The Automatic Database Schema Generation Abstract

The **Automatic Database Schema Generation** is a system, which allows the developers to focus on creating the database using the GUI interface. The user needs to fulfill the requirements in the interface and he can perform the database operations which he wants and can create the database.

This project aims at creation of an automatic database schema generation. This project will be accessible to all developers and its facility allows developers to focus on creating the database schema on the basis of JSP while letting the application server define table based on the fields in JSP and relationships between them. This system provides the following facilities.

This facilitates the user to focus much on application aspects leaving behind the database aspects.

This project allows users to generate database schema generation without having much knowledge of database Aspects.

**Modules**

1) **SQL Query Pane Module**
   
   Here we can type SQL queries and get the data from Database

2) **Import Option Module**
   
   We can import .sql files only into the Database

3) **Export Option Module**
   
   We can export sql Structure, sql Data or both based on some conditions into 3 types of files
   .sql files
   .html files
4) **Operation Module**

Here we can create table with constraints

Alter the existing table like

Alter column

Rename column

Drop column

Empty column

5) **Search Database Module**

Search based on keywords

Search looks for column names only

Search looks for data only

**Existing System:**

There are many Database Management systems available today. The Database designer is familiar with any one of the database Management Systems. Let us consider a condition when a database designer required to design the schema for an application on different DBMS. He required to learn all the DBMS User Interfaces. Where some of them are GUI (Graphic User Interface) based and others are CUI(Character User Interface).

**DRAWBACKS OF EXISTING SYSTEM**

Through this approach to alter or to edit a large database schema, It consumes more time for a Database Designer. The operations like altering the table structure, Editing the table, Dropping columns, searching for a column name, searching for a data in the table.. etc.,
To Design and alter the Database schema there exists different user interfaces for different DBMS.

**Proposed System and its features:**
The Automatic Database Schema Generation System provides the following features.

1. The Automatic Database Schema Generation System provides a Common User Interface to interact with all the databases.
2. Here the user interface is Graphical User Interface.
3. This application is a Web based Application.
4. Being a web based application it doesn’t require any client side installation.
5. Any number of users can interact with the system simultaneously.
7. Using Session management the interaction more flexible and secure.
HARDWARE AND SOFTWARE REQUIREMENTS

HARDWARE REQUIREMENTS

PROCESSOR : Intel 2.0 GHz or above
HARD DISK : 80 GB
RAM : 512 MB RAM.

SOFTWARE REQUIREMENTS

OPERATING SYSTEM : WINDOWS XP with SP2.
LANGUAGE (FRONT END) : JAVA (JDK1.5/1.6)
SERVER : APACHE TOMCAT 5.5/6.0
WEB TECHNOLOGY : HTML, JAVASCRIPT, CSS.
DATABASE (BACK END) : ORACLE 10G.
ARCHITECTURE : 3-TIER ARCHITECTURE.