

Namespace Solstice.Infrastructure.

Attributes

Classes

[QueryAttribute](#)

Represents a custom attribute. This attribute is used to indicate which classes are to be used for database queries. It is a sealed class derived from the `Attribute` class, hence no other class can inherit from it.

[RepositoryAttribute](#)

The `'RepositoryAttribute'` class, derived from `'Attribute'`, is a custom attribute class. It may be used to annotate repository classes. This class is `'sealed'` which prevents further derivation.

Class QueryAttribute

Namespace: [Solstice.Infrastructure.Attributes](#)

Assembly: Solstice.Infrastructure.dll























Represents a custom attribute. This attribute is used to indicate which classes are to be used for database queries. It is a sealed class derived from the Attribute class, hence no other class can inherit from it.

```
[AttributeUsage(AttributeTargets.Class)]  
public sealed class QueryAttribute : Attribute
```

Inheritance

[object](#)  ← [Attribute](#)  ← QueryAttribute

Inherited Members

[Attribute.Equals\(object\)](#)  , [Attribute.GetCustomAttribute\(Assembly, Type\)](#)  ,
[Attribute.GetCustomAttribute\(Assembly, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(MemberInfo, Type\)](#)  ,
[Attribute.GetCustomAttribute\(MemberInfo, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(Module, Type\)](#)  ,
[Attribute.GetCustomAttribute\(Module, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type\)](#)  ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type, bool\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, bool\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, Type\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, Type, bool\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, bool\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, Type\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, Type, bool\)](#)  ,
[Attribute.GetCustomAttributes\(Module\)](#)  , [Attribute.GetCustomAttributes\(Module, bool\)](#)  ,
[Attribute.GetCustomAttributes\(Module, Type\)](#)  ,
[Attribute.GetCustomAttributes\(Module, Type, bool\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, bool\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type, bool\)](#)  , [Attribute.GetHashCode\(\)](#)  ,

[Attribute.IsDefaultAttribute\(\)](#) , [Attribute.IsDefined\(Assembly, Type\)](#) ,
[Attribute.IsDefined\(Assembly, Type, bool\)](#) , [Attribute.IsDefined\(MemberInfo, Type\)](#) ,
[Attribute.IsDefined\(MemberInfo, Type, bool\)](#) , [Attribute.IsDefined\(Module, Type\)](#) ,
[Attribute.IsDefined\(Module, Type, bool\)](#) , [Attribute.IsDefined\(ParameterInfo, Type\)](#) ,
[Attribute.IsDefined\(ParameterInfo, Type, bool\)](#) , [Attribute.Match\(object\)](#) ,
[Attribute.TypeId](#) , [object.Equals\(object, object\)](#) , [object.GetType\(\)](#) ,
[object.ReferenceEquals\(object, object\)](#) , [object.ToString\(\)](#)

Class RepositoryAttribute

Namespace: [Solstice.Infrastructure.Attributes](#)

Assembly: Solstice.Infrastructure.dll

The 'RepositoryAttribute' class, derived from 'Attribute', is a custom attribute class. It may be used to annotate repository classes. This class is 'sealed' which prevents further derivation.

```
[AttributeUsage(AttributeTargets.Class)]  
public sealed class RepositoryAttribute : Attribute
```

Inheritance

[object](#) ← [Attribute](#) ← RepositoryAttribute

Inherited Members

[Attribute.Equals\(object\)](#) , [Attribute.GetCustomAttribute\(Assembly, Type\)](#) ,
[Attribute.GetCustomAttribute\(Assembly, Type, bool\)](#) ,
[Attribute.GetCustomAttribute\(MemberInfo, Type\)](#) ,
[Attribute.GetCustomAttribute\(MemberInfo, Type, bool\)](#) ,
[Attribute.GetCustomAttribute\(Module, Type\)](#) ,
[Attribute.GetCustomAttribute\(Module, Type, bool\)](#) ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type\)](#) ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type, bool\)](#) ,
[Attribute.GetCustomAttributes\(Assembly\)](#) ,
[Attribute.GetCustomAttributes\(Assembly, bool\)](#) ,
[Attribute.GetCustomAttributes\(Assembly, Type\)](#) ,
[Attribute.GetCustomAttributes\(Assembly, Type, bool\)](#) ,
[Attribute.GetCustomAttributes\(MemberInfo\)](#) ,
[Attribute.GetCustomAttributes\(MemberInfo, bool\)](#) ,
[Attribute.GetCustomAttributes\(MemberInfo, Type\)](#) ,
[Attribute.GetCustomAttributes\(MemberInfo, Type, bool\)](#) ,
[Attribute.GetCustomAttributes\(Module\)](#) , [Attribute.GetCustomAttributes\(Module, bool\)](#) ,
[Attribute.GetCustomAttributes\(Module, Type\)](#) ,
[Attribute.GetCustomAttributes\(Module, Type, bool\)](#) ,
[Attribute.GetCustomAttributes\(ParameterInfo\)](#) ,
[Attribute.GetCustomAttributes\(ParameterInfo, bool\)](#) ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type\)](#) ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type, bool\)](#) , [Attribute.GetHashCode\(\)](#) ,

[Attribute.IsDefaultAttribute\(\)](#) , [Attribute.IsDefined\(Assembly, Type\)](#) ,
[Attribute.IsDefined\(Assembly, Type, bool\)](#) , [Attribute.IsDefined\(MemberInfo, Type\)](#) ,
[Attribute.IsDefined\(MemberInfo, Type, bool\)](#) , [Attribute.IsDefined\(Module, Type\)](#) ,
[Attribute.IsDefined\(Module, Type, bool\)](#) , [Attribute.IsDefined\(ParameterInfo, Type\)](#) ,
[Attribute.IsDefined\(ParameterInfo, Type, bool\)](#) , [Attribute.Match\(object\)](#) ,
[Attribute.TypeId](#) , [object.Equals\(object, object\)](#) , [object.GetType\(\)](#) ,
[object.ReferenceEquals\(object, object\)](#) , [object.ToString\(\)](#)

Namespace Solstice.Infrastructure.Core

Classes

[CoreRepositoryExtension](#)

[CoreRepository<T, TContext>](#)

An abstract class for the CoreRepository. Constructs a repository with a given context and Http context.

Interfaces

[ICoreRepository<T>](#)

The ICoreRepository interface provides methods for performing CRUD operations, querying, counting, paging, transactions, and other tasks on an underlying data repository in an asynchronous manner. The repository holds objects of a type. The methods in this interface produce or consume tasks that represent ongoing work and are used for structuring asynchronous code.

Class CoreRepositoryExtension

Namespace: [Solstice.Infrastructure.Core](#)








Assembly: Solstice.Infrastructure.dll

```
public static class CoreRepositoryExtension
```

Inheritance

[object](#)  ← CoreRepositoryExtension

Inherited Members

[object.Equals\(object\)](#)  , [object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  , [object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

Methods

ToCollectionAsync<T>(IQueryable<T>, CancellationTokens)

Converts provided IQueryable of entities into a list of entities in an asynchronous manner, respecting the provided cancellation token.

```
public static Task<ICollection<T>> ToCollectionAsync<T>(this IQueryable<T> query, CancellationTokens cancellationTokens)
```

Parameters

query [IQueryable](#)  <T>

The IQueryable of entities to be converted into a list

cancellationTokens [CancellationTokens](#) 

The cancellation token

Returns

[Task](#) <[ICollection](#) <T>>

A task that represents the asynchronous operation, with a return value of the list containing the entities

Type Parameters

T

The type of entities

Class CoreRepository<T, TContext>

Namespace: [Solstice.Infrastructure.Core](#)

Assembly: Solstice.Infrastructure.dll

An abstract class for the CoreRepository. Constructs a repository with a given context and Http context.

```
public class CoreRepository<T, TContext> : ICoreRepository<T> where T : class where  
TContext : DbContext
```

Type Parameters


T

A entity type

TContext

The DbContext type








Inheritance

[object](#)  ← CoreRepository<T, TContext>

Implements

[ICoreRepository](#)<T>

Inherited Members

[object.Equals\(object\)](#)  , [object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  ,
[object.ToString\(\)](#) 

Constructors

CoreRepository(TContext, IHttpContextAccessor)

Constructs a new instance of CoreRepository with the given context and Http context.

```
protected CoreRepository(TContext dbContext, IHttpContextAccessor httpContext)
```

Parameters

dbContext TContext

The DbContext to use.

httpContext [IHttpContextAccessor](#)

The HttpContext to use for cancellations.

Methods

AddAndSaveAsync(T)

```
public Task AddAndSaveAsync(T entity)
```

Parameters

entity T

Returns

[Task](#)

AddAndSaveAsync<TEntity>(TEntity)

```
public Task AddAndSaveAsync<TEntity>(TEntity entity) where TEntity : class
```

Parameters

entity TEntity

Returns

[Task](#)

Type Parameters

TEntity

AddAsync(T)

Adds the given entity to the database and saves the changes.

```
public Task AddAsync(T entity)
```

Parameters

entity T

The entity to add.

Returns

[Task](#)

AddAsync<TEntity>(TEntity)

```
public Task AddAsync<TEntity>(TEntity entity) where TEntity : class
```

Parameters

entity TEntity

Returns

[Task](#)

Type Parameters

TEntity

AddRangeAndSaveAsync(ICollection<T>)

```
public Task AddRangeAndSaveAsync(ICollection<T> entities)
```

Parameters

entities [ICollection](#)<T>

Returns

[Task](#)

AddRangeAndSaveAsync<TEntity> (ICollection<TEntity>)

```
public Task AddRangeAndSaveAsync<TEntity>(ICollection<TEntity> entities) where  
TEntity : class
```

Parameters

entities [ICollection](#)<TEntity>

Returns

[Task](#)

Type Parameters

TEntity

AddRangeAsync(ICollection<T>)

Adds a range of entities to the database and saves the changes.

```
public Task AddRangeAsync(ICollection<T> entities)
```

Parameters

entities [ICollection](#) <T>

The entities to add.

Returns

[Task](#)

AddRangeAsync<TEntity>(ICollection<TEntity>)

```
public Task AddRangeAsync<TEntity>(ICollection<TEntity> entities) where TEntity
: class
```

Parameters

entities [ICollection](#) <TEntity>

Returns

[Task](#)

Type Parameters

TEntity

AnyAsync(Expression<Func<T, bool>>)

Checks if any entities in the database match the given expression.

```
public Task<bool> AnyAsync(Expression<Func<T, bool>> where)
```

Parameters

where [Expression](#) <[Func](#) <T, [bool](#)>>

The expression to evaluate.

Returns

[Task](#) <[bool](#)>

A task that represents the asynchronous operation. The task result contains a boolean indicating whether any entities match the expression.

AnyAsync<TEntity>(Expression<Func<TEntity, bool>>)

```
public Task<bool> AnyAsync<TEntity>(Expression<Func<TEntity, bool>> where) where  
TEntity : class
```

Parameters

where [Expression](#) <[Func](#) <TEntity, [bool](#)>>

Returns

[Task](#) <[bool](#)>

Type Parameters

TEntity

AnyAsync<TEntity>(IQueryable<TEntity>)

```
public Task<bool> AnyAsync<TEntity>(IQueryable<TEntity> queryable) where TEntity  
: class
```

Parameters

queryable [IQueryable](#) <TEntity>

Returns

[Task](#) <[bool](#)>

Type Parameters

TEntity

BeginTransactionAsync()

Begins a new transaction in the database.

```
public Task<IDbContextTransaction> BeginTransactionAsync()
```

Returns

[Task](#) <[IDbContextTransaction](#)>

A task that represents the asynchronous operation. The task result contains the IDbContextTransaction that encapsulates all changes made to the DbContext within the transaction.

ChangeTracker()

```
public ChangeTracker ChangeTracker()
```

Returns

[ChangeTracker](#)

CountAsync()

Counts all entities in the database.

```
public Task<decimal> CountAsync()
```

Returns

[Task](#) <[decimal](#)>

A task that represents the asynchronous operation. The task result contains the count of all entities.

CountAsync(Expression<Func<T, bool>>?)

Counts all entities in the database that satisfy the given expression.

```
public Task<decimal> CountAsync(Expression<Func<T, bool>>? where)
```

Parameters

where [Expression](#) <[Func](#) <T, [bool](#)>>>

The expression to evaluate.

Returns

[Task](#) <[decimal](#)>

A task that represents the asynchronous operation. The task result contains the count of entities that satisfy the expression.

CountAsync<TEntity>()

Counts all entities in the database.

```
public Task<decimal> CountAsync<TEntity>() where TEntity : class
```

Returns

[Task](#) <[decimal](#)>

A task that represents the asynchronous operation. The task result contains the count of all entities.

Type Parameters

TEntity

CountAsync<TEntity>(Expression<Func<TEntity, bool>>)


```
public Task<decimal> CountAsync<TEntity>(Expression<Func<TEntity, bool>> where)  
where TEntity : class
```

Parameters

where [Expression](#) <[Func](#) <TEntity, [bool](#)>>

Returns

[Task](#) <[decimal](#)>

Type Parameters

TEntity

ExecuteQuery(string, ICollection<DbParameter>?)

```
public Task ExecuteQuery(string query, ICollection<DbParameter>? dbParameters)
```

Parameters

query [string](#)

dbParameters [ICollection](#) <[DbParameter](#)>

Returns

[Task](#)

FindAsync(int)

```
public Task<T> FindAsync(int id)
```

Parameters

id [int](#)

Returns

[Task](#) <T>

FindAsync<TEntity>(int)

```
public Task<TEntity> FindAsync<TEntity>(int id) where TEntity : class
```

Parameters

id [int](#)

Returns

[Task](#) <TEntity>

Type Parameters

TEntity

GetAllAsync()

Gets all entities from the database.

```
public Task<ICollection<T>> GetAllAsync()
```

Returns

[Task](#) <[ICollection](#) <T>>

A task that represents the asynchronous operation. The task result contains the list of all entities.

GetAllAsync(ICoreSpecifications<T>?)

Gets all entities from the database that satisfy The core specifications.

```
public Task<ICollection<T>> GetAllAsync(ICoreSpecifications<T>? coreSpecifications)
```

Parameters

coreSpecifications [ICoreSpecifications](#)<T>

The core specifications to evaluate.

Returns

[Task](#)<[ICollection](#)<T>>

A task that represents the asynchronous operation. The task result contains the list of entities that satisfy the specifications.

GetAllAsync(Expression<Func<T, bool>>)

Gets all entities from the database that satisfy the given expression.

```
public Task<ICollection<T>> GetAllAsync(Expression<Func<T, bool>> where)
```

Parameters

where [Expression](#)<[Func](#)<T, [bool](#)>>

The expression to evaluate.

Returns

[Task](#)<[ICollection](#)<T>>

A task that represents the asynchronous operation. The task result contains the list of entities that satisfy the expression.

GetAllAsync(string, ICoreSpecifications<T>?)

Gets all entities from the database based on the provided query and specifications.

```
public Task<ICollection<T>> GetAllAsync(string query, ICoreSpecifications<T>?  
coreSpecifications)
```

Parameters

query [string](#)

The SQL query to execute.

coreSpecifications [ICoreSpecifications](#)<T>

The core specifications to evaluate.

Returns

[Task](#) <[ICollection](#) <T>>

A task that represents the asynchronous operation. The task result contains the list of entities fetched based on the query and specifications.

GetAllAsync(string, ICollection<DbParameter>, ICoreSpecifications<T>?)

Gets all entities from the database based on the provided query, parameters and specifications.

```
public Task<ICollection<T>> GetAllAsync(string query, ICollection<DbParameter>  
parameters, ICoreSpecifications<T>? coreSpecifications)
```

Parameters

query [string](#)

The SQL query to execute.

parameters [ICollection](#) <[DbParameter](#)>

The SQL parameters needed for the query.

coreSpecifications [ICoreSpecifications](#)<T>

The core specifications to evaluate.

Returns

[Task](#) <[ICollection](#) <T>>

A task that represents the asynchronous operation. The task result contains the list of entities fetched based on the query, parameters, and specifications.

GetAllAsync<TEntity>()

```
public Task<ICollection<TEntity>> GetAllAsync<TEntity>() where TEntity : class
```

Returns

[Task](#) <[ICollection](#) <TEntity>>

Type Parameters

TEntity

GetAllAsync<TEntity>(ICoreSpecifications<TEntity>?)

```
public Task<ICollection<TEntity>> GetAllAsync<TEntity>(ICoreSpecifications<TEntity>? coreSpecifications) where TEntity : class
```

Parameters

coreSpecifications [ICoreSpecifications](#) <TEntity>

Returns

[Task](#) <[ICollection](#) <TEntity>>

Type Parameters

TEntity

GetAllAsync<TEntity>(Expression<Func<TEntity, bool>>)

```
public Task<ICollection<TEntity>> GetAllAsync<TEntity>(Expression<Func<TEntity, bool>> where) where TEntity : class
```

Parameters

where [Expression](#) <[Func](#) <TEntity, [bool](#)>>

Returns

[Task](#) <[ICollection](#) <TEntity>>

Type Parameters

[TEntity](#)

GetAllAsync<TEntity>(string)

```
public Task<ICollection<TEntity>> GetAllAsync<TEntity>(string query) where TEntity : class
```

Parameters

query [string](#)

Returns

[Task](#) <[ICollection](#) <TEntity>>

Type Parameters

[TEntity](#)

GetAllAsync<TEntity>(string, ICoreSpecifications<TEntity>?)

```
public Task<ICollection<TEntity>> GetAllAsync<TEntity>(string query,  
ICoreSpecifications<TEntity>? coreSpecifications) where TEntity : class
```

Parameters

query [string](#)

coreSpecifications [ICoreSpecifications](#)<TEntity>

Returns

[Task](#)<[ICollection](#)<TEntity>>

Type Parameters

TEntity

GetAllAsync<TEntity>(string, ICollection<DbParameter>)

```
public Task<ICollection<TEntity>> GetAllAsync<TEntity>(string query,  
ICollection<DbParameter> parameters) where TEntity : class
```

Parameters

query [string](#)

parameters [ICollection](#)<[DbParameter](#)>

Returns

[Task](#)<[ICollection](#)<TEntity>>

Type Parameters

TEntity

GetAllAsync<TEntity>(string, ICollection<DbParameter>, ICoreSpecifications<TEntity>?)

```
public Task<ICollection<TEntity>> GetAllAsync<TEntity>(string query,
ICollection<DbParameter> parameters, ICoreSpecifications<TEntity>?
coreSpecifications) where TEntity : class
```

Parameters

query [string](#)

parameters [ICollection](#) <[DbParameter](#)>

coreSpecifications [ICoreSpecifications](#) <TEntity>

Returns

[Task](#) <[ICollection](#) <TEntity>>

Type Parameters

TEntity

GetAllByQueryable<TEntity>(IQueryable<TEntity>)

Gets all entities from the database by executing the provided IQueryable query.

```
public Task<ICollection<TEntity>> GetAllByQueryable<TEntity>
(IQueryable<TEntity> query)
```

Parameters

query [IQueryable](#) <TEntity>

The IQueryable query to execute.

Returns

[Task](#) <[ICollection](#) <TEntity>>

A task that represents the asynchronous operation. The task result contains the list of entities fetched by executing the query.

Type Parameters

TEntity

GetAllQueryable()

Get all entities as IQueryable.

```
public IQueryable<T> GetAllQueryable()
```

Returns

[IQueryable](#) <T>

IQueryable of all entities in the database.

GetAllQueryable(ICoreSpecifications<T>?)

Gets all entities from the database satisfying the specifications provided.

```
public IQueryable<T> GetAllQueryable(ICoreSpecifications<T>? coreSpecifications)
```

Parameters

coreSpecifications [ICoreSpecifications](#) <T>

The core specifications to evaluate.

Returns

[IQueryable](#) <T>

IQueryable of entities satisfying the specifications.

GetAllQueryable(Expression<Func<T, bool>>)

Gets all entities from the database that matches the given expression as IQueryable.

```
public IQueryable<T> GetAllQueryable(Expression<Func<T, bool>> where)
```

Parameters

where [Expression](#) <[Func](#) <T, [bool](#)>>

The expression to evaluate.

Returns

[IQueryable](#) <T>

IQueryable of entities that match the expression.

GetAllQueryable(string)

Gets entities from the database based on the SQL query and specifications provided.

```
public IQueryable<T> GetAllQueryable(string query)
```

Parameters

query [string](#)

The SQL query to execute.

Returns

[IQueryable](#) <T>

IQueryable of entities fetched based on the query and specifications.

GetAllQueryable(string, ICoreSpecifications<T>?)

Gets entities from the database based on the SQL query and specifications provided.

```
public IQueryable<T> GetAllQueryable(string query, ICoreSpecifications<T>?
coreSpecifications)
```

Parameters

query [string](#)

The SQL query to execute.

coreSpecifications [ICoreSpecifications](#)<T>

The core specifications to evaluate.

Returns

[IQueryable](#)<T>

IQueryable of entities fetched based on the query and specifications.

GetAllQueryable(string, ICollection<DbParameter>)

Gets entities from the database based on the SQL query, parameters, and specifications provided.

```
public IQueryable<T> GetAllQueryable(string query, ICollection<DbParameter>
parameters)
```

Parameters

query [string](#)

The SQL query to execute.

parameters [ICollection](#)<[DbParameter](#)>

The SQL parameters needed for the query.

Returns

[IQueryable](#)<T>

IQueryable of entities fetched based on the query, parameters, and specifications.

GetAllQueryable(string, ICollection<DbParameter>, ICoreSpecifications<T>?)

Gets entities from the database based on the SQL query, parameters, and specifications provided.

```
public IQueryable<T> GetAllQueryable(string query, ICollection<DbParameter> parameters, ICoreSpecifications<T>? coreSpecifications)
```

Parameters

query [string](#)

The SQL query to execute.

parameters [ICollection](#) <[DbParameter](#)>

The SQL parameters needed for the query.

coreSpecifications [ICoreSpecifications](#) <T>

The core specifications to evaluate.

Returns

[IQueryable](#) <T>

IQueryable of entities fetched based on the query, parameters, and specifications.

GetAllQueryable<TEntity>()

Get all entities as IQueryable.

```
public IQueryable<TEntity> GetAllQueryable<TEntity>() where TEntity : class
```

Returns

[IQueryable](#) <TEntity>

IQueryable of all entities in the database.

Type Parameters

TEntity

GetAllQueryable<TEntity> (ICoreSpecifications<TEntity>?)

Gets all entities from the database satisfying the specifications provided.

```
public IQueryable<TEntity> GetAllQueryable<TEntity>(ICoreSpecifications<TEntity>?  
coreSpecifications) where TEntity : class
```

Parameters

coreSpecifications [ICoreSpecifications](#) <TEntity>

The core specifications to evaluate.

Returns

[IQueryable](#) <TEntity>

IQueryable of entities satisfying the specifications.

Type Parameters

TEntity

GetAllQueryable<TEntity>(Expression<Func<TEntity, bool>>)

Gets all entities from the database that matches the given expression as IQueryable.

```
public IQueryable<TEntity> GetAllQueryable<TEntity>(Expression<Func<TEntity, bool>>
```

```
where) where TEntity : class
```

Parameters

```
where Expression <Func <TEntity, bool>>
```

The expression to evaluate.

Returns

```
IQueryable <TEntity>
```

IQueryable of entities that match the expression.

Type Parameters

```
TEntity
```

GetAllQueryable<TEntity>(string)

Gets entities from the database based on the SQL query and specifications provided.

```
public IQueryable<TEntity> GetAllQueryable<TEntity>(string query) where TEntity  
: class
```

Parameters

```
query string
```

The SQL query to execute.

Returns

```
IQueryable <TEntity>
```

IQueryable of entities fetched based on the query and specifications.

Type Parameters

```
TEntity
```

GetAllQueryable<TEntity>(string, ICoreSpecifications<TEntity>?)

Gets entities from the database based on the SQL query and specifications provided.

```
public IQueryable<TEntity> GetAllQueryable<TEntity>(string query,  
ICoreSpecifications<TEntity>? coreSpecifications) where TEntity : class
```

Parameters

query [string](#)

The SQL query to execute.

coreSpecifications [ICoreSpecifications](#)<TEntity>

The core specifications to evaluate.

Returns

[IQueryable](#)<TEntity>

IQueryable of entities fetched based on the query and specifications.

Type Parameters

TEntity

GetAllQueryable<TEntity>(string, ICollection<DbParameter>)

Gets entities from the database based on the SQL query, parameters, and specifications provided.

```
public IQueryable<TEntity> GetAllQueryable<TEntity>(string query,  
ICollection<DbParameter> parameters) where TEntity : class
```

Parameters

query [string](#)

The SQL query to execute.

parameters [ICollection<DbParameter>](#)

The SQL parameters needed for the query.

Returns

[IQueryable<TEntity>](#)

IQueryable of entities fetched based on the query, parameters, and specifications.

Type Parameters

TEntity

**GetAllQueryable<TEntity>(string,
ICollection<DbParameter>,
ICoreSpecifications<TEntity>?)**

Gets entities from the database based on the SQL query, parameters, and specifications provided.

```
public IQueryable<TEntity> GetAllQueryable<TEntity>(string query,  
ICollection<DbParameter> parameters, ICoreSpecifications<TEntity>?  
coreSpecifications) where TEntity : class
```

Parameters

query [string](#)

The SQL query to execute.

parameters [ICollection<DbParameter>](#)

The SQL parameters needed for the query.

coreSpecifications [ICoreSpecifications<TEntity>](#)

The core specifications to evaluate.

Returns

[IQueryable](#) <TEntity>

IQueryable of entities fetched based on the query, parameters, and specifications.

Type Parameters

TEntity

GetBy(ICoreSpecifications<T>?)

Gets the first entity that satisfies the provided specifications.

```
public Task<T?> GetBy(ICoreSpecifications<T>? coreSpecifications)
```

Parameters

coreSpecifications [ICoreSpecifications](#) <T>

The specifications to evaluate.

Returns

[Task](#) <T>

A task that represents the asynchronous operation. The task result contains the first entity that satisfies the specifications or null if no such entity exists.

GetBy(Expression<Func<T, bool>>)

Gets the first entity that satisfies the provided expression.

```
public Task<T?> GetBy(Expression<Func<T, bool>> where)
```

Parameters

where [Expression](#) <[Func](#) <T, [bool](#)>>

The expression to evaluate.

Returns

[Task](#)  <T>

A task that represents the asynchronous operation. The task result contains the first entity that satisfies the expression or null if no such entity exists.

GetBy(string, ICollection<DbParameter>, ICoreSpecifications<T>?)

```
public Task<T?> GetBy(string query, ICollection<DbParameter> parameters,
ICoreSpecifications<T>? coreSpecifications)
```

Parameters

query [string](#) 

parameters [ICollection](#)  <[DbParameter](#)  >

coreSpecifications [ICoreSpecifications](#) <T>

Returns

[Task](#)  <T>

GetBy<TEntity>(ICoreSpecifications<TEntity>?)

```
public Task<TEntity?> GetBy<TEntity>(ICoreSpecifications<TEntity>?
coreSpecifications) where TEntity : class
```

Parameters

coreSpecifications [ICoreSpecifications](#) <TEntity>

Returns

[Task](#) <TEntity>

Type Parameters

TEntity

GetBy<TEntity>(Expression<Func<TEntity, bool>>)

```
public Task<TEntity?> GetBy<TEntity>(Expression<Func<TEntity, bool>> where) where  
TEntity : class
```

Parameters

where [Expression](#) <[Func](#) <TEntity, [bool](#)>>

Returns

[Task](#) <TEntity>

Type Parameters

TEntity

GetBy<TEntity>(string, ICollection<DbParameter>, ICoreSpecifications<TEntity>?)

```
public Task<TEntity?> GetBy<TEntity>(string query, ICollection<DbParameter>  
parameters, ICoreSpecifications<TEntity>? coreSpecifications) where TEntity : class
```

Parameters

query [string](#)

parameters [ICollection](#) <[DbParameter](#)>

coreSpecifications [ICoreSpecifications](#) <TEntity>

Returns

[Task](#) <TEntity>

Type Parameters

TEntity

GetPagedResult(Page)

Retrieves a paginated list of entities from the repository that conforms to the specified page.

```
public Task<Paged<T>> GetPagedResult(Page page)
```

Parameters

page [Page](#)

The page number and size of the entities to be retrieved from the repository.

Returns

[Task](#) <[Paged](#) <T>>

A task that represents the asynchronous operation. The task result is a collection of entities that meet The core specifications, paginated based on the given page object. If no entities meet the specifications, the task result is an empty collection.

GetPagedResult(Page, ICoreSpecifications<T>?)

```
public Task<Paged<T>> GetPagedResult(Page page, ICoreSpecifications<T>? coreSpecifications)
```

Parameters

page [Page](#)

coreSpecifications [ICoreSpecifications](#) <T>

Returns

[Task](#) <[Paged](#) <T>>

GetPagedResult(Page, string, ICollection<DbParameter>)

```
public Task<Paged<T>> GetPagedResult(Page page, string query,
    ICollection<DbParameter> parameters)
```

Parameters

page [Page](#)

query [string](#)

parameters [ICollection](#) <[DbParameter](#)>

Returns

[Task](#) <[Paged](#) <T>>

GetPagedResult(Page, string, ICollection<DbParameter>, ICoreSpecifications<T>?)

```
public Task<Paged<T>> GetPagedResult(Page page, string query,
    ICollection<DbParameter> parameters, ICoreSpecifications<T>? coreSpecifications)
```

Parameters

page [Page](#)

query [string](#)

parameters [ICollection](#) <[DbParameter](#)>

coreSpecifications [ICoreSpecifications](#) <T>

Returns

[Task](#) <[Paged](#)<T>>

GetPagedResult<TEntity>(Page)

```
public Task<Paged<TEntity>> GetPagedResult<TEntity>(Page page) where TEntity : class
```

Parameters

page [Page](#)

Returns

[Task](#) <[Paged](#)<TEntity>>

Type Parameters

TEntity

GetPagedResult<TEntity>(Page, ICoreSpecifications<TEntity>?)

```
public Task<Paged<TEntity>> GetPagedResult<TEntity>(Page page,
ICoreSpecifications<TEntity>? coreSpecifications) where TEntity : class
```

Parameters

page [Page](#)

coreSpecifications [ICoreSpecifications](#)<TEntity>

Returns

[Task](#) <[Paged](#)<TEntity>>

Type Parameters

TEntity

GetPagedResult<TEntity>(Page, string,
ICollection<DbParameter>)

```
public Task<Paged<TEntity>> GetPagedResult<TEntity>(Page page, string query,  
ICollection<DbParameter> parameters) where TEntity : class
```

Parameters

page [Page](#)

query [string](#)

parameters [ICollection](#) <[DbParameter](#)>

Returns

[Task](#) <[Paged](#) <TEntity>>

Type Parameters

TEntity

GetPagedResult<TEntity>(Page, string,
ICollection<DbParameter>,
ICoreSpecifications<TEntity>?)

```
public Task<Paged<TEntity>> GetPagedResult<TEntity>(Page page, string query,  
ICollection<DbParameter> parameters, ICoreSpecifications<TEntity>?  
coreSpecifications) where TEntity : class
```

Parameters

page [Page](#)

query [string](#)

parameters [ICollection](#) <[DbParameter](#)>

coreSpecifications [ICoreSpecifications](#)<TEntity>

Returns

[Task](#) <[Paged](#)<TEntity>>

Type Parameters

TEntity

PageAllAsync(Page, ICoreSpecifications<T>?)

Pages all entities based on the provided page information and specifications.

```
public Task<ICollection<T>> PageAllAsync(Page page, ICoreSpecifications<T>?
coreSpecifications)
```

Parameters

page [Page](#)

The page information.

coreSpecifications [ICoreSpecifications](#)<T>

The specifications to evaluate.

Returns

[Task](#) <[ICollection](#)<T>>

A task that represents the asynchronous operation. The task result contains a list of entities paged according to the provided information and specifications.

PageAllQueryable(Page, ICoreSpecifications<T>?)

Returns an IQueryable of all paged entities based on the provided page information and specifications.


```
public IQueryable<T> PageAllQueryable(Page page, ICoreSpecifications<T>?
coreSpecifications)
```

Parameters

page [Page](#)

The page information.

coreSpecifications [ICoreSpecifications](#)<T>

The specifications to evaluate.

Returns

[IQueryable](#)  <T>

IQueryable of entities paged according to the provided page information and specifications.

Remove(T)

Removes the given entity from the database and saves the changes.

```
public void Remove(T entity)
```

Parameters

entity T

The entity to remove.

RemoveAndSaveAsync(T)

```
public Task RemoveAndSaveAsync(T entity)
```

Parameters

entity T

Returns

[Task](#)

RemoveAndSaveAsync<TEntity>(TEntity)

```
public Task RemoveAndSaveAsync<TEntity>(TEntity entity) where TEntity : class
```

Parameters

entity TEntity

Returns

[Task](#)

Type Parameters

TEntity

RemoveRange(ICollection<T>)

Removes a range of entities from the database and saves the changes.

```
public void RemoveRange(ICollection<T> entities)
```

Parameters

entities [ICollection](#)<T>

The entities to removal.

RemoveRangeAndSaveAsync(ICollection<T>)

```
public Task RemoveRangeAndSaveAsync(ICollection<T> entities)
```

Parameters

entities [ICollection](#) <T>

Returns

[Task](#)

RemoveRangeAndSaveAsync<TEntity> (ICollection<TEntity>)

```
public Task RemoveRangeAndSaveAsync<TEntity>(ICollection<TEntity> entities) where  
TEntity : class
```

Parameters

entities [ICollection](#) <TEntity>

Returns

[Task](#)

Type Parameters

TEntity

RemoveRange<TEntity>(ICollection<TEntity>)

```
public void RemoveRange<TEntity>(ICollection<TEntity> entities) where TEntity  
: class
```

Parameters

entities [ICollection](#) <TEntity>

Type Parameters

TEntity

Remove<TEntity>(TEntity)

```
public void Remove<TEntity>(TEntity entity) where TEntity : class
```

Parameters

entity TEntity

Type Parameters

TEntity

SaveChangesAsync()

Saves changes in the DbContext to the database.

```
public Task SaveChangesAsync()
```

Returns

[Task](#)

A task represents the asynchronous operation for saving changes to the database.

Update(T)

Updates the provided entity in the DbContext and saves the changes to the database.

```
public void Update(T entity)
```

Parameters

entity T

The entity to update.

UpdateAndSaveAsync(T)

```
public Task UpdateAndSaveAsync(T entity)
```

Parameters

entity T

Returns

[Task](#)

UpdateAndSaveAsync<TEntity>(TEntity)

```
public Task UpdateAndSaveAsync<TEntity>(TEntity entity) where TEntity : class
```

Parameters

entity TEntity

Returns

[Task](#)

Type Parameters

TEntity

UpdateRange(ICollection<T>)

Updates the range of entities in the DbContext and saves the changes to the database.

```
public void UpdateRange(ICollection<T> entities)
```

Parameters

entities [ICollection](#)<T>

The entities to update.

UpdateRangeAndSaveAsync(ICollection<T>)

```
public Task UpdateRangeAndSaveAsync(ICollection<T> entities)
```

Parameters

entities [ICollection](#)<T>

Returns

[Task](#)

UpdateRangeAndSaveAsync<TEntity> (ICollection<TEntity>)

```
public Task UpdateRangeAndSaveAsync<TEntity>(ICollection<TEntity> entities) where  
TEntity : class
```

Parameters

entities [ICollection](#)<TEntity>

Returns

[Task](#)

Type Parameters

TEntity

UpdateRange<TEntity>(ICollection<TEntity>)

```
public void UpdateRange<TEntity>(ICollection<TEntity> entities) where TEntity  
: class
```

Parameters

entities [ICollection](#) <TEntity>

Type Parameters

TEntity

Update<TEntity>(TEntity)

```
public void Update<TEntity>(TEntity entity) where TEntity : class
```

Parameters

entity TEntity

Type Parameters

TEntity

Interface ICoreRepository<T>

Namespace: [Solstice.Infrastructure.Core](#)

Assembly: Solstice.Infrastructure.dll

The ICoreRepository interface provides methods for performing CRUD operations, querying, counting, paging, transactions, and other tasks on an underlying data repository in an asynchronous manner. The repository holds objects of a type. The methods in this interface produce or consume tasks that represent ongoing work and are used for structuring asynchronous code.

```
public interface ICoreRepository<T> where T : class
```

Type Parameters

T

A type parameter. This type parameter is used to define the type of objects managed by the repository.

Remarks

- The methods grouped in the 'Create, Update, Delete' region are for managing entities within the repository.
- The 'Actions' region contains methods for counting entities in the repository or check its status (AnyAsyncBy).
- The 'Get By' region provides methods to retrieve an entity by a specific criteria.
- The 'Get all' region offers APIs to get collections of entities based on different criteria/patterns.
- In 'Queryable' area, you find methods for searching within the repository, but the operations are not executed right away and more criteria can be added later in the operation chain.
- 'Pageable' region offers the option to receive the data in chunks, good for large data sets to retrieve and process in smaller parts.
- 'Transactions' region provides a mechanism for batch of operations to be executed together and in an atomic manner.
- 'Others' region provides methods that handle various other tasks not covered by the previously described groupings.

Methods

AddAndSaveAsync(T)

Task `AddAndSaveAsync`(T entity)

Parameters

`entity` T

Returns

[Task](#)

AddAndSaveAsync<TEntity>(TEntity)

Task `AddAndSaveAsync`<TEntity>(TEntity entity) `where` TEntity : `class`

Parameters

`entity` TEntity

Returns

[Task](#)

Type Parameters

`TEntity`

AddAsync(T)

Add entity to repository

Task `AddAsync`(T entity)

Parameters

entity T

The entity object

Returns

[Task](#)

AddAsync<TEntity>(TEntity)

Task **AddAsync<TEntity>**(TEntity entity) **where** TEntity : **class**

Parameters

entity TEntity

Returns

[Task](#)

Type Parameters

TEntity

AddRangeAndSaveAsync(ICollection<T>)

Task **AddRangeAndSaveAsync**(ICollection<T> entities)

Parameters

entities [ICollection](#)<T>

Returns

[Task](#)

AddRangeAndSaveAsync<TEntity> (ICollection<TEntity>)

```
Task AddRangeAndSaveAsync<TEntity>(ICollection<TEntity> entities) where TEntity : class
```

Parameters

entities [ICollection](#)<TEntity>

Returns

[Task](#)

Type Parameters

TEntity

AddRangeAsync(ICollection<T>)

Add range of entities to repository

```
Task AddRangeAsync(ICollection<T> entities)
```

Parameters

entities [ICollection](#)<T>

The entities list

Returns

[Task](#)

AddRangeAsync<TEntity>(ICollection<TEntity>)

```
Task AddRangeAsync<TEntity>(ICollection<TEntity> entities) where TEntity : class
```

Parameters

entities [ICollection](#) <TEntity>

Returns

[Task](#)

Type Parameters

TEntity

AnyAsync(Expression<Func<T, bool>>)

Checks if any entity in the repository matches the provided expression

```
Task<bool> AnyAsync(Expression<Func<T, bool>> where)
```

Parameters

where [Expression](#) <[Func](#) <T, [bool](#)>>

The expression that describes the condition to match

Returns

[Task](#) <[bool](#)>

True if any entity matches the condition, False otherwise

AnyAsync<TEntity>(Expression<Func<TEntity, bool>>)

```
Task<bool> AnyAsync<TEntity>(Expression<Func<TEntity, bool>> where) where TEntity  
: class
```

Parameters

where [Expression](#) <[Func](#) <TEntity, [bool](#)>>

Returns

[Task](#) <[bool](#)>

Type Parameters

TEntity

AnyAsync<TEntity>(IQueryable<TEntity>)

```
Task<bool> AnyAsync<TEntity>(IQueryable<TEntity> queryable) where TEntity : class
```

Parameters

queryable [IQueryable](#) <TEntity>

Returns

[Task](#) <[bool](#)>

Type Parameters

TEntity

BeginTransactionAsync()

Begins a new transaction asynchronously.

```
Task<IDbContextTransaction> BeginTransactionAsync()
```

Returns

[Task](#) <[IDbContextTransaction](#)>

A task that represents the asynchronous operation. The task result is an IDbContextTransaction object which encapsulates all information about the transaction.

ChangeTracker()

ChangeTracker `ChangeTracker()`

Returns

[ChangeTracker](#)

CountAsync()

Counts all entities in repository

Task<decimal> `CountAsync()`

Returns

[Task](#) <[decimal](#)>

Total count of all entities

CountAsync(Expression<Func<T, bool>>)

Counts the total entities that match the provided expression

Task<decimal> `CountAsync(Expression<Func<T, bool>> where)`

Parameters

`where` [Expression](#) <[Func](#) <T, [bool](#)>>

The expression that describes the condition to match

Returns

[Task](#) <[decimal](#)>

Total matched entities count

CountAsync<TEntity>()

```
Task<decimal> CountAsync<TEntity>() where TEntity : class
```

Returns

[Task](#) <[decimal](#)>

Type Parameters

TEntity

CountAsync<TEntity>(Expression<Func<TEntity, bool>>)

```
Task<decimal> CountAsync<TEntity>(Expression<Func<TEntity, bool>> where) where  
TEntity : class
```

Parameters

where [Expression](#) <[Func](#) <TEntity, [bool](#)>>

Returns

[Task](#) <[decimal](#)>

Type Parameters

TEntity

ExecuteQuery(string, ICollection<DbParameter>?)

```
Task ExecuteQuery(string query, ICollection<DbParameter>? dbParameters)
```

Parameters

query [string](#)

dbParameters [ICollection](#) <[DbParameter](#)>

Returns

[Task](#)

FindAsync(int)

```
Task<T> FindAsync(int id)
```

Parameters

id [int](#)

Returns

[Task](#) <T>

FindAsync<TEntity>(int)

```
Task<TEntity> FindAsync<TEntity>(int id) where TEntity : class
```

Parameters

id [int](#)

Returns

[Task](#) <TEntity>

Type Parameters

TEntity

GetAllAsync()

```
Task<ICollection<T>> GetAllAsync()
```

Returns

[Task](#) <[ICollection](#) <T>>

GetAllAsync(ICoreSpecifications<T>?)

Retrieves a collection of all entities from the repository asynchronously.

```
Task<ICollection<T>> GetAllAsync(ICoreSpecifications<T>? coreSpecifications)
```

Parameters

coreSpecifications [ICoreSpecifications](#) <T>

The specifications that entities must meet to be retrieved from the repository.

Returns

[Task](#) <[ICollection](#) <T>>

A task that represents the asynchronous operation. The task result contains a collection of entities satisfying The core specifications or an empty collection if no matches.

GetAllAsync(Expression<Func<T, bool>>)

Retrieves a collection of entities from the repository that satisfy the specified condition asynchronously.

```
Task<ICollection<T>> GetAllAsync(Expression<Func<T, bool>> where)
```

Parameters

where [Expression](#) <[Func](#) <T, [bool](#)>>

An expression representing a condition to be matched by entities in the repository.

Returns

[Task](#) <[ICollection](#) <T>>

A task that represents the asynchronous operation. The task result contains a collection of entities satisfying the condition or an empty collection if there are no matches.

GetAllAsync(string, ICoreSpecifications<T>?)

Retrieves a collection of all entities from the repository asynchronously based on a provided SQL-like query and specifications.

```
Task<ICollection<T>> GetAllAsync(string query, ICoreSpecifications<T>?
coreSpecifications)
```

Parameters

query [string](#)

A SQL-like query that retrieves entities from the repository.

coreSpecifications [ICoreSpecifications](#) <T>

The specifications that entities must meet to be retrieved from the repository.

Returns

[Task](#) <[ICollection](#) <T>>

A task that represents the asynchronous operation. The task results contains a collection of entities satisfying the query and The core specifications or an empty collection if no matches.

GetAllAsync(string, ICollection<DbParameter>, ICoreSpecifications<T>?)

Retrieves a collection of all entities from the repository asynchronously based on a provided SQL-like query, parameters and specifications.

```
Task<ICollection<T>> GetAllAsync(string query, ICollection<DbParameter> parameters,
ICoreSpecifications<T>? coreSpecifications)
```

Parameters

query [string](#)

A SQL-like query that retrieves entities from the repository.

parameters [ICollection](#) <[DbParameter](#)>

A collection of database parameters used in the query

coreSpecifications [ICoreSpecifications](#) <T>

The specifications that entities must meet to be retrieved from the repository.

Returns

[Task](#) <[ICollection](#) <T>>

A task that represents the asynchronous operation. The task results contains a collection of entities satisfying the query, parameters and The core specifications or an empty collection if no matches.

GetAllAsync<TEntity>()

```
Task<ICollection<TEntity>> GetAllAsync<TEntity>() where TEntity : class
```

Returns

[Task](#) <[ICollection](#) <TEntity>>

Type Parameters

TEntity

GetAllAsync<TEntity>(ICoreSpecifications<TEntity>)

```
Task<ICollection<TEntity>> GetAllAsync<TEntity>(ICoreSpecifications<TEntity>  
coreSpecifications) where TEntity : class
```

Parameters

coreSpecifications [ICoreSpecifications](#)<TEntity>

Returns

[Task](#)<[ICollection](#)<TEntity>>

Type Parameters

TEntity

GetAllAsync<TEntity>(Expression<Func<TEntity, bool>>)

```
Task<ICollection<TEntity>> GetAllAsync<TEntity>(Expression<Func<TEntity, bool>>  
where) where TEntity : class
```

Parameters

where [Expression](#)<[Func](#)<TEntity, [bool](#)>>

Returns

[Task](#)<[ICollection](#)<TEntity>>

Type Parameters

TEntity

GetAllAsync<TEntity>(string)

```
Task<ICollection<TEntity>> GetAllAsync<TEntity>(string query) where TEntity : class
```

Parameters

query [string](#)

Returns

[Task](#) <[ICollection](#) <TEntity>>

Type Parameters

TEntity

GetAllAsync<TEntity>(string, ICollection<TEntity>)

```
Task<ICollection<TEntity>> GetAllAsync<TEntity>(string query,
        ICollection<TEntity> coreSpecifications) where TEntity : class
```

Parameters

query [string](#)

coreSpecifications [ICollection](#) <TEntity>

Returns

[Task](#) <[ICollection](#) <TEntity>>

Type Parameters

TEntity

GetAllAsync<TEntity>(string, ICollection<DbParameter>)

```
Task<ICollection<TEntity>> GetAllAsync<TEntity>(string query,
        ICollection<DbParameter> parameters) where TEntity : class
```

Parameters

query [string](#)

parameters [ICollection](#) <[DbParameter](#)>

Returns

[Task](#) <[ICollection](#) <TEntity>>

Type Parameters

TEntity

GetAllAsync<TEntity>(string,
ICollection<DbParameter>,
ICoreSpecifications<TEntity>)

```
Task<ICollection<TEntity>> GetAllAsync<TEntity>(string query,  
ICollection<DbParameter> parameters, ICoreSpecifications<TEntity>  
coreSpecifications) where TEntity : class
```

Parameters

query [string](#)

parameters [ICollection](#) <[DbParameter](#)>

coreSpecifications [ICoreSpecifications](#) <TEntity>

Returns

[Task](#) <[ICollection](#) <TEntity>>

Type Parameters

TEntity

GetAllByQueryable<TEntity>(IQueryable<TEntity>)

Retrieves a collection of entities from a specified IQueryable.

```
Task<ICollection<TEntity>> GetAllByQueryable<TEntity>(IQueryable<TEntity> query)
```

Parameters

query [IQueryable](#) <TEntity>

An IQueryable that retrieves entities from the repository.

Returns

[Task](#) <[ICollection](#) <TEntity>>

A task that represents the asynchronous operation. The task result contains a collection of entities that satisfy the query or an empty collection if no matches.

Type Parameters

TEntity

GetAllQueryable()

Retrieves all entities from the repository asynchronously.

```
IQueryable<T> GetAllQueryable()
```

Returns

[IQueryable](#) <T>

A queryable collection of all entities in the repository.

GetAllQueryable(ICoreSpecifications<T>?)

Retrieves entities that match the specified specifications from the repository asynchronously.

```
IQueryable<T> GetAllQueryable(ICoreSpecifications<T>? coreSpecifications)
```

Parameters

`coreSpecifications` [ICoreSpecifications](#)<T>

The specifications that entities must meet to be retrieved from the repository.

Returns

[IQueryable](#)<T>

A queryable collection of entities that satisfy The core specifications.

GetAllQueryable(Expression<Func<T, bool>>)

Retrieves entities that match the specified condition from the repository asynchronously.

```
IQueryable<T> GetAllQueryable(Expression<Func<T, bool>> where)
```

Parameters

`where` [Expression](#)<[Func](#)<T, [bool](#)>>

An expression representing a condition to be matched by entities in the repository.

Returns

[IQueryable](#)<T>

A queryable collection of entities matching the condition.

GetAllQueryable(string)

Gets entities from the database based on the SQL query and specifications provided.

```
IQueryable<T> GetAllQueryable(string query)
```


Parameters

query [string](#)

The SQL query to execute.

Returns

[IQueryable](#) <T>

IQueryable of entities fetched based on the query and specifications.

GetAllQueryable(string, ICoreSpecifications<T>?)

Retrieves entities from the repository based on a provided SQL-like query and specifications asynchronously.

```
IQueryable<T> GetAllQueryable(string query, ICoreSpecifications<T>?
coreSpecifications)
```

Parameters

query [string](#)

A SQL-like query that retrieves entities from the repository.

coreSpecifications [ICoreSpecifications](#) <T>

The specifications that entities must meet to be retrieved from the repository.

Returns

[IQueryable](#) <T>

A queryable collection of entities satisfying the query and The core specifications.

GetAllQueryable(string, ICollection<DbParameter>)

Gets entities from the database based on the SQL query, parameters, and specifications provided.

`IQueryable<T> GetAllQueryable(string query, ICollection<DbParameter> parameters)`

Parameters

`query` [string](#)

The SQL query to execute.

`parameters` [ICollection](#) <[DbParameter](#)>

The SQL parameters needed for the query.

Returns

[IQueryable](#) <T>

IQueryable of entities fetched based on the query, parameters, and specifications.

GetAllQueryable(string, ICollection<DbParameter>, ICoreSpecifications<T>?)

Retrieves entities from the repository based on a provided SQL-like query, parameters and specifications asynchronously.

`IQueryable<T> GetAllQueryable(string query, ICollection<DbParameter> parameters, ICoreSpecifications<T>? coreSpecifications)`

Parameters

`query` [string](#)

A SQL-like query that retrieves entities from the repository.

`parameters` [ICollection](#) <[DbParameter](#)>

A collection of database parameters used in the query

`coreSpecifications` [ICoreSpecifications](#) <T>

The specifications that entities must meet to be retrieved from the repository.

Returns

[IQueryable](#) <T>

A queryable collection of entities satisfying the query, parameters and The core specifications.

GetAllQueryable<TEntity>()

Retrieves all entities from the repository asynchronously.

```
IQueryable<TEntity> GetAllQueryable<TEntity>() where TEntity : class
```

Returns

[IQueryable](#) <TEntity>

A queryable collection of all entities in the repository.

Type Parameters

TEntity

GetAllQueryable<TEntity> (ICoreSpecifications<TEntity>?)

Retrieves entities that match the specified specifications from the repository asynchronously.

```
IQueryable<TEntity> GetAllQueryable<TEntity>(ICoreSpecifications<TEntity>?  
coreSpecifications) where TEntity : class
```

Parameters

coreSpecifications [ICoreSpecifications](#) <TEntity>

The specifications that entities must meet to be retrieved from the repository.

Returns

[IQueryable](#) <TEntity>

A queryable collection of entities that satisfy The core specifications.

Type Parameters

TEntity

GetAllQueryable<TEntity>(Expression<Func<TEntity, bool>>)

Retrieves entities that match the specified condition from the repository asynchronously.

```
IQueryable<TEntity> GetAllQueryable<TEntity>(Expression<Func<TEntity, bool>> where)  
where TEntity : class
```

Parameters

where [Expression](#) <[Func](#) <TEntity, [bool](#)>>

An expression representing a condition to be matched by entities in the repository.

Returns

[IQueryable](#) <TEntity>

A queryable collection of entities matching the condition.

Type Parameters

TEntity

GetAllQueryable<TEntity>(string)

Gets entities from the database based on the SQL query and specifications provided.

```
IQueryable<TEntity> GetAllQueryable<TEntity>(string query) where TEntity : class
```

Parameters

query [string](#)

The SQL query to execute.

Returns

[IQueryable](#) <TEntity>

IQueryable of entities fetched based on the query and specifications.

Type Parameters

TEntity

GetAllQueryable<TEntity>(string, ICoreSpecifications<TEntity>?)

Retrieves entities from the repository based on a provided SQL-like query and specifications asynchronously.

```
IQueryable<TEntity> GetAllQueryable<TEntity>(string query,  
ICoreSpecifications<TEntity>? coreSpecifications) where TEntity : class
```

Parameters

query [string](#)

A SQL-like query that retrieves entities from the repository.

coreSpecifications [ICoreSpecifications](#) <TEntity>

The specifications that entities must meet to be retrieved from the repository.

Returns

[IQueryable](#) <TEntity>

A queryable collection of entities satisfying the query and The core specifications.

Type Parameters

TEntity

GetAllQueryable(string, ICollection<DbParameter>)

Gets entities from the database based on the SQL query, parameters, and specifications provided.

```
IQueryable GetAllQueryable(string query, ICollection<DbParameter> parameters) where TEntity : class
```

Parameters

query [string](#)

The SQL query to execute.

parameters [ICollection](#) <[DbParameter](#)>

The SQL parameters needed for the query.

Returns

[IQueryable](#) <TEntity>

IQueryable of entities fetched based on the query, parameters, and specifications.

Type Parameters

TEntity

GetAllQueryable(string, ICollection<DbParameter>, ICoreSpecifications<TEntity>?)

Retrieves entities from the repository based on a provided SQL-like query, parameters and specifications asynchronously.

```
IQueryable<TEntity> GetAllQueryable<TEntity>(string query, ICollection<DbParameter> parameters, ICoreSpecifications<TEntity>? coreSpecifications) where TEntity : class
```

Parameters

query [string](#)

A SQL-like query that retrieves entities from the repository.

parameters [ICollection](#) <[DbParameter](#)>

A collection of database parameters used in the query

coreSpecifications [ICoreSpecifications](#) <TEntity>

The specifications that entities must meet to be retrieved from the repository.

Returns

[IQueryable](#) <TEntity>

A queryable collection of entities satisfying the query, parameters and The core specifications.

Type Parameters

TEntity

GetBy(ICoreSpecifications<T>)

Retrieves an entity from the repository that meets the criteria specified by the given specification.

```
Task<T?> GetBy(ICoreSpecifications<T> coreSpecifications)
```

Parameters

coreSpecifications [ICoreSpecifications](#) <T>

The specifications that an entity must meet to be retrieved from the repository.

Returns

[Task](#) <T>

A task that represents the asynchronous operation. The task result is the first entity that satisfies the specified specifications. If no entity satisfies the specifications, the task result is null.

GetBy(Expression<Func<T, bool>>)

Retrieves an entity that matches the specified condition from the repository.

```
Task<T?> GetBy(Expression<Func<T, bool>> where)
```

Parameters

where [Expression](#) <[Func](#) <T, [bool](#)>>

An expression representing a condition to be matched by entities in the repository.

Returns

[Task](#) <T>

A task that represents the asynchronous operation. The task result contains the first matching entity or null if no entity matches the condition.

GetBy(string, ICollection<DbParameter>, ICoreSpecifications<T>?)

```
Task<T?> GetBy(string query, ICollection<DbParameter> parameters,  
ICoreSpecifications<T>? coreSpecifications)
```

Parameters

query [string](#)

parameters [ICollection](#) <[DbParameter](#)>

`coreSpecifications` [ICoreSpecifications](#)<T>

Returns

[Task](#)<T>

GetBy<TEntity>(ICoreSpecifications<TEntity>)

```
Task<TEntity?> GetBy<TEntity>(ICoreSpecifications<TEntity> coreSpecifications) where  
TEntity : class
```

Parameters

`coreSpecifications` [ICoreSpecifications](#)<TEntity>

Returns

[Task](#)<TEntity>

Type Parameters

`TEntity`

GetBy<TEntity>(Expression<Func<TEntity, bool>>)

```
Task<TEntity?> GetBy<TEntity>(Expression<Func<TEntity, bool>> where) where TEntity  
: class
```

Parameters

`where` [Expression](#)<[Func](#)<TEntity, [bool](#)>>

Returns

[Task](#)<TEntity>

Type Parameters

TEntity

GetBy<TEntity>(string, ICollection<DbParameter>, ICoreSpecifications<TEntity>)

```
Task<TEntity?> GetBy<TEntity>(string query, ICollection<DbParameter> parameters,
ICoreSpecifications<TEntity> coreSpecifications) where TEntity : class
```

Parameters

query [string](#)

parameters [ICollection](#) <[DbParameter](#)>

coreSpecifications [ICoreSpecifications](#) <TEntity>

Returns

[Task](#) <TEntity>

Type Parameters

TEntity

GetPagedResult(Page)

Retrieves a paginated list of entities from the repository that conforms to the specified page.

```
Task<Paged<T>> GetPagedResult(Page page)
```

Parameters

page [Page](#)

The page number and size of the entities to be retrieved from the repository.

Returns

[Task](#) <[Paged](#)<T>>

A task that represents the asynchronous operation. The task result is a collection of entities that meet The core specifications, paginated based on the given page object. If no entities meet the specifications, the task result is an empty collection.

GetPagedResult(Page, ICoreSpecifications<T>)

```
Task<Paged<T>> GetPagedResult(Page page, ICoreSpecifications<T> coreSpecifications)
```

Parameters

page [Page](#)

coreSpecifications [ICoreSpecifications](#)<T>

Returns

[Task](#) <[Paged](#)<T>>

GetPagedResult(Page, string, ICollection<DbParameter>)

```
Task<Paged<T>> GetPagedResult(Page page, string query, ICollection<DbParameter> parameters)
```

Parameters

page [Page](#)

query [string](#)

parameters [ICollection](#) <[DbParameter](#)>

Returns

[Task](#) <[Paged](#)<T>>

GetPagedResult(Page, string, ICollection<DbParameter>, ICoreSpecifications<T>)

```
Task<Paged<T>> GetPagedResult(Page page, string query, ICollection<DbParameter> parameters, ICoreSpecifications<T> coreSpecifications)
```

Parameters

page [Page](#)

query [string](#)

parameters [ICollection](#) <[DbParameter](#)>

coreSpecifications [ICoreSpecifications](#) <T>

Returns

[Task](#) <[Paged](#) <T>>

GetPagedResult<TEntity>(Page)

```
Task<Paged<TEntity>> GetPagedResult<TEntity>(Page page) where TEntity : class
```

Parameters

page [Page](#)

Returns

[Task](#) <[Paged](#) <TEntity>>

Type Parameters

TEntity

GetPagedResult<TEntity>(Page, ICoreSpecifications<TEntity>)

```
Task<Paged<TEntity>> GetPagedResult<TEntity>(Page page, ICoreSpecifications<TEntity>
coreSpecifications) where TEntity : class
```

Parameters

page [Page](#)

coreSpecifications [ICoreSpecifications](#)<TEntity>

Returns

[Task](#) [<Paged](#)<TEntity>>

Type Parameters

TEntity

GetPagedResult<TEntity>(Page, string, ICollection<DbParameter>)

```
Task<Paged<TEntity>> GetPagedResult<TEntity>(Page page, string query,
ICollection<DbParameter> parameters) where TEntity : class
```

Parameters

page [Page](#)

query [string](#)

parameters [ICollection](#) [<DbParameter](#)>

Returns

[Task](#) [<Paged](#)<TEntity>>

Type Parameters

TEntity

GetPagedResult<TEntity>(Page, string,
ICollection<DbParameter>,
ICoreSpecifications<TEntity>)

```
Task<Paged<TEntity>> GetPagedResult<TEntity>(Page page, string query,  
ICollection<DbParameter> parameters, ICoreSpecifications<TEntity>  
coreSpecifications) where TEntity : class
```

Parameters

page [Page](#)

query [string](#)

parameters [ICollection](#)<[DbParameter](#)>

coreSpecifications [ICoreSpecifications](#)<TEntity>

Returns

[Task](#)<[Paged](#)<TEntity>>

Type Parameters

TEntity

PageAllAsync(Page, ICoreSpecifications<T>?)

Retrieves a collection of entities from the repository that satisfy the specified condition asynchronously, and do paging on them.

```
Task<ICollection<T>> PageAllAsync(Page page, ICoreSpecifications<T>?  
coreSpecifications)
```

Parameters

page [Page](#)

The page number and size of the entities to be retrieved from the repository.

coreSpecifications [ICoreSpecifications](#)<T>

The specifications that entities must meet to be retrieved from the repository.

Returns

[Task](#) <[ICollection](#)<T>>

A task that represents the asynchronous operation. The task result contains a collection of entities satisfying the condition. or an empty collection if no matches, paged by the given information in Page object.

PageAllQueryable(Page, ICoreSpecifications<T>?)

Retrieves a queryable collection of entities from the repository that satisfy the specified condition asynchronously, and do paging on them.

```
IQueryable<T> PageAllQueryable(Page page, ICoreSpecifications<T>?  
coreSpecifications)
```

Parameters

page [Page](#)

The page number and size of the entities to be retrieved from the repository.

coreSpecifications [ICoreSpecifications](#)<T>

The specifications that entities must meet to be retrieved from the repository.

Returns

[IQueryable](#)<T>

A queryable collection of all entities in the repository that fulfill the condition, paged by the given information in Page object.

Remove(T)

Remove entity from repository

```
void Remove(T entity)
```

Parameters

entity T

The entity object

RemoveAndSaveAsync(T)

```
Task RemoveAndSaveAsync(T entity)
```

Parameters

entity T

Returns

[Task](#)

RemoveAndSaveAsync<TEntity>(TEntity)

```
Task RemoveAndSaveAsync<TEntity>(TEntity entity) where TEntity : class
```

Parameters

entity TEntity

Returns

[Task](#)

Type Parameters

TEntity

RemoveRange(ICollection<T>)

Remove range of entities from repository

```
void RemoveRange(ICollection<T> entities)
```

Parameters

entities [ICollection](#)<T>

The entities list

RemoveRangeAndSaveAsync(ICollection<T>)

```
Task RemoveRangeAndSaveAsync(ICollection<T> entities)
```

Parameters

entities [ICollection](#)<T>

Returns

[Task](#)

RemoveRangeAndSaveAsync(ICollection<TEntity>)

```
Task RemoveRangeAndSaveAsync<TEntity>(ICollection<TEntity> entities) where TEntity  
: class
```

Parameters

entities [ICollection](#)<TEntity>

Returns

[Task](#)

Type Parameters

TEntity

RemoveRange<TEntity>(ICollection<TEntity>)

```
void RemoveRange<TEntity>(ICollection<TEntity> entities) where TEntity : class
```

Parameters

entities [ICollection](#) <TEntity>

Type Parameters

TEntity

Remove<TEntity>(TEntity)

```
void Remove<TEntity>(TEntity entity) where TEntity : class
```

Parameters

entity TEntity

Type Parameters

TEntity

SaveChangesAsync()

Save changes in repository

Task `SaveChangesAsync()`

Returns

[Task](#)

Update(T)

Update entity in repository

```
void Update(T entity)
```

Parameters

`entity` T

The entity object

UpdateAndSaveAsync(T)

Task `UpdateAndSaveAsync(T entity)`

Parameters

`entity` T

Returns

[Task](#)

UpdateAndSaveAsync<TEntity>(TEntity)

Task `UpdateAndSaveAsync<TEntity>(TEntity entity)` where TEntity : class

Parameters

entity TEntity

Returns

[Task](#)

Type Parameters

TEntity

UpdateRange(ICollection<T>)

Update range of entities in repository

```
void UpdateRange(ICollection<T> entities)
```

Parameters

entities [ICollection](#)<T>

The entities list

UpdateRangeAndSaveAsync(ICollection<T>)

```
Task UpdateRangeAndSaveAsync(ICollection<T> entities)
```

Parameters

entities [ICollection](#)<T>

Returns

[Task](#)

UpdateRangeAndSaveAsync<TEntity> (ICollection<TEntity>)

```
Task UpdateRangeAndSaveAsync<TEntity>(ICollection<TEntity> entities) where TEntity : class
```

Parameters

entities [ICollection](#)<TEntity>

Returns

[Task](#)

Type Parameters

TEntity

UpdateRange<TEntity>(ICollection<TEntity>)

```
void UpdateRange<TEntity>(ICollection<TEntity> entities) where TEntity : class
```

Parameters

entities [ICollection](#)<TEntity>

Type Parameters

TEntity

Update<TEntity>(TEntity)

```
void Update<TEntity>(TEntity entity) where TEntity : class
```

Parameters

entity TEntity

Type Parameters

Namespace Solstice.Infrastructure. Extensions

Classes

[CoreQueryableExtension](#)

Represents a utility class that provides extension methods to IQueryable interface objects.

Class CoreQueryableExtension

Namespace: [Solstice.Infrastructure.Extensions](#)

Assembly: Solstice.Infrastructure.dll








Represents a utility class that provides extension methods to IQueryable interface objects.

```
public static class CoreQueryableExtension
```

Inheritance

[object](#)  ← CoreQueryableExtension

Inherited Members

[object.Equals\(object\)](#)  , [object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  ,
[object.ToString\(\)](#) 

Remarks

CoreQueryableExtension offers pagination for queries.

Methods

Pageable<TSource>(IQueryable<TSource>, Page)

Returns a paged source from the provided IQueryable object using the given CorePage object parameters.

```
public static IQueryable<TSource> Pageable<TSource>(this IQueryable<TSource>  
queryable, Page page)
```

Parameters

queryable [IQueryable](#)  <TSource>

The System.Linq.IQueryable{T} to create a paged source from.

page [Page](#)

CorePage object that determines the number of elements to bypass and the size of the page.

Returns

[IQueryable](#) <TSource>

An System.Linq.IQueryable{T} that contains elements from the input sequence that occur after the specified index and has the specified page size.

Type Parameters

TSource

The type of the elements of source.

Namespace Solstice.Infrastructure. Injections

Classes

[RepositoryInjections](#)

The RepositoryInjections static class contains extension methods for ModelBuilder and IServiceCollection instances. These extension methods add convenient functionality for database and service-related configurations.

Class RepositoryInjections

Namespace: [Solstice.Infrastructure.Injections](#)

Assembly: Solstice.Infrastructure.dll








The RepositoryInjections static class contains extension methods for modelBuilder and IServiceCollection instances. These extension methods add convenient functionality for database and service-related configurations.

```
public static class RepositoryInjections
```

Inheritance

[object](#)  ← RepositoryInjections

Inherited Members

[object.Equals\(object\)](#)  , [object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  , [object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

Methods

AddQueryDtoToDbContext(ModelBuilder)

This extension method for the modelBuilder class scans all assemblies in the current domain for types marked with the QueryAttribute. Each located type is then added to the modelBuilder as an entity, with no key, and set to be excluded from migrations.

```
public static void AddQueryDtoToDbContext(this modelBuilder modelBuilder)
```

Parameters

modelBuilder [ModelBuilder](#) 

The modelBuilder instance to which the types are added.

Exceptions

[CoreException](#)

Thrown when no types with the QueryAttribute are found.

AddRepositories<TDbContext>(IServiceCollection)

The AddRepositories extension method for the IServiceCollection, which scans all assemblies in the current domain for types marked with the RepositoryAttribute.

```
public static void AddRepositories<TDbContext>(this IServiceCollection services)
where TDbContext : DbContext
```

Parameters

services [IServiceCollection](#) 

The IServiceCollection instance to which the types are added.

Type Parameters

TDbContext

Remarks

The located type(s) that have the RepositoryAttribute are added to the IServiceCollection as a Scope. If no such types are found, it throws a CoreInjectionsException.

Exceptions

[CoreException](#)

Thrown when no types with the RepositoryAttribute are found.

AddRepositories<TDbContext>(IServiceCollection, string)

```
[Obsolete("AddRepositories with namespace is deprecated, please use AddRepositories
with Repository Attribute instead.")]
public static void AddRepositories<TDbContext>(this IServiceCollection services,
string assemblyName) where TDbContext : DbContext
```

Parameters

services [IServiceCollection](#)

assemblyName [string](#)

Type Parameters

TDbContext

AddUnitOfWork<TDbContext>(IServiceCollection)

The AddUnitOfWork extension method for the IServiceCollection, which adds the UnitOfWork as a Scoped service.

```
public static void AddUnitOfWork<TDbContext>(this IServiceCollection services) where  
TDbContext : DbContext
```

Parameters

services [IServiceCollection](#)

Type Parameters

TDbContext

ApplyDbConfigurations(ModelBuilder, Assembly)

This extension method to the ModelBuilder class allows the application to apply database configurations from a specified assembly.

```
public static void ApplyDbConfigurations(this ModelBuilder modelBuilder,  
Assembly assembly)
```

Parameters

modelBuilder [ModelBuilder](#)

The ModelBuilder instance on which to apply the assembly configurations.

assembly [Assembly](#)

The assembly from which configurations should be applied.

Remarks

The method loads the specified assembly and applies its configurations to the dbContext via the modelBuilder ApplyConfigurationsFromAssembly method.

ApplyDbConfigurations(ModelBuilder, string)

This extension method to the modelBuilder class allows the application to apply database configurations from a specified assembly.

```
public static void ApplyDbConfigurations(this modelBuilder modelBuilder,
string assemblyName)
```

Parameters

modelBuilder [ModelBuilder](#)

The modelBuilder instance on which to apply the assembly configurations.

assemblyName [string](#)

The name of the assembly from which configurations should be applied.

Remarks

The method loads the specified assembly and applies its configurations to the dbContext via the modelBuilder ApplyConfigurationsFromAssembly method.

ScanRepositoriesIn<TDbContext>(IServiceCollection, Assembly)

The AddRepositories extension method for the IServiceCollection, which scans all assemblies in the current domain for types marked with the RepositoryAttribute.

```
public static void ScanRepositoriesIn<TDbContext>(this IServiceCollection services,
Assembly assembly) where TDbContext : DbContext
```

Parameters

services [IServiceCollection](#)[↗]

The IServiceCollection instance to which the types are added.

assembly [Assembly](#)[↗]

The assembly to scan

Type Parameters

TDbContext

Remarks

The located type(s) that have the RepositoryAttribute are added to the IServiceCollection as a Scope. If no such types are found, it throws a CoreInjectionsException.

Exceptions

[CoreException](#)

Thrown when no types with the RepositoryAttribute are found.

ScanRepositoriesIn<TDbContext>(IServiceCollection, string)

The AddRepositories extension method for the IServiceCollection, which scans all assemblies in the current domain for types marked with the RepositoryAttribute.

```
public static void ScanRepositoriesIn<TDbContext>(this IServiceCollection services,  
string assemblyName) where TDbContext : DbContext
```

Parameters

services [IServiceCollection](#)[↗]

The IServiceCollection instance to which the types are added.

assemblyName [string](#)[↗]

The name of the assembly to scan

Type Parameters

TDbContext

Remarks

The located type(s) that have the RepositoryAttribute are added to the IServiceCollection as a Scope. If no such types are found, it throws a CoreInjectionsException.

Exceptions

[CoreException](#)

Thrown when no types with the RepositoryAttribute are found.

Namespace Solstice.Infrastructure. Specifications

Classes

[CoreSpecificationEvaluator<T>](#)

[Specification<T>](#)

The `coreSpecifications<T>` class implements the `ICoreSpecifications<T>` interface for providing generic ways to define specifications for querying the database.

Interfaces

[ICoreSpecifications<T>](#)

Class CoreSpecificationEvaluator<T>

Namespace: [Solstice.Infrastructure.Specifications](#)

Assembly: Solstice.Infrastructure.dll

```
public class CoreSpecificationEvaluator<T> where T : class
```








Type Parameters

T

Inheritance

[object](#)  ← CoreSpecificationEvaluator<T>

Inherited Members

[object.Equals\(object\)](#) , [object.Equals\(object, object\)](#) , [object.GetHashCode\(\)](#) ,
[object.GetType\(\)](#) , [object.MemberwiseClone\(\)](#) , [object.ReferenceEquals\(object, object\)](#) ,
[object.ToString\(\)](#) 

Constructors

CoreSpecificationEvaluator()

```
protected CoreSpecificationEvaluator()
```

Methods

GetQuery(IQueryable<T>, ICoreSpecifications<T>)

```
public static IQueryable<T> GetQuery(IQueryable<T> query, ICoreSpecifications<T>  
specifications)
```

Parameters

query [IQueryable](#)  <T>

specifications [ICoreSpecifications](#)<T>

Returns

[IQueryable](#) <T>

Interface ICoreSpecifications<T>

Namespace: [Solstice.Infrastructure.Specifications](#)

Assembly: Solstice.Infrastructure.dll

```
public interface ICoreSpecifications<T>
```

Type Parameters

T

Properties

ComplexIncludes

```
Collection<Func<IQueryable<T>, IIncludableQueryable<T, object>>> ComplexIncludes {  
    get; }
```

Property Value

[Collection](#)[↗] <[Func](#)[↗] <[IQueryable](#)[↗] <T>, [IIncludableQueryable](#)[↗] <T, [object](#)[↗] >>>

Distincts

```
bool Distincts { get; }
```

Property Value

[bool](#)[↗]

FilterCondition

```
Expression<Func<T, bool>> FilterCondition { get; }
```

Property Value

[Expression](#) <[Func](#) <T, [bool](#)>>>

GroupBys

```
Expression<Func<T, object>> GroupBys { get; }
```

Property Value

[Expression](#) <[Func](#) <T, [object](#)>>>

OrderByDescendings

```
Collection<Expression<Func<T, object>>> OrderByDescendings { get; }
```

Property Value

[Collection](#) <[Expression](#) <[Func](#) <T, [object](#)>>>>

OrderBys

```
Collection<Expression<Func<T, object>>> OrderBys { get; }
```

Property Value

[Collection](#) <[Expression](#) <[Func](#) <T, [object](#)>>>>

SimpleIncludes

```
Collection<Expression<Func<T, object>>> SimpleIncludes { get; }
```

Property Value

[Collection](#) < [Expression](#) < [Func](#) < T, [object](#) > > >

Class Specification<T>

Namespace: [Solstice.Infrastructure.Specifications](#)

Assembly: Solstice.Infrastructure.dll

The `coreSpecifications<T>` class implements the `ICoreSpecifications<T>` interface for providing generic ways to define specifications for querying the database.

```
public class Specification<T> : ICoreSpecifications<T>
```

Type Parameters

T

The type of the object which specifications are applied to. Something like an EF Core model type.








Inheritance

[object](#)  ← Specification<T>

Implements

[ICoreSpecifications](#)<T>

Inherited Members

[object.Equals\(object\)](#)  , [object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  , [object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

Examples

This sample shows how to create a new instance of `coreSpecifications<T>`.

```
var specs = new coreSpecifications<MyModel>();  
specs.SetFilterCondition(x => x.Property > 0);  
specs.ApplyOrderBy(x => x.AnotherProperty);
```

Remarks

Properties and methods in this class allow for including related data, ordering, filtering, and grouping the result of queries against a DBSet of the specified type **T**. Note: The 'Include',

'OrderBy', 'OrderByDescending', 'FilterCondition', and 'GroupBy' are Expressions and something like LINQ queries.

Constructors

Specification()

```
public Specification()
```

Specification(Expression<Func<T, bool>>?)

```
public Specification(Expression<Func<T, bool>>? filterCondition)
```

Parameters

`filterCondition` [Expression](#) <[Func](#) <T, [bool](#)>>

Properties

ComplexIncludes

```
public Collection<Func<IQueryable<T>, IIncludableQueryable<T, object>>>  
ComplexIncludes { get; }
```

Property Value

[Collection](#) <[Func](#) <[IQueryable](#) <T>, [IIncludableQueryable](#) <T, [object](#)>>>

Distincts

```
public bool Distincts { get; }
```

Property Value

[bool](#)

FilterCondition

```
public Expression<Func<T, bool>> FilterCondition { get; }
```

Property Value

[Expression](#) <[Func](#) <T, [bool](#)>>>

GroupBys

```
public Expression<Func<T, object>> GroupBys { get; }
```

Property Value

[Expression](#) <[Func](#) <T, [object](#)>>>

OrderByDescendings

```
public Collection<Expression<Func<T, object>>> OrderByDescendings { get; }
```

Property Value

[Collection](#) <[Expression](#) <[Func](#) <T, [object](#)>>>>

OrderBys

```
public Collection<Expression<Func<T, object>>> OrderBys { get; }
```

Property Value

[Collection](#) <[Expression](#) <[Func](#) <T, [object](#)>>>>

SimpleIncludes

```
public Collection<Expression<Func<T, object>>> SimpleIncludes { get; }
```

Property Value

[Collection](#) <[Expression](#) <[Func](#) <T, [object](#)>>>

Methods

Distinct()

Permet d'ajouter un Distinct à la requête

```
public Specification<T> Distinct()
```

Returns

[Specification](#)<T>

GroupBy(Expression<Func<T, object>>)

Permet d'ajouter un GroupBy à la requête

```
public Specification<T> GroupBy(Expression<Func<T, object>> groupByExpression)
```

Parameters

groupByExpression [Expression](#) <[Func](#) <T, [object](#)>>

Returns

[Specification](#)<T>

Include(Func<IQueryable<T>, IIncludableQueryable<T, object>>)

Permet d'effectuer un .Include sur une entité

```
public Specification<T> Include(Func<IQueryable<T>, IIncludableQueryable<T, object>> includeExpression)
```

Parameters

includeExpression [Func](#) <[IQueryable](#) <T>, [IIncludableQueryable](#) <T, [object](#) >>

Returns

[Specification](#) <T>

Remarks

Exemple: new Specification().Include(item => item.Include(item => item.User).ThenInclude(item => item.Address))

Include(Expression<Func<T, object>>)

Permet d'effectuer un .Include sur une entité

```
public Specification<T> Include(Expression<Func<T, object>> includeExpression)
```

Parameters

includeExpression [Expression](#) <[Func](#) <T, [object](#) >>

Returns

[Specification](#) <T>

Remarks

Exemple: new Specification().Include(item => item.User)

OrderBy(Expression<Func<T, object>>)

Permet d'ajouter un OrderBy à la requête

Si on en ajoute plusieurs, ils seront exécutés dans l'ordre d'ajout (OrderBy, ThenBy, ThenBy, ...)

```
public Specification<T> OrderBy(Expression<Func<T, object>> orderByExpression)
```

Parameters

`orderByExpression` [Expression](#) <[Func](#) <T, [object](#)>>

Returns

[Specification](#) <T>

OrderByDescending(Expression<Func<T, object>>)

Permet d'ajouter un OrderByDescending à la requête

Si on en ajoute plusieurs, ils seront exécutés dans l'ordre d'ajout (OrderByDescending, ThenByDescending, ThenByDescending, ...)

```
public Specification<T> OrderByDescending(Expression<Func<T, object>> orderByDescendingExpression)
```

Parameters

`orderByDescendingExpression` [Expression](#) <[Func](#) <T, [object](#)>>

Returns

[Specification](#) <T>

SetFilterCondition(Expression<Func<T, bool>>)

```
public void SetFilterCondition(Expression<Func<T, bool>> filterExpression)
```

Parameters

`filterExpression` [Expression](#) <[Func](#) <T, [bool](#)>>>

Namespace Solstice.Infrastructure.Unit OfWorks

Classes

[UnitOfWork<TDbContext>](#)

Interfaces

[IUnitOfWork](#)

Interface IUnitOfWork

Namespace: [Solstice.Infrastructure.UnitOfWorks](#)

Assembly: Solstice.Infrastructure.dll

```
public interface IUnitOfWork : IDisposable
```

Inherited Members

[IDisposable.Dispose\(\)](#)

Methods

GetRepository<TRepository, TEntity>()

```
TRepository GetRepository<TRepository, TEntity>() where TRepository :  
ICoreRepository<TEntity> where TEntity : class
```

Returns

TRepository

Type Parameters

TRepository

TEntity

Class UnitOfWork<TDbContext>

Namespace: [Solstice.Infrastructure.UnitOfWorks](#)


Assembly: Solstice.Infrastructure.dll

```
public sealed class UnitOfWork<TDbContext> : IUnitOfWork, IDisposable where  
TDbContext : DbContext
```

Type Parameters

TDbContext







Inheritance

[object](#)  ← UnitOfWork<TDbContext>

Implements

[IUnitOfWork](#), [IDisposable](#) 

Inherited Members

[object.Equals\(object\)](#)  , [object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  ,
[object.GetType\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

Constructors

UnitOfWork(TDbContext, IHttpContextAccessor)

```
public UnitOfWork(TDbContext dbContext, IHttpContextAccessor httpContext)
```

Parameters

dbContext TDbContext

httpContext [IHttpContextAccessor](#) 

Methods

Dispose()

Performs application-defined tasks associated with freeing, releasing, or resetting unmanaged resources.

```
public void Dispose()
```