Namespace DynamicQueryBuilder Classes

<u>DynamicQueryBuilderModule</u>

Module for adding Dynamic Query Builder services.

Class DynamicQueryBuilderModule

Namespace: <u>DynamicQueryBuilder</u>
Assembly: DynamicQueryBuilder.dll

Module for adding Dynamic Query Builder services.

public static class DynamicQueryBuilderModule

Inheritance

<u>object</u> ♂ ← DynamicQueryBuilderModule

Inherited Members

<u>object.Equals(object)</u> <u>object.Equals(object, object)</u> <u>object.GetHashCode()</u> , <u>object.GetType()</u> , <u>object.MemberwiseClone()</u> , <u>object.ReferenceEquals(object, object)</u> , <u>object.ToString()</u>

Methods

AddDynamicQueryBuilder(IServiceCollection, DynamicQueryBuilderSettings)

Adds Dynamic Query Builder services to the service collection.

public static IServiceCollection AddDynamicQueryBuilder(this IServiceCollection services, DynamicQueryBuilderSettings settings)

Parameters

The service collection.

settings <u>DynamicQueryBuilderSettings</u>

Settings object containing Connection String and Driver definition.

Returns

$\underline{\mathsf{IServiceCollection}} \, {\mathbin{\boxtimes}} \,$

The service collection.

Namespace DynamicQueryBuilder.Builders Classes

QueryBuilder

Implements the IQueryBuilder interface to build SQL queries fluently.

Class QueryBuilder

Namespace: <u>DynamicQueryBuilder.Builders</u>

Assembly: DynamicQueryBuilder.dll

Implements the IQueryBuilder interface to build SQL queries fluently.

```
public class QueryBuilder : IQueryBuilderSetup, IQueryBuilder
```

Inheritance

Implements

IQueryBuilderSetup, IQueryBuilder

Inherited Members

<u>object.Equals(object)</u> <u>object.Equals(object, object)</u> <u>object.GetHashCode()</u> , <u>object.GetType()</u> , <u>object.MemberwiseClone()</u> , <u>object.ReferenceEquals(object, object)</u> , <u>object.ToString()</u>

Methods

Columns(params string[])

Specifies the columns to select in the query.

```
public IQueryBuilder Columns(params string[] columns)
```

Parameters

columns <u>string</u> []

An array of column names.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

Create()

Factory method to start the builder.

```
public static IQueryBuilderSetup Create()
```

Returns

<u>IQueryBuilderSetup</u>

A <u>QueryBuilder</u> stance.

FilterBy(string, ComparisonOperators, string)

Adds a filter condition to the query using a comparison operator with AND.

Parameters

The column name.

operator <u>ComparisonOperators</u>

The comparison operator.

value <u>string</u>♂

The value for the filter.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

FilterBy(string, InclusionOperators, IEnumerable<string>)

Adds a filter condition for inclusion operators (IN, NOT IN) with AND.

```
public IQueryBuilder FilterBy(string column, InclusionOperators @operator,
IEnumerable<string> values)
```

Parameters

column string

The column name.

operator <u>InclusionOperators</u>

The inclusion operator.

values <u>IEnumerable</u> < <u>string</u> < >

The values for the filter.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

FilterBy(string, NullOperators)

Adds a filter condition for null checks with AND.

```
public IQueryBuilder FilterBy(string column, NullOperators @operator)
```

Parameters

The column name.

operator NullOperators

The null operator.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

FilterBy(string, RangeOperators, string, string)

Adds a filter condition for range checks (BETWEEN, NOT BETWEEN) with AND.

```
public IQueryBuilder FilterBy(string column, RangeOperators @operator, string start,
string end)
```

Parameters

column <u>string</u> □

The column name.

operator RangeOperators

The range operator.

start <u>string</u>♂

The start value of the range.

end <u>string</u> ♂

The end value of the range.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

FilterBy(string, StringOperators, string)

Adds a filter condition using a string operator (LIKE, ILIKE) with AND.

```
public IQueryBuilder FilterBy(string column, StringOperators @operator,
string pattern)
```

Parameters

```
column <u>string</u> □
```

The column name.

operator <u>StringOperators</u>

The string operator for filtering.

pattern <u>string</u> ♂

The pattern to match.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

FilterBy(string, string, string)

Adds a filter condition to the query using a raw string operator with AND.

```
public IQueryBuilder FilterBy(string column, string @operator, string value)
```

Parameters

column <u>string</u> □

The column name.

operator <u>string</u> ✓

The operator as a string.

The value for the filter.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

FromTable(string)

Specifies the table from which to select data.

```
public IQueryBuilder FromTable(string table)
```

Parameters

table <u>string</u> <a>□

The name of the table.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

GenerateFormattedSql()

Generates a formatted SQL query with proper line breaks and indentation.

```
public string GenerateFormattedSql()
```

Returns

A SQL query string.

Exceptions

Thrown when the table is undefined or not present in the provided database information.

GenerateSql()

Generates the complete SQL query string based on the specified clauses.

```
public string GenerateSql()
```

Returns

A SQL query string.

Exceptions

Thrown when the table is undefined or not present in the provided database information.

GroupBy(params string[])

Specifies the GROUP BY clause for the query.

```
public IQueryBuilder GroupBy(params string[] columns)
```

Parameters

columns <u>string</u> []

An array of column names to group by.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

Join(JoinOperators, string, string)

Adds a JOIN clause to the query.

```
public IQueryBuilder Join(JoinOperators type, string table, string condition)
```

Parameters

type JoinOperators

The type of join represented by a JoinOperators enum.

The table to join.

condition <u>string</u> □

The condition on which to join.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

OrFilterBy(string, ComparisonOperators, string)

Adds a filter condition to the query using a comparison operator with OR.

```
public IQueryBuilder OrFilterBy(string column, ComparisonOperators @operator,
string value)
```

Parameters

The column name.

operator ComparisonOperators

The comparison operator.

value <u>string</u> ♂

The value for the filter.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

OrFilterBy(string, InclusionOperators, IEnumerable<string>)

Adds a filter condition for inclusion operators (IN, NOT IN) with OR.

public IQueryBuilder OrFilterBy(string column, InclusionOperators @operator, IEnumerable<string> values)

Parameters

column <u>string</u>♂

The column name.

operator <u>InclusionOperators</u>

The inclusion operator.

values <u>IEnumerable</u> < <u>string</u> < >

The values for the filter.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

OrFilterBy(string, NullOperators)

Adds a filter condition for null checks with OR.

```
public IQueryBuilder OrFilterBy(string column, NullOperators @operator)
```

Parameters

column <u>string</u> □

The column name.

operator <u>NullOperators</u>

The null operator.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

OrFilterBy(string, RangeOperators, string, string)

Adds a filter condition for range checks (BETWEEN, NOT BETWEEN) with OR.

```
public IQueryBuilder OrFilterBy(string column, RangeOperators @operator, string
start, string end)
```

Parameters

column <u>string</u>♂

The column name.

operator <u>RangeOperators</u>

The range operator.

start <u>string</u>♂

The start value of the range.

end <u>string</u>♂

The end value of the range.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

OrFilterBy(string, StringOperators, string)

Adds a filter condition using a string operator (LIKE, ILIKE) with OR.

```
public IQueryBuilder OrFilterBy(string column, StringOperators @operator,
string pattern)
```

Parameters

```
column <u>string</u> □
```

The column name.

operator <u>StringOperators</u>

The string operator for filtering.

pattern <u>string</u>♂

The pattern to match.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

OrFilterBy(string, string, string)

Adds a filter condition to the query using a raw string operator with OR.

```
public IQueryBuilder OrFilterBy(string column, string @operator, string value)
```

Parameters

column <u>string</u> □

The column name.

operator <u>string</u> ✓

The operator as a string.

value <u>string</u>♂

The value for the filter.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

OrderBy(string, OrderDirection)

Specifies the ORDER BY clause for a single column with a specified direction.

```
public IQueryBuilder OrderBy(string column, OrderDirection direction)
```

Parameters

column <u>string</u>♂

The column name to order by.

direction OrderDirection

The direction of ordering.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

OrderBy(params string[])

Specifies the ORDER BY clause for the query using default ordering.

```
public IQueryBuilder OrderBy(params string[] columns)
```

Parameters

```
columns <u>string</u> []
```

An array of column names to order by.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

SetLimit(int)

Limits the number of records returned by the query.

```
public IQueryBuilder SetLimit(int limit)
```

Parameters

limit int♂

The maximum number of records to return.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

Setup(Dictionary<string, List<string>>)

Configures the query builder with the required database metadata. This method must be called before proceeding with any query building operations.

public IQueryBuilder Setup(Dictionary<string, List<string>> databaseInfo)

Parameters

databaseInfo <u>Dictionary</u> < <u>string</u> < , <u>List</u> < <u>string</u> < >>

A dictionary where each key is a table name (as a string) and the associated value is a list of column names (as strings) for that table.

Returns

<u>IQueryBuilder</u>

An instance of <u>IQueryBuilder</u> that provides the full set of query-building methods.

Namespace DynamicQueryBuilder.Drivers Classes

DriversFactory

Factory class for creating database connections and metadata queries.

Class DriversFactory

Namespace: <u>DynamicQueryBuilder.Drivers</u>

Assembly: DynamicQueryBuilder.dll

Factory class for creating database connections and metadata queries.

public static class DriversFactory

Inheritance

<u>object</u> ← DriversFactory

Inherited Members

<u>object.Equals(object)</u> <u>object.Equals(object, object)</u> <u>object.GetHashCode()</u> , <u>object.GetType()</u> , <u>object.MemberwiseClone()</u> , <u>object.ReferenceEquals(object, object)</u> , <u>object.ToString()</u>

Methods

GetDatabaseConnection(DatabaseDriver, string)

Get a database connection.

public static IDbConnection GetDatabaseConnection(DatabaseDriver driver, string connectionString)

Parameters

driver DatabaseDriver

The database driver.

connectionString <u>string</u> <a>d

The connection string.

Returns

A database connection.

GetMetadataQuery(DatabaseDriver)

Get the metadata query for a database driver.

public static string GetMetadataQuery(DatabaseDriver driver)

Parameters

driver <u>DatabaseDriver</u>

The database driver.

Returns

<u>string</u> □

The metadata query.

Namespace DynamicQueryBuilder. Interfaces.Builders

Interfaces

<u>IQueryBuilder</u>

Defines a builder for constructing SQL queries.

<u>IQueryBuilderSetup</u>

Provides the initial setup functionality for the dynamic query builder. This interface enforces that the necessary database metadata is provided before any query construction methods become available.

Interface IQueryBuilder

Namespace: <u>DynamicQueryBuilder.Interfaces.Builders</u>

Assembly: DynamicQueryBuilder.dll

Defines a builder for constructing SQL queries.

public interface IQueryBuilder

Methods

Columns(params string[])

Specifies the columns to select in the query.

IQueryBuilder Columns(params string[] columns)

Parameters

columns <u>string</u> []

An array of column names.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

FilterBy(string, ComparisonOperators, string)

Adds a filter condition to the query using a comparison operator with AND.

IQueryBuilder FilterBy(string column, ComparisonOperators @operator, string value)

Parameters

```
column string
```

The column name.

operator <u>ComparisonOperators</u>

The comparison operator.

value <u>string</u>♂

The value for the filter.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

FilterBy(string, InclusionOperators, IEnumerable<string>)

Adds a filter condition for inclusion operators (IN, NOT IN) with AND.

```
IQueryBuilder FilterBy(string column, InclusionOperators @operator,
IEnumerable<string> values)
```

Parameters

column <u>string</u>♂

The column name.

operator <u>InclusionOperators</u>

The inclusion operator.

values <u>IEnumerable</u> < <u>string</u> < >

The values for the filter.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

FilterBy(string, NullOperators)

Adds a filter condition for null checks with AND.

IQueryBuilder FilterBy(string column, NullOperators @operator)

Parameters

column string

The column name.

operator NullOperators

The null operator.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

FilterBy(string, RangeOperators, string, string)

Adds a filter condition for range checks (BETWEEN, NOT BETWEEN) with AND.

IQueryBuilder FilterBy(string column, RangeOperators @operator, string start, string end)

Parameters

column <u>string</u> □

The column name.

operator RangeOperators

The range operator.

start <u>string</u>♂

The start value of the range.

end <u>string</u> ☑

The end value of the range.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

FilterBy(string, StringOperators, string)

Adds a filter condition using a string operator (LIKE, ILIKE) with AND.

IQueryBuilder FilterBy(string column, StringOperators @operator, string pattern)

Parameters

column <u>string</u> ☑

The column name.

operator <u>StringOperators</u>

The string operator for filtering.

pattern <u>string</u> □

The pattern to match.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

FilterBy(string, string, string)

Adds a filter condition to the query using a raw string operator with AND.

```
IQueryBuilder FilterBy(string column, string @operator, string value)
```

Parameters

column <u>string</u> □

The column name.

operator <u>string</u> □

The operator as a string.

The value for the filter.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

FromTable(string)

Specifies the table from which to select data.

```
IQueryBuilder FromTable(string table)
```

Parameters

table <u>string</u>♂

The name of the table.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

GenerateFormattedSql()

Generates a formatted SQL query with proper line breaks and indentation.

string GenerateFormattedSql()

Returns

A SQL query string.

Exceptions

Thrown when the table is undefined or not present in the provided database information.

GenerateSql()

Generates the complete SQL query string based on the specified clauses.

string GenerateSql()

Returns

A SQL query string.

Exceptions

Thrown when the table is undefined or not present in the provided database information.

GroupBy(params string[])

Specifies the GROUP BY clause for the query.

```
IQueryBuilder GroupBy(params string[] columns)
```

Parameters

columns <u>string</u> []

An array of column names to group by.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

Join(JoinOperators, string, string)

Adds a JOIN clause to the query.

IQueryBuilder Join(JoinOperators type, string table, string condition)

Parameters

type <u>JoinOperators</u>

The type of join represented by a <u>JoinOperators</u> enum.

table <u>string</u>♂

The table to join.

condition \underline{string}

The condition on which to join.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

OrFilterBy(string, ComparisonOperators, string)

Adds a filter condition to the query using a comparison operator with OR.

IQueryBuilder OrFilterBy(string column, ComparisonOperators @operator, string value)

Parameters

column <u>string</u> <a>□

The column name.

operator ComparisonOperators

The comparison operator.

value <u>string</u>♂

The value for the filter.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

OrFilterBy(string, InclusionOperators, IEnumerable<string>)

Adds a filter condition for inclusion operators (IN, NOT IN) with OR.

IQueryBuilder OrFilterBy(string column, InclusionOperators @operator,
IEnumerable<string> values)

Parameters

The column name.

operator <u>InclusionOperators</u>

The inclusion operator.

values <u>IEnumerable</u> ♂ < <u>string</u> ♂ >

The values for the filter.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

OrFilterBy(string, NullOperators)

Adds a filter condition for null checks with OR.

IQueryBuilder OrFilterBy(string column, NullOperators @operator)

Parameters

The column name.

operator <u>NullOperators</u>

The null operator.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

OrFilterBy(string, RangeOperators, string, string)

Adds a filter condition for range checks (BETWEEN, NOT BETWEEN) with OR.

IQueryBuilder OrFilterBy(string column, RangeOperators @operator, string start, string end)

Parameters

column <u>string</u>♂

The column name.

operator RangeOperators

The range operator.

start <u>string</u>♂

The start value of the range.

end <u>string</u> ☑

The end value of the range.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

OrFilterBy(string, StringOperators, string)

Adds a filter condition using a string operator (LIKE, ILIKE) with OR.

IQueryBuilder OrFilterBy(string column, StringOperators @operator, string pattern)

Parameters

column <u>string</u>♂

The column name.

operator <u>StringOperators</u>

The string operator for filtering.

pattern <u>string</u> □

The pattern to match.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

OrFilterBy(string, string, string)

Adds a filter condition to the query using a raw string operator with OR.

IQueryBuilder OrFilterBy(string column, string @operator, string value)

Parameters

column <u>string</u> □

The column name.

operator string

The operator as a string.

value <u>string</u>♂

The value for the filter.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

OrderBy(string, OrderDirection)

Specifies the ORDER BY clause for a single column with a specified direction.

IQueryBuilder OrderBy(string column, OrderDirection direction)

Parameters

column <u>string</u> □

The column name to order by.

direction OrderDirection

The direction of ordering.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

OrderBy(params string[])

Specifies the ORDER BY clause for the query using default ordering.

```
IQueryBuilder OrderBy(params string[] columns)
```

Parameters

columns <u>string</u> []

An array of column names to order by.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

SetLimit(int)

Limits the number of records returned by the query.

```
IQueryBuilder SetLimit(int limit)
```

Parameters

limit <u>int</u>♂

The maximum number of records to return.

Returns

<u>IQueryBuilder</u>

The current IQueryBuilder instance.

Interface IQueryBuilderSetup

Namespace: <u>DynamicQueryBuilder.Interfaces.Builders</u>

Assembly: DynamicQueryBuilder.dll

Provides the initial setup functionality for the dynamic query builder. This interface enforces that the necessary database metadata is provided before any query construction methods become available.

public interface IQueryBuilderSetup

Methods

Setup(Dictionary<string, List<string>>)

Configures the query builder with the required database metadata. This method must be called before proceeding with any query building operations.

IQueryBuilder Setup(Dictionary<string, List<string>> databaseInfo)

Parameters

databaseInfo Dictionary < < string < , List < < string < >>

A dictionary where each key is a table name (as a string) and the associated value is a list of column names (as strings) for that table.

Returns

<u>IQueryBuilder</u>

An instance of <u>IQueryBuilder</u> that provides the full set of query-building methods.

Namespace DynamicQueryBuilder. Interfaces.Helpers

Interfaces

<u>IGetDatabaseMetaData</u>

Interface for getting database metadata.

Interface IGetDatabaseMetaData

Namespace: <u>DynamicQueryBuilder.Interfaces.Helpers</u>

Assembly: DynamicQueryBuilder.dll

Interface for getting database metadata.

public interface IGetDatabaseMetaData

Methods

GetDatabaseTablesMetaDataAsync()

Get the metadata of the database tables.

Task<Dictionary<string, Dictionary<string, List<DatabaseTablesMetaData>>>>
GetDatabaseTablesMetaDataAsync()

Returns

<u>Task</u>♂<<u>Dictionary</u>♂<<u>string</u>♂, <u>Dictionary</u>♂<<u>string</u>♂, <u>List</u>♂<<u>DatabaseTablesMetaData</u>>>>>

A dictionary of schemas and tables with their metadata.

Exceptions

 $\underline{InvalidOperationException} \boxdot$

Thrown when unable to create a command.

Namespace DynamicQueryBuilder.Models. Enums.Helpers.Databases

Enums

DatabaseDriver

Supported drivers to get tables metadata.

Enum DatabaseDriver

Namespace: <u>DynamicQueryBuilder.Models.Enums.Helpers.Databases</u>

Assembly: DynamicQueryBuilder.dll

Supported drivers to get tables metadata.

public enum DatabaseDriver

Fields

MYSQL = 1

MySQL driver.

POSTGRESQL = 0

PostgreSQL driver.

Namespace DynamicQueryBuilder.Models. Enums.SqlOperators

Classes

FilterClause

Represents a filter clause in SQL.

Enums

<u>ArithmeticOperators</u>

Represents the arithmetic operators in SQL.

<u>ComparisonOperators</u>

Represents SQL comparison operators.

<u>InclusionOperators</u>

Represents SQL inclusion operators.

<u>JoinOperators</u>

Represents SQL join operators.

<u>LogicalOperators</u>

Represents SQL logical operators.

NullOperators

Represents SQL null operators.

OrderDirection

Specifies the order direction for ordering clauses.

RangeOperators

Represents SQL range operators.

SetOperators

Represents SQL set operators.

<u>StringOperators</u>

Represents SQL string operators.

Enum ArithmeticOperators

Namespace: <u>DynamicQueryBuilder.Models.Enums.SqlOperators</u>

Assembly: DynamicQueryBuilder.dll

Represents the arithmetic operators in SQL.

public enum ArithmeticOperators

Fields

```
ADDITION = 0

Addition (+)

DIVISION = 3

Division (/)

MODULO = 4

Modulo (%) - Remainder of division

MULTIPLICATION = 2

Multiplication (*)

SUBTRACTION = 1

Subtraction (-)
```

Enum ComparisonOperators

Namespace: <u>DynamicQueryBuilder.Models.Enums.SqlOperators</u>

Assembly: DynamicQueryBuilder.dll

Represents SQL comparison operators.

public enum ComparisonOperators

Fields

```
EQUAL = 0

Equal (=)

GREATER_OR_EQUAL = 4

Greater than or equal to (>=)

GREATER_THAN = 2

Greater than (>)

LESS_OR_EQUAL = 5

LESS_THAN = 3

NOT_EQUAL = 1
```

Class FilterClause

Namespace: <u>DynamicQueryBuilder.Models.Enums.SqlOperators</u>

Assembly: DynamicQueryBuilder.dll

Represents a filter clause in SQL.

public record FilterClause : IEquatable<FilterClause>

Inheritance

object

← FilterClause

Implements

<u>IEquatable</u> < <u>FilterClause</u> >

Inherited Members

<u>object.Equals(object)</u> <u>object.Equals(object, object)</u> <u>object.GetHashCode()</u> , <u>object.GetType()</u> , <u>object.MemberwiseClone()</u> , <u>object.ReferenceEquals(object, object)</u> , <u>object.ToString()</u>

Constructors

FilterClause(LogicalOperators, string)

Represents a filter clause in SQL.

public FilterClause(LogicalOperators JoinOperator, string Condition)

Parameters

JoinOperator LogicalOperators

The logical operator to join the condition.

Condition <u>string</u> ✓

The condition to filter the data.

Properties

Condition

The condition to filter the data.

```
public string Condition { get; init; }
Property Value
string♂
```

JoinOperator

The logical operator to join the condition.

```
public LogicalOperators JoinOperator { get; init; }
```

Property Value

LogicalOperators

Enum InclusionOperators

Namespace: <u>DynamicQueryBuilder.Models.Enums.SqlOperators</u>

Assembly: DynamicQueryBuilder.dll

Represents SQL inclusion operators.

public enum InclusionOperators

Fields

```
IN = 0
```

IN - Checks if a value belongs to a set

 $NOT_IN = 1$

NOT IN - Checks if a value does not belong to a set

Enum JoinOperators

Namespace: <u>DynamicQueryBuilder.Models.Enums.SqlOperators</u>

Assembly: DynamicQueryBuilder.dll

Represents SQL join operators.

public enum JoinOperators

Fields

```
CROSS_JOIN = 4
```

CROSS JOIN - Produces a Cartesian product of the tables

```
FULL_JOIN = 3
```

FULL JOIN (or FULL OUTER JOIN) - Returns all records from both tables, with matching records when available

```
INNER JOIN = 0
```

INNER JOIN - Returns only records that have matching entries in both tables

```
LEFT JOIN = 1
```

LEFT JOIN (or LEFT OUTER JOIN) - Returns all records from the left table and the matching records from the right table

```
RIGHT_JOIN = 2
```

RIGHT JOIN (or RIGHT OUTER JOIN) - Returns all records from the right table and the matching records from the left table

```
SELF_JOIN = 5
```

SELF JOIN - Joins a table with itself

Enum LogicalOperators

Namespace: <u>DynamicQueryBuilder.Models.Enums.SqlOperators</u>

Assembly: DynamicQueryBuilder.dll

Represents SQL logical operators.

public enum LogicalOperators

Fields

AND = 0

Logical operator AND

NOT = 2

Logical operator NOT

OR = 1

Logical operator OR

Enum NullOperators

Namespace: <u>DynamicQueryBuilder.Models.Enums.SqlOperators</u>

Assembly: DynamicQueryBuilder.dll

Represents SQL null operators.

public enum NullOperators

Fields

```
IS_NOT_NULL = 1
IS NOT NULL - Checks if a value is not null
IS_NULL = 0
```

IS NULL - Checks if a value is null

Enum OrderDirection

Namespace: <u>DynamicQueryBuilder.Models.Enums.SqlOperators</u>

Assembly: DynamicQueryBuilder.dll

Specifies the order direction for ordering clauses.

public enum OrderDirection

Fields

ASC = 0

Ascending order (ASC)

DESC = 1

Descending order (DESC)

Enum RangeOperators

Namespace: <u>DynamicQueryBuilder.Models.Enums.SqlOperators</u>

Assembly: DynamicQueryBuilder.dll

Represents SQL range operators.

public enum RangeOperators

Fields

BETWEEN = 0

BETWEEN - Checks if the value is within a range

 $NOT_BETWEEN = 1$

NOT BETWEEN - Checks if the value is outside a range

Enum SetOperators

Namespace: <u>DynamicQueryBuilder.Models.Enums.SqlOperators</u>

Assembly: DynamicQueryBuilder.dll

Represents SQL set operators.

public enum SetOperators

Fields

EXCEPT = 3

EXCEPT - Returns records that are in the first query but not in the second

INTERSECT = 2

INTERSECT - Returns records common to both queries

UNION = 0

UNION - Combines and returns distinct results from two queries

 $UNION_ALL = 1$

UNION ALL - Combines results, including duplicates

Enum StringOperators

Namespace: <u>DynamicQueryBuilder.Models.Enums.SqlOperators</u>

Assembly: DynamicQueryBuilder.dll

Represents SQL string operators.

public enum StringOperators

Fields

CONCAT = 2

Concatenation of strings (|| in PostgreSQL/Oracle, + in SQL Server)

ILIKE = 1

ILIKE - Searches for patterns without case sensitivity (PostgreSQL)

LIKE = 0

LIKE - Searches for string patterns

Namespace DynamicQueryBuilder.Models. Helpers

Classes

<u>DatabaseTablesMetaData</u>

Represents the metadata of a database table, including schema, columns, primary key, and foreign key relationships.

<u>DynamicQueryBuilderSettings</u>

Configuration Object to initialize the library.

Class DatabaseTablesMetaData

Namespace: <u>DynamicQueryBuilder</u>.<u>Models</u>.<u>Helpers</u>

Assembly: DynamicQueryBuilder.dll

Represents the metadata of a database table, including schema, columns, primary key, and foreign key relationships.

public record DatabaseTablesMetaData : IEquatable<DatabaseTablesMetaData>

Inheritance

<u>object</u> d ← DatabaseTablesMetaData

Implements

<u>IEquatable</u> < <u>DatabaseTablesMetaData</u> >

Inherited Members

<u>object.Equals(object)</u> <u>object.Equals(object, object)</u> <u>object.GetHashCode()</u> , <u>object.GetType()</u> , <u>object.MemberwiseClone()</u> , <u>object.ReferenceEquals(object, object)</u> , <u>object.ToString()</u>

Constructors

DatabaseTablesMetaData(string, string, string?, string?, string?)

Represents the metadata of a database table, including schema, columns, primary key, and foreign key relationships.

```
public DatabaseTablesMetaData(string Column, string ColumnType, string? PrimaryKey,
string? RelatedSchema, string? RelatedTable, string? RelatedColumn)
```

Parameters

The name of the column in the table.

The data type of the column.

PrimaryKey <u>string</u>♂

The name of the primary key column if applicable; otherwise, null.

RelatedSchema <u>string</u>♂

The schema of the related table if there is a foreign key relationship; otherwise, null.

RelatedTable <u>string</u> <a>d

The name of the related table if there is a foreign key relationship; otherwise, null.

RelatedColumn string

The name of the related column if there is a foreign key relationship; otherwise, null.

Properties

Column

The name of the column in the table.

```
public string Column { get; init; }
```

Property Value

ColumnType

The data type of the column.

```
public string ColumnType { get; init; }
```

Property Value

PrimaryKey

The name of the primary key column if applicable; otherwise, null.

```
public string? PrimaryKey { get; init; }
Property Value
```

RelatedColumn

The name of the related column if there is a foreign key relationship; otherwise, null.

```
public string? RelatedColumn { get; init; }
Property Value
string@
```

RelatedSchema

The schema of the related table if there is a foreign key relationship; otherwise, null.

```
public string? RelatedSchema { get; init; }
Property Value
string@
```

RelatedTable

The name of the related table if there is a foreign key relationship; otherwise, null.

```
public string? RelatedTable { get; init; }
```

Property Value

Class DynamicQueryBuilderSettings

Namespace: <u>DynamicQueryBuilder</u>. <u>Models</u>. <u>Helpers</u>

Assembly: DynamicQueryBuilder.dll

Configuration Object to initialize the library.

public record DynamicQueryBuilderSettings : IEquatable<DynamicQueryBuilderSettings>

Inheritance

<u>object</u> ← DynamicQueryBuilderSettings

Implements

<u>IEquatable</u> < <u>DynamicQueryBuilderSettings</u> >

Inherited Members

<u>object.Equals(object)</u> <u>object.Equals(object, object)</u> <u>object.GetHashCode()</u> , <u>object.GetType()</u> , <u>object.MemberwiseClone()</u> , <u>object.ReferenceEquals(object, object)</u> , <u>object.ToString()</u>

Constructors

DynamicQueryBuilderSettings(string, DatabaseDriver)

Configuration Object to initialize the library.

public DynamicQueryBuilderSettings(string ConnectionString, DatabaseDriver DatabaseDriver)

Parameters

ConnectionString <u>string</u> ✓

Database connection string.

DatabaseDriver <u>DatabaseDriver</u>

Database Driver.

Properties

ConnectionString

Database connection string.

```
public string ConnectionString { get; init; }
Property Value
string♂
```

DatabaseDriver

Database Driver.

```
public DatabaseDriver DatabaseDriver { get; init; }
```

Property Value

DatabaseDriver