Namespace Raftel. Application. Abstractions

Classes

<u>RequestDispatcher</u>

Default implementation of <u>IRequestDispatcher</u> that resolves the request handler and middleware pipeline from the dependency injection container.

Interfaces

<u>IRequestDispatcher</u>

Dispatches requests through the pipeline and to their associated handler.

<u>IRequestHandler<TRequest, TResponse></u>

Defines a handler that processes a request of type TRequest and returns a response of type TResponse.

<u>IRequestMiddleware<TRequest, TResponse></u>

Represents a middleware component in the request pipeline that can intercept and modify the processing of a request before and/or after the next component is invoked.

<u>IRequest<TResponse></u>

Represents a request that produces a response of type TResponse.

Delegates

RequestHandlerDelegate < TResponse >

Delegate that represents the next handler or middleware in the request processing pipeline.

Interface IRequestDispatcher

Namespace: <u>Raftel</u>.<u>Application</u>.<u>Abstractions</u>

Assembly: Raftel.Application.dll

Dispatches requests through the pipeline and to their associated handler.

public interface IRequestDispatcher

Methods

DispatchAsync<TRequest, TResponse>(TRequest)

Dispatches the given request and returns the result asynchronously.

Task<TResponse> DispatchAsync<TRequest, TResponse>(TRequest request) where TRequest
: IRequest<TResponse>

Parameters

request TRequest

The request to dispatch.

Returns

<u>Task</u> < TResponse >

The result returned from the request handler or middleware.

Type Parameters

TRequest

The type of the request.

TResponse

The type of the response.

Interface IRequestHandler<TRequest, TResponse>

Namespace: <u>Raftel</u>.<u>Application</u>.<u>Abstractions</u>

Assembly: Raftel.Application.dll

Defines a handler that processes a request of type TRequest and returns a response of type TResponse.

public interface IRequestHandler<TRequest, TResponse> where TRequest : IRequest<TResponse>

Type Parameters

TRequest

The type of the request.

TResponse

The type of the response.

Methods

HandleAsync(TRequest)

Handles the given request asynchronously.

Task<TResponse> HandleAsync(TRequest request)

Parameters

request TRequest

The request to process.

Returns

<u>Task</u> < TResponse >

A task representing the asynchronous operation, containing the response.

Interface IRequestMiddleware < TRequest, TResponse >

Namespace: <u>Raftel.Application.Abstractions</u>

Assembly: Raftel.Application.dll

Represents a middleware component in the request pipeline that can intercept and modify the processing of a request before and/or after the next component is invoked.

public interface IRequestMiddleware<TRequest, TResponse> where TRequest
: IRequest<TResponse>

Type Parameters

TRequest

The type of the request.

TResponse

The type of the response.

Methods

HandleAsync(TRequest, RequestHandlerDelegate < TResponse >)

Processes the request and optionally calls the next delegate in the pipeline.

Task<TResponse> HandleAsync(TRequest request, RequestHandlerDelegate<TResponse> next)

Parameters

request TRequest

The request instance.

next <u>RequestHandlerDelegate</u><TResponse>

The next handler in the pipeline.

Returns

<u>Task</u> < TResponse >

A task containing the result of the request.

Interface IRequest<TResponse>

Namespace: <u>Raftel.Application.Abstractions</u>

Assembly: Raftel.Application.dll

Represents a request that produces a response of type TResponse.

public interface IRequest<TResponse>

Type Parameters

TResponse

The type of response expected from the request.

Class RequestDispatcher

Namespace: <u>Raftel.Application.Abstractions</u>

Assembly: Raftel.Application.dll

Default implementation of <u>IRequestDispatcher</u> that resolves the request handler and middleware pipeline from the dependency injection container.

public class RequestDispatcher : IRequestDispatcher

Inheritance

<u>object</u> ← RequestDispatcher

Implements

<u>IRequestDispatcher</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

RequestDispatcher(IServiceProvider)

Creates a new instance of the RequestDispatcher class.

public RequestDispatcher(IServiceProvider serviceProvider)

Parameters

The dependency injection service provider.

Methods

DispatchAsync<TRequest, TResponse>(TRequest)

Dispatches the given request and returns the result asynchronously.

public Task<TResponse> DispatchAsync<TRequest, TResponse>(TRequest request) where TRequest
: IRequest<TResponse>

Parameters

request TRequest

The request to dispatch.

Returns

<u>Task</u> < TResponse >

The result returned from the request handler or middleware.

Type Parameters

TRequest

The type of the request.

TResponse

The type of the response.

Delegate RequestHandlerDelegate < TResponse >

Namespace: <u>Raftel.Application.Abstractions</u>

Assembly: Raftel.Application.dll

Delegate that represents the next handler or middleware in the request processing pipeline.

public delegate Task<TResponse> RequestHandlerDelegate<TResponse>()

Returns

<u>Task</u> < TResponse >

The asynchronous result of the request pipeline execution.

Type Parameters

TResponse

The type of response expected.

Namespace Raftel.Application.Commands

Classes

CommandDispatcher

Default implementation of <u>ICommandDispatcher</u> that delegates command execution to the <u>IRequest Dispatcher</u> infrastructure.

Interfaces

ICommand

Represents a command that does not return a value other than a Result.

<u>ICommandDispatcher</u>

Dispatches a command to its corresponding handler.

ICommandHandler<TCommand>

Defines a handler for processing a command of type TCommand.

Class CommandDispatcher

Namespace: Raftel.Application.Commands

Assembly: Raftel.Application.dll

Default implementation of <u>ICommandDispatcher</u> that delegates command execution to the <u>IRequest Dispatcher</u> infrastructure.

public class CommandDispatcher : ICommandDispatcher

Inheritance

<u>object</u>

← CommandDispatcher

Implements

<u>ICommandDispatcher</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

CommandDispatcher(IRequestDispatcher)

Initializes a new instance of the **CommandDispatcher** class.

public CommandDispatcher(IRequestDispatcher dispatcher)

Parameters

dispatcher IRequestDispatcher

The internal dispatcher used to route commands.

Methods

DispatchAsync<TCommand>(TCommand)

Dispatches a command asynchronously.

public Task<Result> DispatchAsync<TCommand>(TCommand command) where TCommand : ICommand

Parameters

command TCommand

The command instance to process.

Returns

A **Result** representing the outcome of the command execution.

Type Parameters

TCommand

The type of command to dispatch.

Interface ICommand

Namespace: <u>Raftel.Application.Commands</u>

Assembly: Raftel.Application.dll

Represents a command that does not return a value other than a Result.

public interface ICommand : IRequest<Result>

Interface ICommandDispatcher

Namespace: Raftel.Application.Commands

Assembly: Raftel.Application.dll

Dispatches a command to its corresponding handler.

public interface ICommandDispatcher

Methods

DispatchAsync < TCommand > (TCommand)

Dispatches a command asynchronously.

Task<Result> DispatchAsync<TCommand>(TCommand command) where TCommand : ICommand

Parameters

command TCommand

The command instance to process.

Returns

<u>Task</u> < <u>Result</u> >

A Result representing the outcome of the command execution.

Type Parameters

TCommand

The type of command to dispatch.

Interface ICommandHandler<TCommand>

Namespace: Raftel.Application.Commands

Assembly: Raftel.Application.dll

Defines a handler for processing a command of type TCommand.

public interface ICommandHandler<TCommand> : IRequestHandler<TCommand, Result> where

TCommand : ICommand

Type Parameters

TCommand

The type of command to handle.

Inherited Members

<u>IRequestHandler<TCommand</u>, <u>Result>.HandleAsync(TCommand)</u>

Namespace Raftel.Application.Queries

Classes

QueryDispatcher

Default implementation of <u>IQueryDispatcher</u> that delegates query execution to the <u>IRequestDispatcher</u> infrastructure.

Interfaces

<u>IQueryDispatcher</u>

Dispatches a query to its corresponding handler and returns the result.

IQueryHandler<TQuery, TResult>

Defines a handler for processing a query of type TQuery that returns a result of type TResult.

<u>IQuery<TResult></u>

Represents a query that returns a result of type TResult.

Interface IQueryDispatcher

Namespace: <u>Raftel.Application.Queries</u>

Assembly: Raftel.Application.dll

Dispatches a query to its corresponding handler and returns the result.

public interface IQueryDispatcher

Methods

DispatchAsync<TQuery, TResult>(TQuery)

Dispatches a query asynchronously and retrieves the result.

Task<Result<TResult>> DispatchAsync<TQuery, TResult>(TQuery query) where TQuery
: IQuery<TResult>

Parameters

query TQuery

The query instance to process.

Returns

<u>Task</u> < <u>Result</u> < TResult > >

A <u>Result<TValue></u> representing the outcome of the query execution.

Type Parameters

TQuery

The type of the query to dispatch.

TResult

The type of the result expected from the query.

Interface IQueryHandler<TQuery, TResult>

Namespace: Raftel. Application. Queries

Assembly: Raftel.Application.dll

Defines a handler for processing a query of type TQuery that returns a result of type TResult.

```
public interface IQueryHandler<TQuery, TResult> : IRequestHandler<TQuery, Result<TResult>>
where TQuery : IQuery<TResult>
```

Type Parameters

TQuery

The type of the query to handle.

TResult

The type of the result produced by the query.

Inherited Members

<u>IRequestHandler<TQuery, Result<TResult>>.HandleAsync(TQuery)</u>

Interface IQuery<TResult>

Namespace: Raftel. Application. Queries

Assembly: Raftel.Application.dll

Represents a query that returns a result of type TResult.

public interface IQuery<TResult> : IRequest<Result<TResult>>

Type Parameters

TResult

The type of the result produced by the query.

Class QueryDispatcher

Namespace: Raftel.Application.Queries

Assembly: Raftel.Application.dll

Default implementation of <u>IQueryDispatcher</u> that delegates query execution to the <u>IRequestDispatcher</u> infrastructure.

```
public class QueryDispatcher : IQueryDispatcher
```

Inheritance

object
c QueryDispatcher

Implements

IQueryDispatcher

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

QueryDispatcher(IRequestDispatcher)

Initializes a new instance of the **QueryDispatcher** class.

```
public QueryDispatcher(IRequestDispatcher dispatcher)
```

Parameters

dispatcher <u>IRequestDispatcher</u>

The internal dispatcher used to route queries.

Methods

DispatchAsync<TQuery, TResult>(TQuery)

Dispatches a query asynchronously and retrieves the result.

public Task<Result<TResult>> DispatchAsync<TQuery, TResult>(TQuery query) where TQuery
: IQuery<TResult>

Parameters

query TQuery

The query instance to process.

Returns

<u>Task</u> < <u>Result</u> < TResult > >

A <u>Result<TValue></u> representing the outcome of the query execution.

Type Parameters

TQuery

The type of the query to dispatch.

TResult

The type of the result expected from the query.

Namespace Raftel.Domain.Abstractions Classes

Error

Result

Result<TValue>

Class Error

Namespace: <u>Raftel.Domain.Abstractions</u>

Assembly: Raftel.Domain.dll

```
public record Error : IEquatable<Error>
```

Inheritance

<u>object</u> □ ← Error

Implements

Inherited Members

 $\underline{object.Equals(object)} \ \ \ \ \ \underline{object.Equals(object, object)} \ \ \ \ \ \ \underline{object.GetHashCode()} \ \ \ \ \ \underline{object.GetType()} \ \ \ \ \ \ \underline{object.MemberwiseClone()} \ \ \ \ \ \underline{object.ReferenceEquals(object, object)} \ \ \ \ \ \underline{object.ToString()} \ \ \ \ \underline{object.ToString()} \ \ \ \ \ \underline{object.ToString()} \ \ \ \underline{object.ToString()} \ \ \ \underline{object.ToString()} \ \ \underline{objec$

Constructors

Error(string, string)

```
public Error(string Code, string Message)
```

Parameters

Code <u>string</u> ☑

Fields

None

```
public static Error None
```

Error

NullValue

```
public static Error NullValue
```

Field Value

Error

Properties

Code

```
public string Code { get; init; }
Property Value
```

<u>string</u>♂

Message

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

Property Value

Class Result

Namespace: <u>Raftel.Domain.Abstractions</u>

Assembly: Raftel.Domain.dll

```
public class Result
```

Inheritance

<u>object</u>

✓ Result

Derived

Result < TValue >

Inherited Members

 $\underline{object.Equals(object)} \ \ \ \ \ \underline{object.Equals(object, object)} \ \ \ \ \ \ \underline{object.GetHashCode()} \ \ \ \ \ \underline{object.GetType()} \ \ \ \ \ \ \underline{object.MemberwiseClone()} \ \ \ \ \ \underline{object.ReferenceEquals(object, object)} \ \ \ \ \ \underline{object.ToString()} \ \ \ \ \underline{object.ToString()} \ \ \ \ \ \underline{object.ToString()} \ \ \ \underline{object.ToString()} \ \ \ \underline{object.ToString()} \ \ \underline{objec$

Constructors

Result(bool, Error)

```
protected Result(bool isSuccess, Error error)
```

Parameters

isSuccess bool♂

error Error

Properties

Error

```
public Error Error { get; }
```

IsFailure

```
public bool IsFailure { get; }
```

Property Value

IsSuccess

```
public bool IsSuccess { get; }
```

Property Value

bool₫

Methods

Create < TValue > (TValue?)

```
public static Result<TValue> Create<TValue>(TValue? value)
```

Parameters

value TValue

Returns

Result < TValue >

Type Parameters

TValue

Failure(Error)

```
public static Result Failure(Error error)
Parameters
error Error
Returns
Result
Failure < TValue > (Error)
 public static Result<TValue> Failure<TValue>(Error error)
Parameters
error Error
Returns
Result < TValue >
Type Parameters
TValue
Success()
```

```
public static Result Success()
```

Returns

Result

Success < TValue > (TValue)

public static Result<TValue> Success<TValue>(TValue value)

Parameters

value TValue

Returns

Result<TValue>

Type Parameters

TValue

Class Result < TValue >

Namespace: <u>Raftel.Domain.Abstractions</u>

Assembly: Raftel.Domain.dll

public class Result<TValue> : Result

Type Parameters

TValue

Inheritance

object ← Result ← Result < TValue >

Inherited Members

Result.IsSuccess, Result.IsFailure, Result.Error, Result.Success(), Result.Success<TValue>(TValue), Result.Failure<TValue>(Error), Result.Create<TValue>(TValue), object.Equals(object), object.Equals(object), object.GetHashCode(), object.GetType(), object.ToString(), object.MemberwiseClone(), object.ReferenceEquals(object, object), object.ToString(), obj

Constructors

Result(TValue, bool, Error)

Initializes a new instance of the Result<TValue> class.

protected Result(TValue value, bool isSuccess, Error error)

Parameters

value TValue

The value returned by the operation.

isSuccess bool♂

Indicates whether the operation was successful.

error Error

The error associated with the operation.

Properties

Value

Gets the value returned by the operation, if successful.

```
public TValue Value { get; }
```

Property Value

TValue

Methods

Failure(Error)

Creates a failed result with the specified error.

```
public static Result<TValue> Failure(Error error)
```

Parameters

```
error Error
```

The error associated with the failure.

Returns

Result < TValue >

A failed result.

Success(TValue)

Creates a successful result with the specified value.

```
public static Result<TValue> Success(TValue value)
```

Parameters

value TValue

The value returned by the operation.

Returns

Result < TValue >

A successful result containing the value.

Operators

implicit operator Result<TValue>(TValue)

public static implicit operator Result<TValue>(TValue value)

Parameters

value TValue

Returns

Result < TValue >

Namespace Raftel.Domain.BaseTypes

Classes

<u>AggregateRoot<Tld></u>

Represents the root of an aggregate in the domain model.

Entity<TId>

Base class for all domain entities with a strongly-typed ID.

TypedGuidId

<u>TypedId<T></u>

Represents a strongly-typed identifier based on a primitive type.

Class AggregateRoot<Tld>

Namespace: Raftel.Domain.BaseTypes

Assembly: Raftel.Domain.dll

Represents the root of an aggregate in the domain model.

```
public abstract class AggregateRoot<TId> : Entity<TId> where TId : TypedId<Guid>
```

Type Parameters

TId

The type of the aggregate's identifier.

Inheritance

<u>object</u> ♂ ← <u>Entity</u> < TId > ← AggregateRoot < TId >

Inherited Members

Entity<TId>.Id , Entity<TId>.Equals(object) , Entity<TId>.GetHashCode() , object.Equals(object, object) , object.GetType() , object.MemberwiseClone() , object.ReferenceEquals(object, object) , object.ToString()

Constructors

AggregateRoot(Tld)

Initializes a new instance of the <a href="AggregateRoot<Tld">AggregateRoot<Tld class.

```
protected AggregateRoot(TId id)
```

Parameters

id Tld

The identifier of the aggregate root.

Class Entity<TId>

Namespace: Raftel.Domain.BaseTypes

Assembly: Raftel.Domain.dll

Base class for all domain entities with a strongly-typed ID.

```
public abstract class Entity<TId> where TId : TypedId<Guid>
```

Type Parameters

TId

The type of the entity's identifier.

Inheritance

object d ← Entity < TId >

Derived

<u>AggregateRoot<Tld></u>

Inherited Members

 $\underline{object.Equals(object, object)} \ "", \ \underline{object.MemberwiseClone()} \ "", \ \underline{object.ReferenceEquals(object, object)} \ "", \ \underline{object.ToString()} \ ""$

Constructors

Entity(Tld)

Initializes a new instance of the Entity < TId > class.

```
protected Entity(TId id)
```

Parameters

id Tld

The identifier of the entity.

Properties

Id

Gets the unique identifier of the entity.

```
public TId Id { get; protected set; }
```

Property Value

TId

Methods

Equals(object?)

Determines whether the specified object is equal to the current object.

```
public override bool Equals(object? obj)
```

Parameters

obj <u>object</u>♂

The object to compare with the current object.

Returns

bool♂

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

<u>int</u>♂

A hash code for the current object.

Class TypedGuidId

Namespace: Raftel.Domain.BaseTypes

Assembly: Raftel.Domain.dll

Base class for identifiers that use <u>Guid</u> as the backing type.

```
public abstract record TypedGuidId : TypedId<Guid>, IEquatable<TypedId<Guid>>,
IEquatable<TypedGuidId>
```

Inheritance

<u>object</u> ← <u>TypedId</u> < <u>Guid</u> ▷ > ← TypedGuidId

Implements

<u>IEquatable</u> ♂ < <u>TypedId</u> < <u>Guid</u> ♂ >>, <u>IEquatable</u> ♂ < <u>TypedGuidId</u>>

Inherited Members

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

Constructors

TypedGuidId(Guid)

Initializes a new instance of the <u>TypedGuidId</u> class.

```
protected TypedGuidId(Guid value)
```

Parameters

value Guid♂

The GUID value.

Methods

NewGuid()

Generates a new GUID using version 7.

public static Guid NewGuid()

Returns

<u>Guid</u> ♂

Class TypedId<T>

Namespace: <u>Raftel.Domain.BaseTypes</u>

Assembly: Raftel.Domain.dll

Represents a strongly-typed identifier based on a primitive type.

```
public abstract record TypedId<T> : IEquatable<TypedId<T>> where T : notnull
```

Type Parameters

Т

The underlying primitive type (e.g., Guid, int).

Inheritance

Implements

<u>IEquatable</u> ♂ < <u>TypedId</u> < T > >

Derived

TypedGuidId

Inherited Members

Constructors

TypedId(T)

Initializes a new instance of the <u>TypedId<T></u> class.

```
protected TypedId(T value)
```

Parameters

value T

The raw value of the identifier.

Exceptions

<u>ArgumentNullException</u> ☑

Thrown when value is null.

<u>ArgumentException</u> □

Thrown when value is Guid. Empty.

Methods

Equals(TypedId < T > ?)

Indicates whether the current object is equal to another object of the same type.

```
public virtual bool Equals(TypedId<T>? other)
```

Parameters

other <u>TypedId</u><T>

An object to compare with this object.

Returns

bool♂

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

<u>int</u>♂

A hash code for the current object.

ToString()

Returns a string that represents the current object.

```
public override string? ToString()
```

Returns

<u>string</u> □

A string that represents the current object.

Operators

implicit operator T(TypedId<T>)

Implicitly converts a <u>TypedId<T></u> to its underlying value.

```
public static implicit operator T(TypedId<T> id)
```

Parameters

id <u>TypedId</u><T>

Returns

Т