

SQL SERVER NAMING CONVENTIONS AND STANDARDS

In programming, we have many naming conventions like camelCase, PascalCase, under_scores etc. But each and every organization has its own naming conventions. In this article, I would like to share some common and useful naming conventions and standards that you should use while programming with SQL Server.

Table

Tables are used to store data in the database. The naming conventions for a table may have a "tbl" prefix, followed by the table name. Moreover, TableName should be plural. The syntax should be "tbl<TableName>".

Examples are below:

1. `tblEmployees`
2. `tblOrders`
3. `tblProducts`

Primary Key Constraint

[Primary key](#) is a field or a set of fields in the database table that uniquely identify records in the database table. A table can have only one primary key. The naming conventions for a primary key constraints should have a "PK_" prefix, followed by the table name. The syntax should be "PK_<TableName>".

Examples are below:

1. `PK_Employees`
2. `PK_Orders`
3. `PK_Products`

Foreign Key Constraint

[Foreign key](#) is a field in the database table that is primary key in other table. The naming conventions for a foreign key constraint should have a "FK_" prefix, followed by the target table name, followed by the source table name. The syntax should be "FK_<TargetTable>_<SourceTable>".

Examples are below:

1. `FK_Orders_Employees`
2. `FK_Items_Products`

Unique Key Constraint

[Unique key](#) is a set of one or more fields/columns of a table that uniquely identify a record in database table. It is like Primary key but it can accept only one null value. The naming conventions for a unique key constraints should have a "UQ_" prefix, followed by the table name, followed by the column name. The syntax for a unique constraint should be "UQ_<TableName>_<ColumnName(s)>".

Examples are below:

1. `UQ_Employees_EmailID`
2. `UQ_Items_Code`

Default Constraint

[Default Constraints](#) insert a default value into the column when no value is provided for that column. The syntax for a unique constraint should be "DF_<TableName>_<ColumnName>".

Examples are below:

1. `DF_Employees_IsActive`
2. `DF_Employees_CreateDate`

Check Constraint

[Check Constraints](#) defines a business rule on a column in the database table that each row of the table must follow this rule. The syntax for a unique constraint should be "CHK_<TableName>_<ColumnName>".

Examples are below:

1. `CHK_Employees_Salary`
2. `CHK_Employees_DOB`

User Defined Stored Procedures

[Stored Procedures](#) are executed on the server side and perform a set of actions, before returning the results to the client side. This allows a set of actions to be executed with minimum time and also reduce the network traffic. While creating user defined stored procedures we should avoid the prefix "sp_" with the name of procedure. Since "sp_" prefix is already fixed for system defined stored procedures. The naming conventions for user defined stored procedure may have a "usp_" prefix, followed by the action and objects of the procedure. The syntax for a user defined stored procedure should be "usp_<Action>_<Object>".

Examples are below:

1. `usp_Insert_Employees`
2. `usp_View_EmployeeOrders`

User Defined Functions

[Functions](#) are a set of SQL statements that accepts only input parameters, perform actions and return the result. Function can return only single value or a table. The naming conventions for user defined functions may have a "fn_" prefix, followed by it's action. The syntax should be "fn_<Action>".

Examples are below:

1. `fn_CalulateTax`
2. `fn_CalculateAge`

Views

[Views](#) are like a virtual table that can be made over one or more database tables. Generally we put those columns in view that we need to retrieve/query again and again. The naming conventions for a view should have a "vw_" prefix, followed by the namespace, results. The syntax should be "vw_<Result>".

Examples are below:

1. `vw_EmpOrderDetails`
2. `vw_SalesProductDetails`

Triggers

Triggers are database object. Basically these are special type of stored procedure that are automatically fired/executed when a DDL or DML command statement related with the trigger is executed. The naming conventions for a trigger should have a "trg_" prefix, followed by the action, and the table name. The syntax should be "trg_<Action>_<TableName>".

Examples are below:

1. `trg_Ins_Employee`
2. `trg_Upd_Employee`
3. `trg_Del_Employee`

Indexes

Indexes are database objects that help the SQL Server query engine to find the desired data. Indexes may attached to tables or views. The naming conventions for an index should have an "IX_" prefix, followed by the table name and columns. The syntax should be "IX_<TableName>_<Column(s)>".

Examples are below:

1. `IX_Employee_Name`
2. `IX_Employee_NameMobileNo`

Source : <http://www.dotnet-tricks.com/Tutorial/sqlserver/a54b241112-SQL-Server-Naming-Conventions-and-Standards.html>