



EDES eSar Dynamic Examination Systems



WHAT IS EDES

EDES is Dynamic & intelligent Examination system that cover the Examination system Fields, Building Exams, Managing resources & data , Online Registration, control Management System and Fully Dynamic Reporting with Charting system. EDES is Collection of 3 Modules contains more than 78 Functions. EDES is Examination system gives the ability to Users to control in all features and functions in Examination System. EDES is Fully Secured in all Business layers, Database Storage and all data transaction.

EDESTM Software Description

The EDES is easy to use, full-featured and flexible Testing, Examination and Assessment tool. The Knowledge absorption skills assessment is monitored through the Evaluation System. It allows Administrators to enable and approve Comprehensive Course Tests, accessible to students. The Evaluation System provides complete functionality of evaluating and assessing student's performance skills. The Evaluation System comprises of Question Bank effectively blended with a whole set of Features. Using different features of the Evaluation System an administrator can set an exam name, select a subject, assign questions for batches as well as an Individual student, set the appearance of questions and lot.

In our Online Examination software/ system - Administrator can set up multiple choice tests for set time periods that when submitted are automatically corrected and the results logged beside the student's or trainee's reference number.

Start easily with **EDES** Look and Feel

Key Feature:

- Its user friendly and easy to use.
- User creates company, branch, student, batch, subject, exam timetable, topic for subject, and employee for institute.
- Administrator manage exam user, provide multi user facility.
- On-click student exam result.
- Student result analysis reports.
- Student compares his answered question with other student answer.
- Provide question tag mark facility in exam time .
- Use examiner time to allocate other place.
- Select question randomly for exam.
- Provide every student question number randomly.
- Save paper cost.
- Save examiner time.
- Save administrator time for make timetable.
- On-click exam result getting.
- Student week point analysis report.
- Take tests from anywhere, only Internet access is required.
- Option for randomization of questions.
- Multiple-choice single answers.
- True/False type.
- Exhibit based.
- Multiple-choice multiple answer.
- Detailed answers.

Advantages of EDES:

- Proctors can register to administer the online exam right from their computer
- Online exam classes can be created in minutes and proctored immediately
- Class progress can be monitored during the exam
- Access exam results instantly
- Upon completion of the exam, examinees are notified whether they have passed the exam
- Once the entire class is finished, exam results are accessible instantly
- Certificates are mailed to Instructors/Proctors within 24-48 business hours of grading the class.

Advantages for Examinees:

- Examinees may take a practice exam on-line
- Examinees can review selected questions before completing
- Examinees know immediately if they pass the exam



Back Office (Admin)

Management of accounts and Users databases, transaction files, and Re-presentment, security functions, Report, calculations, schemes are provided.

Highly parametric system allows setting up organizational and operations parameters through user menus. Multiple Modules under a single account is possible. Account wide and mobile-based limits can be applied.

Reporting management system keeps track of all parameters, collections, clearing and Result, commission and Training Materials. Day to day operations of Examination acceptance can be precisely controlled.

Authorization system is very capable and flexible. It can handle both incoming and outgoing authorizations automatically. Authorizations can be provided through comprehensive and detailed screen forms, which can provide extensive mobile holder and transaction detail to help authorization personnel. Fully automatic end-to-end authorizations from EDESTM to mobile portal for providing acquiring authorization services, as well as responses to other systems for issuer authorizations are possible.

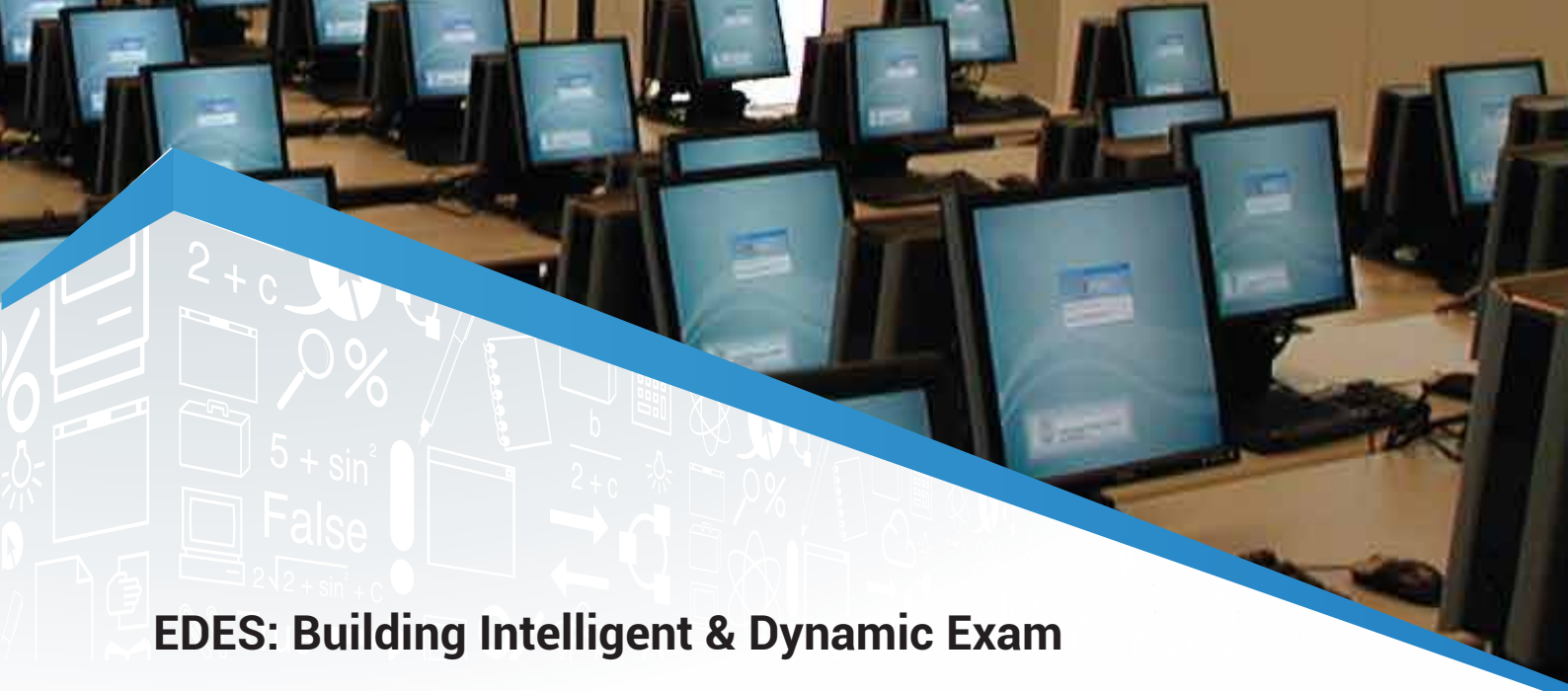
Building Exam is one of the Admin Features that give the chance for each teacher to build his own Exam with full Security functions.

Managing all students with fully Information, Managing all teachers Information & Materials with Bank question. Network monitoring and controlling at all PC connected with the System.

FRONT OFFICE

Client Side is the online Exam that the student will tack it as multiple-choice Exam has many Features: time Control, Review, Result, Issuing, Calculations, Backup system,

EDES Client Side provides online real time Transaction to EDESTM subsystems. These are fully certified with international Transaction Procedure, so that you can make your Exam with full security.



EDES: Building Intelligent & Dynamic Exam

EDES revolutionizes the process of testing students and performing various questionnaires, quizzes and surveys. The comprehensive test suite allows you to design, implement, run, grade and assess the results of a test of any complexity. Plain-text customer satisfaction surveys, product questionnaires, language tests, university exams and sophisticated certification tests are all made easily possible with EDES.

Tests and Exams: from Paper-based to Computer-based

- Automatically Test Grading.
- Multitude of Question Types.
- Fully Customizable Look and Feel.
- Simple to Learn and to Use.
- Easy to Implement.
- Easy to Grade.
- Personalized Tests.
- Comprehensive Privacy.
- Fully Secure.
- Client-Server Technology.
- Multiple Exams Made Easy.
- Dynamic & Portable.
- Backup Technology for Exams at run time.
- Review and Remarks functionality.
- Network Monitoring for all Exams
- Ability to issuing Certificate.
- Etc...

Stand-alone and Network Testing

EDES™ MAIN Modules

Main Modules core database management and reporting facilities for Dynamic Examination system.

1. EDES Portal Management System (Administration Module).
2. EDES Examiner (Student Module).
3. EDES Online (Web Client Module).

Administration Module

Sub Modules:

- Admin Modules.
- Teacher Modules.
- Manager Modules.
- Sub Admin Modules.

Student Module

Sub Modules:

- In-Door Student.
- Out-Door Student.

Online Module

Sub Modules:

- Admin Module.
- Training Manager Module.
- Student Module.
- Manager Module.
- Guest Module.

Main Functionality & Systems of “EDES” Platform Modules

Administration Module | Sub Modules:

Teacher Modules.

- Student Monitoring System.
- Dynamic & Intelligent Exam Maker System.
- Security Tools.
- Auto Recovery system.
- Data banking Management tools.
- Dynamic Reporting & Charting System.
- Media Management Tools.
- Auto Alarming System.
- Dynamic Agenda Tools.
- Exploring management System.
- Exam Controlling Tools.

Manager Modules.

- Dynamic Reporting System.
- Dynamic Charting System.
- Dynamic Agenda Tools.
- Dynamic Alarming System.
- Dynamic Emailing System.

Exams ,Tests and Quizzes Made Easy

Admin Modules.

- Intelligent Managing & Customizing all Forms and Data.
- Fully Dynamic Control in the System.
- Data Banking | Question Databank Management system.
- Dynamic Reporting Tools.
- Automatic Alarming System.
- Dynamic Emailing System.
- User Management System.
- Managing and Controlling for Authentication, Policy and Privileges for all Users, Client and Student.
- Dynamic Exploring Files.
- Auto Backup & Recovery System.
- Dynamic Agenda Tools.
- Networking Management Tools.
- Intelligent Blocking system.
- Security Management System.
- Lapse Management System.
- Dynamic & intelligent Multi lingual Management system.
- Advertisement Management system.
- Dynamic Charting System.
- EDES online Content Management System.

Admin Modules.

- Dynamic Reporting Tools.
- Dynamic Charting System.
- Automatic Alarming System.
- Dynamic Exploring Files.
- Dynamic Emailing System.
- Laps Management System.
- Advertisement Management system.
- EDES online Content Management System.
- Auto Backup & Recovery System.
- Dynamic Agenda Tools.
- Networking Management Tools.

Are you Ready for Exams?

EDES has Helpful Tools for you!

Student Module | Sub Modules:

In-Door Student.

- Q/A Management System.
- Auto Recovery Management System.
- Student e-Card Tools.
- Dynamic Result & Certificate Issuing Tools.
- Time Controlling System.
- Examiner Feedback System.
- Dynamic Editing System.

Out-Door Student.

- Q/A Management System.
- Auto Recovery Management System.
- Student e-Card Tools.
- Dynamic Result & Certificate Issuing Tools.
- Time Controlling System.
- Examiner Feedback System.
- Dynamic Editing System.

Online Module| Sub Modules:

Admin Module.

- Dynamic Control management system.
- Dynamic Reporting system.
- Dynamic Charting system.
- Advertisement system.
- Mailing management System.
- Client Management System.
- Statistics Tools.
- Auto Backup System.
- Online Practice Exam System.

Training Manager Module.

- Auto Registration system.
- Examiner Management system.
- Exploring Exam System.
- Auto Mailing System.
- Auto Backup system.
- Security Tools.
- Reporting Tools.
- Charting Tools.
- Dynamic Result system.
- Multi lingual System.

Manager Module

- Reporting Management System.
- Charting Management system.
- Advertisement Management Tools.
- Monitoring Management Tools.

Guest Module.

- Advertisement Tools.
- Exam Exploring System.
- Registration system.
- Feedback Tools.

EDES Features



EDES™ SOFTWARE Architecture

Database

eSar' has selected Microsoft SQL Server as the strategic database platform as it is the fastest and most portable relational database which is available. However, the system also can easily be on MS/SQL, MY/SQL, and Oracle .

High level Programs

All server platforms are developed using C# & vb.net 2010, asp.net as well as the Client Portal module & Admin Module.

GUI

All GUI applications were developed on PowerBuilder with object-oriented approach. Certain DLLs and programs where necessary, therefore, they were developed with Visual Basic.net 2010.

Database Programming Style

SQL Stored Procedures and Packages used as much as possible for more reliable and easily maintainable database and business logic.

Client / Server Model

All business logic is designed as Servers or Services to be accessed by different clients using a model called UNIQUE which the core server. Instead of each

EDES is Complete END-TO-END Testing Solution

program directly reaching a channel or hardware component these server process or services called; For example for obtaining an authorization for a mobile/Email transaction a EDES formats the message according to a universal format expected by UNIQUE and passes it over Message Queues or TCP/IP sockets to UNIQUE listener process which analyzes the message, makes the necessary database checks and updates if necessary routes the transaction to an appropriate switch gets the response from the other end makes necessary database updates and returns the result to the caller. These servers are very powerful, efficient and reliable. Furthermore, they are designed to be working in distributed mode and possibly as multiple instances.

TCP/IP

eSar' have decided to use TCP/IP protocols and sockets for inter-process communications and computer to computer communications in distributed programming environment.

Machine / Model Independent

The application can run on different brand, model and even operating system in a fully hybrid environment using open database and communication standards.

Scalable

It can be configured to run from the smallest machines to biggest supercomputer class machines.

EDES = Simple + Secure + Dynamic
+ Intelligent

Assured Continuity

The source codes can be easily recompiled on different platforms and newer models.

High Availability

Applications can run on high availability systems like Oracle RAC Server or HP MC/Server Guard.

Crypto Messaging

All internal messaging between processes over message queues and TCP/IP sockets are made with 128 bit 3DES with 2048 bit RSA key exchange to defeat data monitoring and interference of internal threats within the organization.

Web Based Solutions

eSar' designed EDES™ Online which is the web access system related to the server system enables the Client to access his account and check the all Information.



EDES – QDBMS Module | Question Data Bank Management System

QDBMS is a module of EDES Platform that Manage all Questions in Data Bank with methodology Process of Standard question elements.

For each question the following construction is defined as standard:

- Element 1: Header (General data)
- Element 2: Question (type)
- Element 3: Annexe(s) (to the specific question)
- Element 4: Statistics / Feed back

Question Header

The header of a question describes all existential information behind the question (and answer) text. They are necessary for an effective and time saving administration of larger data bases:

- 1 Question ID,
- 2 Creation Date,
- 3 Last Update Date,
- 4 Status flag,
- 5 Reference to learning objective,
- 6 Reference to module and syllabus paragraph / subparagraph, Level,
- 7 Category,
- 8 Scheduled working time,
- 9 Difficulty Level.

A quick and flexible process for Creating, managing and analyzing questions

Question Types

Following question types are allowed to be used:

- 1 Multiple-choice question with dynamic answers and dynamic correct answer
- 2 Grid questions
- 3 Matching question
- 4 Gap fill question
- 5 Hotspot question
- 6 Drag and drop question
- 7 Drag and connect question
- 8 Flash question
- 9 Spoken response
- 10 Draw question
- 11 File upload question

Annexe(s)

In this context, an Annex refers to a document that is needed to solve the question(s). One or more Annexes may be needed to solve a particular question.

Annexes should be in good clear quality and suitable for the purpose of solving the question. They can be used as prints as well as digitised documents in the format jpg, gif or png for computer based examinations.

POWERFUL TOOLS THAT FIT YOUR NEEDS

Feedback information (Quality circle)

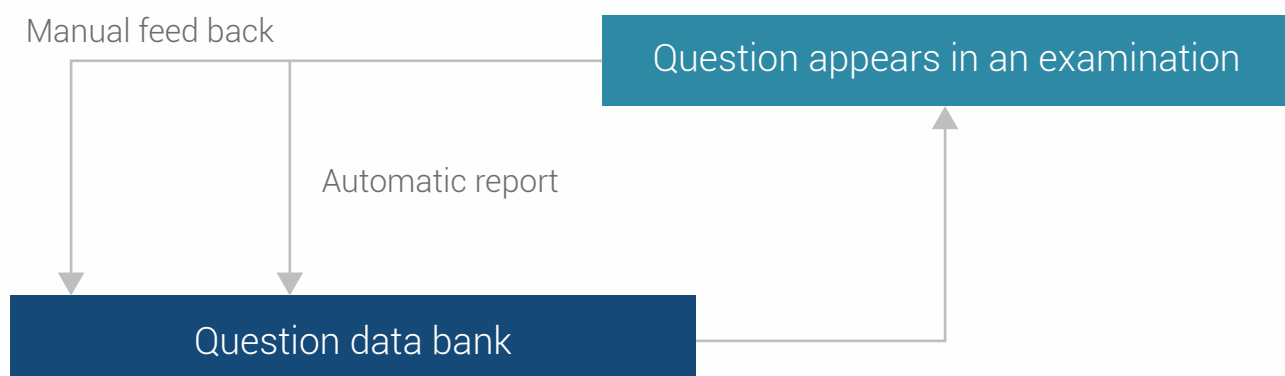
(a) Automatic report (Self-assessment of questions)

The future of examining is in Computer based examinations, which will also make possible the reporting back of candidates' inputs as an automatic and ongoing procedure. Each time a question appears in an examination the software will create a new entry in the feedback list. With this function, it can be recognised if the question fulfils the expected Value (for example, not too easy and not too difficult, or if the question has a Misleading nature). If the software in use supports the functions, the feedback can lead to an automatic assessment of the questions.

(b) Manual feed back

As an additional function, it is possible to enable candidates to type in comments concerning the unsuitability of the current question. This would enable to access the candidates' comments in this regard.

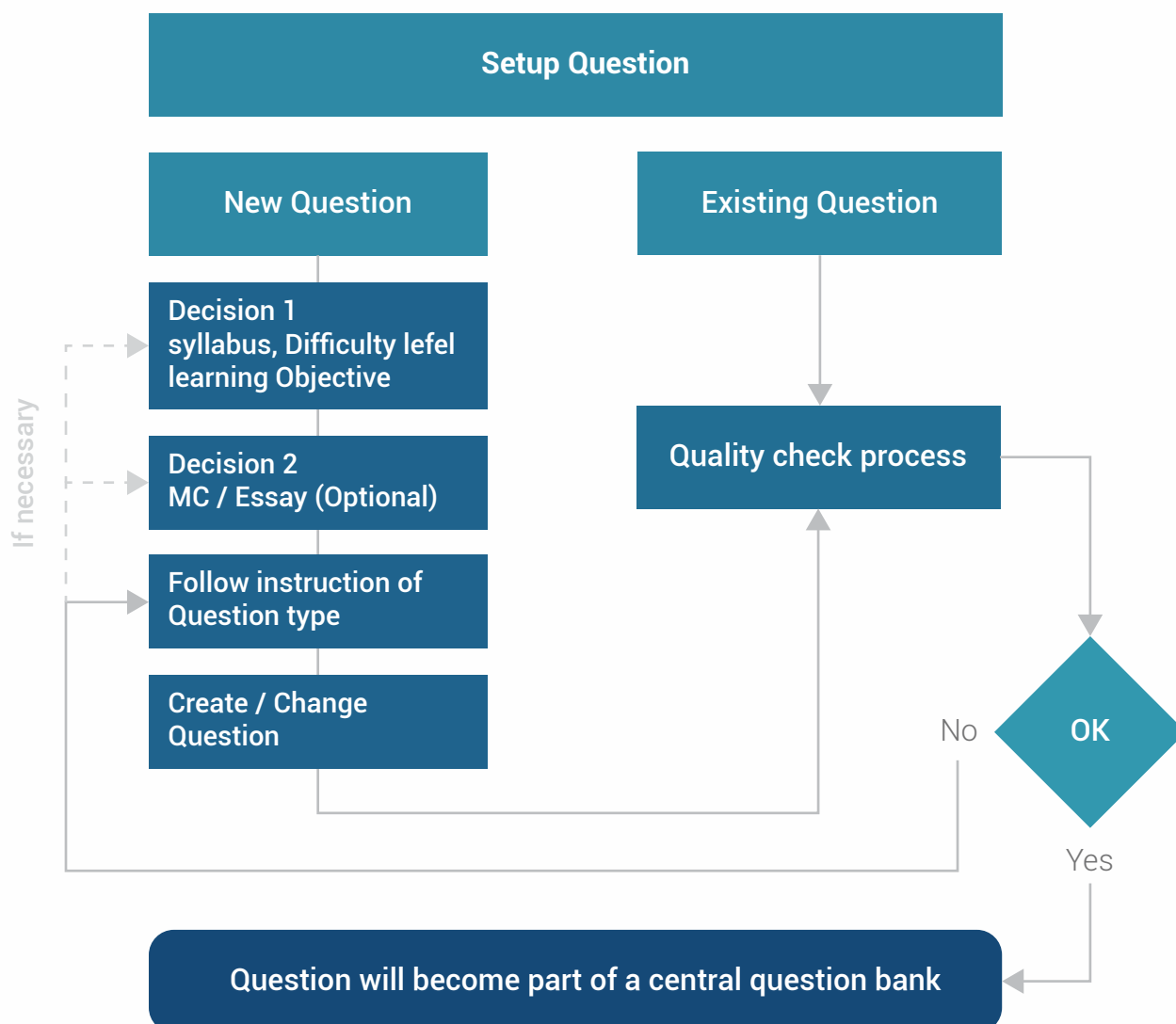
(c) Overview feedback quality circle



Quality Circle Setup and Review Questions

The picture below shows the general workflow which should be followed when Setting up new questions or reviewing existing questions. The use of the diagram

Shall also support the aim to get a common quality level of questions.

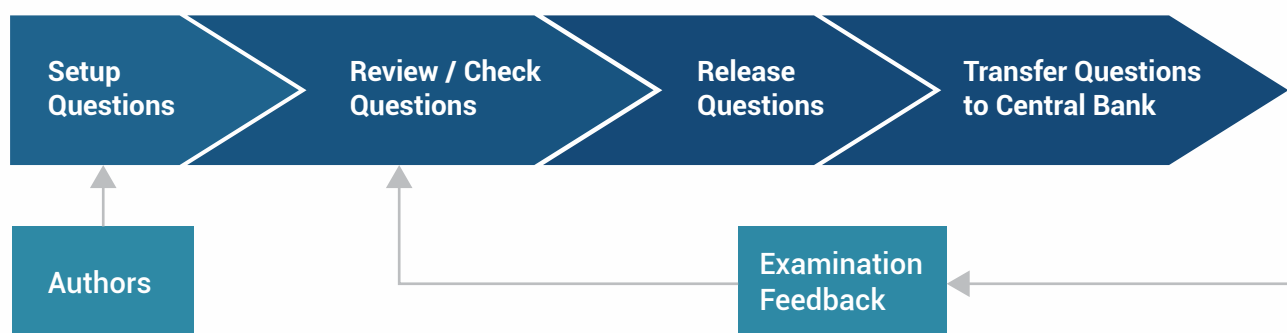


Ongoing Quality Circle

Before a question appears in an examination it should be checked by one or more Module Experts and by students in the advanced stage. Their judgment guarantees the clear understanding of the meaning of a question and its reply. The figure below shows the standard quality process.

1. Author(s) write questions
2. Experts review Questions
3. Experts decide and release the question when it is ok
4. Question appears in exam
5. Feedback:
 - 5.1 If the question is ok Question stays in the bank
 - 5.2 If the question is not ok go to 1 and 2

Process





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