

# DATABASE ENGINE CONTROL THROUGH WEB PORTAL MONITORING CONFIGURATION

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**ABSTRACT:** Integrated Solution for Admission, Course and Accounts for Institutes are complex information technology (IT) applications that can be accessed by all authorized employees of a given organization. The Integrated Solution for Admission, Course and Accounts for Institutes, implementation process must take into account the challenges of both change institute management and technology acceptance. The early DBMSs are among the most influential software systems in computer science, and the ideas and implementation issues pioneered for DBMSs are widely copied and reinvented. Business logics are implemented in database engine layer and UI logics are implemented in presentation layer. The community of people involved in designing and implementing database systems is tight: many attended the same schools, worked on the same influential research projects, and collaborated on the same commercial products. . In this paper, we attempt to capture the main architectural aspects of modern database systems, with a discussion of advanced topics. Some of these appear in the literature, and we provide references where appropriate.

## 1. INTRODUCTION

The *database layer* provides an object view of database information by applying schema semantics to database records, thereby isolating the upper layers of the directory service from the underlying database system. The database layer is an internal interface that is not exposed to users. No database access calls are made directly to the Extensible Storage Engine; instead, all database access is routed through the database layer.

Active Directory provides a hierarchical namespace. Each object is uniquely identified in the database by its individual naming attribute, called the relative distinguished name (also known as the RDN). The relative distinguished name and the chain of successive parent object names make up the object's distinguished name (also known as the DN). The database stores the relative distinguished name for each object, as well as a reference to the parent object. The database layer follows these

parent references and concatenates the successive relative distinguished names to form distinguished names.

Active Directory relative distinguished names are unique within a particular parent; that is, Active Directory does not permit two objects with the same relative distinguished name under the same parent container. The distinguished name identifies one object only and is unique (that is, no other object in the directory has its name).

A major function of the database layer is to translate each distinguished name into an integer structure called the *distinguished name tag*, which is used for all internal accesses. The database layer guarantees the uniqueness of the distinguished name tag for each database record.

All data that describes an object is held as a set of attributes, which are stored as columns in the database. The database layer is responsible for the creation, retrieval, and deletion of individual records, attributes within records, and values within attributes. To carry out these functions, the database layer uses the schema cache (an in-memory structure in the DSA) to get information about the attributes that it needs.

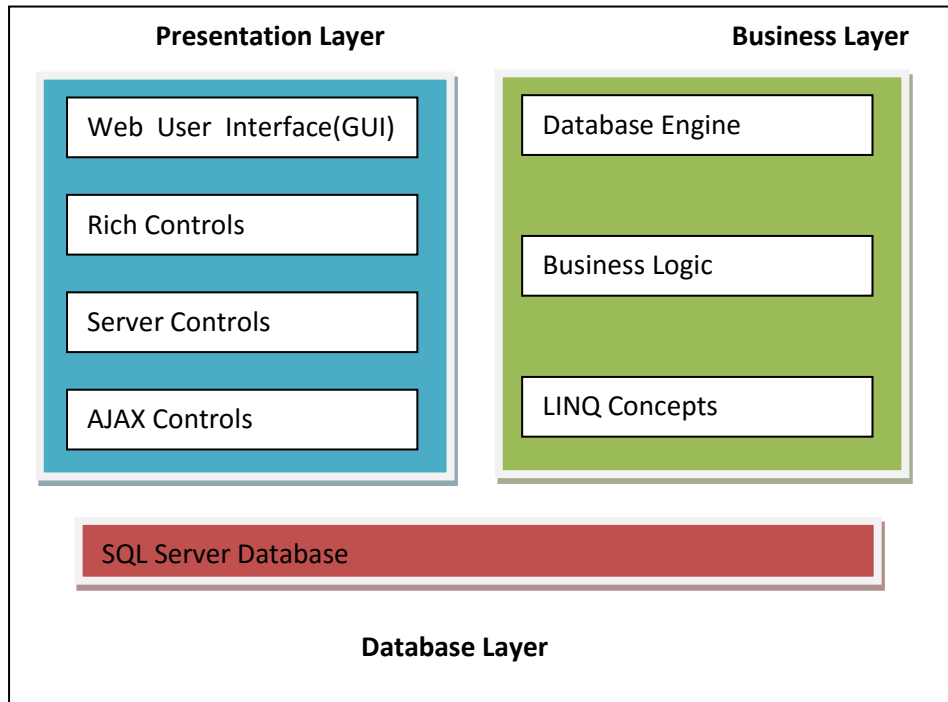
### a.) Database engine layer:

In database engine layer business logic are implemented. So business logics are abstracted from presented layer developer. It will give high security. So DB engine developer (business developer) can continue his work without depending the presentation layer. So the project can be completed quickly. Now days splitting code development import to achieve the target given by client.

### b.) Presentation layer:

The presentation developer will be given necessary methods to access the business logic values through the DB engine. The presentation layer will have the UI logics. It will give the good user friendly look and feel to users. The presentation developer can develop independently to complete their task.

**System Architecture:**



**c.) Scope and Overview**

In most of this paper, our focus is on architectural fundamentals supporting core database functionality. We do not attempt to provide a comprehensive review of database algorithms that have been extensively documented in the literature. We also provide only minimal discussion of many extensions present in modern DBMSs, most of which provide features beyond core data management but do not significantly alter the system architecture. However, within the various sections of this paper we note topics of interest that are beyond the scope of the paper, and where possible we provide pointers to additional reading. We begin our discussion with an investigation of the overall architecture of database systems. The first topic in any server system architecture is its overall process structure, and we explore a variety of viable alternatives on this front, first for uniprocessor machines and then for the variety of parallel architectures available today. This discussion of core server system architecture is applicable to a variety of systems, but was to a large degree pioneered in DBMS design. Following this, we begin on the more domain-specific components of a DBMS. We start with a single query's view of the system, focusing on the relational query processor. Following that,

we move into the storage architecture and transactional storage management design. Finally, we present some of the shared components and utilities that exist in most DBMSs, but are rarely discussed in textbooks.

**2. SYSTEM STUDY**

The institute documents student details, fees details, are maintained manually using note book, bill book, so the management cannot get Fees details, student address, student balance details, enquiry Detail and Book detail. There are few employees working in manual system to do the job partially. The manual system is not used at all for the management.

The aim of the paper is automation of the all customized activities of the Integrated Solution for Admission, Course and Accounts for Institutes. This includes the Book master, Course master, Enquiry, Enquiry Details, Admission ,Receipt , Book Issue Details, Collection Details, Account Details, Particular Course Details, Particular Date Collection Details, Login page, Particular Student Details and overall Details.

- Account functionalities are automated. So it helps the management to know the balance details of the candidate on time easily.
- It totally avoids the manual work.
- It will decrease the cost of the expenses
- It will provide the accurate result to the management
- It is great software should be used by all schools, colleges, institutes and universities.
- It uses the email engine, db engine, custom controls, server controls, Ajax controls, sitemap detail, LINQ (Language integrated query).

### 3. CONCLUSION

This application is providing extremely good solution to the management. It automates all the necessary business functionalities. It helps to reduce the expenses. It helps to increase the productivity. It provides valid data on time to the management. It uses the latest technology to provide good solution to the management. It provides the secured access to all the data.

The business user and admin users are enjoying to use this application. It is user friendly application. It is developed to support any latest technology like next version of .net. All business users are appreciating our team for providing secured, high performance, main notification application to them

The role based security plays the main role in this application. It provide the limited pages only to the limited user and full access to the admin user. Actually it provides only necessary pages to the necessary user.

The management and employees are using all the functionalities with fulfilled options. We have delivered successful application to the users. The management and employees are some new functionality. We are discussing the new functionalities which will be developed and delivered to the user as soon as possible.

Our future enhancement for this application will be using Silverlight. Because the management team expecting some reports with Silverlight. We are planning to develop highly interactive system for the new functionalities.

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