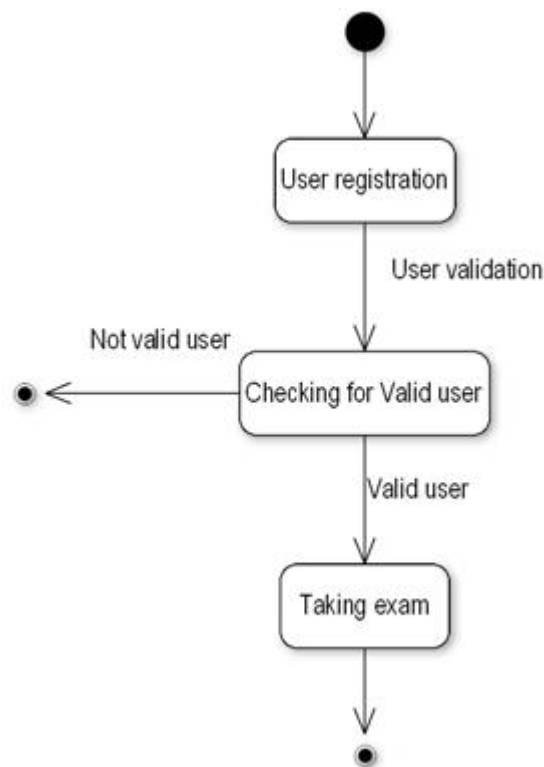
DATABASE DFD DAIGRAM:

A data flow diagram (DFD) is use a very small number of primitive symbols to represent the functionality performed by the project and the flow data among the different functions of the project. The data flow diagram depicted in figure B below shows the relationship among the entities in the Online Examination system. The entity “USER” can give exam after he or she registered to the online examination system.



STATE CHART DIAGRAM:

State chart diagram is one of the five UML diagrams used to model the dynamic nature of a system. They define different states of an object during its lifetime and these states are changed by events. State chart diagrams are useful to model the reactive systems.



6. CONCLUSION

Using an open source language gives us more flexibility, but at the same time it required more time to be programmed. The proposed Online Examination System (OES) can be easily adopted by universities and institutions in order to make the exam more secure and more flexible. The system is subdivided into two main subsystems (student and administrator) that are designed to give the system maximum benefit by demonstrating carefully each subsystem service. The administrator's functions are clearly identified to be able to manipulate user's information such as add (register), delete users and managing the exam materials and content such as add, delete questions, Thus the proposed system is easy and flexible because for future maintenance and development because each subsystem can be handled separately without influence on other system.

7. FUTURE SCOPE

Scope of this project is very wide in terms of other manually exam paper. This can be used not only in educational institution but also private institute .It can be used anyplace any time as it web base application .No limitation that examiner has to be available when the student takes the test. Online examination is need to designing for educational institutes like and private institutes to direct test of their students. There have been number of cases of computer glitches, bugs in content. And security threats reported in web based online examination system. So in the near future the so called software can be make more secure and trustworthy. While electronic glitches are uncommon. They have been known to occur. For instance when computer crashes voided the efforts of so many students. There are also cases in which correction software has corrupted score.

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