Namespace TestSR.API

Classes

ChatHub

ClientCertificateAuthenticationHandler

 $\underline{ClientCertificateAuthenticationOptions}$

ClientCertificateProvider

MyCertificateValidationService

MyConnection

ServerTimeNotifierService

Interfaces

<u>ICertificateValidationService</u>

IChatClient

<u>IClientCertificateProvider</u>

Class ChatHub

Namespace: <u>TestSR.API</u>
Assembly: TestSR.API.dll

```
public class ChatHub : Hub<IChatClient>, IDisposable
```

Inheritance

<u>object</u> ♂ ← <u>Hub</u> ♂ ← <u>Hub</u> ♂ < <u>IChatClient</u>> ← ChatHub

Implements

<u>IDisposable</u> ☑

Inherited Members

 $\frac{\text{Hub} < \text{IChatClient} > .\text{Clients} \ \ \, \text{Clients} \ \ \, \text$

Methods

OnConnectedAsync()

Called when a new connection is established with the hub.

```
public override Task OnConnectedAsync()
```

Returns

A <u>Task</u> that represents the asynchronous connect.

Class ClientCertificateAuthenticationHandler

Namespace: <u>TestSR.API</u>
Assembly: TestSR.API.dll

```
public class ClientCertificateAuthenticationHandler :
AuthenticationHandler<ClientCertificateAuthenticationOptions>, IAuthenticationHandler
```

Inheritance

 $\underline{object} \boxtimes \leftarrow \underline{AuthenticationHandler} \boxtimes <\underline{ClientCertificateAuthenticationOptions} > \leftarrow \\ \underline{ClientCertificateAuthenticationHandler}$

Implements

<u>IAuthenticationHandler</u>

☑

Inherited Members

 $\underline{AuthenticationHandler < ClientCertificateAuthenticationOptions > .InitializeAsync(AuthenticationScheme, \underline{HttpContext}) \ \ \, \overrightarrow{C}} \ \ \, ,$

AuthenticationHandler < ClientCertificateAuthenticationOptions > . InitializeEventsAsync() , ,

AuthenticationHandler < ClientCertificateAuthenticationOptions > . CreateEventsAsync() CreateEventsAsync()

 $\underline{Authentication Handler} < \underline{ClientCertificateAuthenticationOptions} > \underline{InitializeHandlerAsync()} \ \square \ ,$

 $\underline{Authentication Handler < Client Certificate Authentication Options >. Build Redirect \underline{Uri(string)} \, \square \ \ ,$

AuthenticationHandler<ClientCertificateAuthenticationOptions>.ResolveTarget(string) does not be a supplied to the control of t

 $\underline{AuthenticationHandler < ClientCertificateAuthenticationOptions > .AuthenticateAsync()} \square ,$

 $\underline{AuthenticationHandler < ClientCertificateAuthenticationOptions > . HandleAuthenticateOnceAsync()_ \square } \ ,$

AuthenticationHandler<ClientCertificateAuthenticationOptions>.HandleAuthenticateOnceSafeAsync() , ,

<u>AuthenticationHandler<ClientCertificateAuthenticationOptions>.HandleForbiddenAsync(AuthenticationProperties)</u> ∠ ,

 $\underline{AuthenticationHandler < ClientCertificateAuthenticationOptions > .HandleChallengeAsync(AuthenticationProperties) <math>\square$,

 $\underline{AuthenticationHandler} < \underline{ClientCertificateAuthenticationOptions} > \underline{.ChallengeAsync(AuthenticationProperties)} \\ \square ,$

 $\underline{AuthenticationHandler} < \underline{ClientCertificateAuthenticationOptions} > \underline{ForbidAsync(AuthenticationProperties)}$

 $\underline{AuthenticationHandler {<} ClientCertificateAuthenticationOptions {>} . Scheme} \, \square \ ,$

<u>AuthenticationHandler<ClientCertificateAuthenticationOptions>.Options</u> ,

<u>AuthenticationHandler<ClientCertificateAuthenticationOptions>.Context</u> ☑ ,

 $\underline{Authentication Handler}{<} \underline{Client Certificate Authentication Options}{>}.\underline{Request} \, \underline{\square} \ ,$

AuthenticationHandler < ClientCertificateAuthenticationOptions > . Response 2 ,

```
AuthenticationHandler < ClientCertificateAuthenticationOptions > .OriginalPath® ,
AuthenticationHandler < ClientCertificateAuthenticationOptions > .Logger Ø ,
AuthenticationHandler < ClientCertificateAuthenticationOptions > .Logger Ø ,
AuthenticationHandler < ClientCertificateAuthenticationOptions > .UrlEncoder Ø ,
AuthenticationHandler < ClientCertificateAuthenticationOptions > .Clock Ø ,
AuthenticationHandler < ClientCertificateAuthenticationOptions > .TimeProvider Ø ,
AuthenticationHandler < ClientCertificateAuthenticationOptions > .OptionsMonitor Ø ,
AuthenticationHandler < ClientCertificateAuthenticationOptions > .Events Ø ,
AuthenticationHandler < ClientCertificateAuthenticationOptions > .ClaimsIssuer Ø ,
AuthenticationHandler < ClientCertificateAuthenticationOptions > .CurrentUri Ø , object.Equals(object) Ø ,
object.Equals(object, object) Ø , object.GetHashCode() Ø , object.GetType() Ø ,
object.MemberwiseClone() Ø , object.ReferenceEquals(object, object) Ø , object.ToString() Ø
```

Constructors

ClientCertificateAuthenticationHandler(IOptionsMonitor < Client CertificateAuthenticationOptions > , ILoggerFactory, UrlEncoder)

```
public
```

ClientCertificateAuthenticationHandler(IOptionsMonitor<ClientCertificateAuthenticationOption
s> options, ILoggerFactory logger, UrlEncoder encoder)

Parameters

options | IOptionsMonitor | < ClientCertificateAuthenticationOptions >

logger <u>ILoggerFactory</u>♂

encoder <u>UrlEncoder</u> ☑

Methods

HandleAuthenticateAsync()

Allows derived types to handle authentication.

protected override Task<AuthenticateResult> HandleAuthenticateAsync()

Returns

<u>Task</u> ♂ < <u>AuthenticateResult</u> ♂ >

The <u>AuthenticateResult</u> ☑.

Class ClientCertificateAuthenticationOptions

Namespace: <u>TestSR.API</u>
Assembly: TestSR.API.dll

public class ClientCertificateAuthenticationOptions : AuthenticationSchemeOptions

Inheritance

<u>object</u> ✓ ← <u>AuthenticationSchemeOptions</u> ← ClientCertificateAuthenticationOptions

Inherited Members

AuthenticationSchemeOptions.Validate(), AuthenticationSchemeOptions.Validate(string), AuthenticationSchemeOptions.ClaimsIssuer, AuthenticationSchemeOptions.Events, AuthenticationSchemeOptions.EventsType, AuthenticationSchemeOptions.ForwardDefault, AuthenticationSchemeOptions.ForwardAuthenticate, AuthenticationSchemeOptions.ForwardChallenge, AuthenticationSchemeOptions.ForwardForbid, AuthenticationSchemeOptions.ForwardSignIn, AuthenticationSchemeOptions.ForwardSignOut, AuthenticationSchemeOptions.ForwardDefaultSelector, AuthenticationSchemeOptions.ForwardDefaultSelector, AuthenticationSchemeOptions.TimeProvider, object.Equals(object), object.Equals(object, object), object.GetType(), object.MemberwiseClone(), object.Equals(object, object), object.ReferenceEquals(object, object), object.ToString(), object.ReferenceEquals(object, object), object.ToString(), object.ReferenceEquals(object, object), object.ToString(), object.ReferenceEquals(object, object), object.ToString(), object.ToString()

Class ClientCertificateProvider

Namespace: <u>TestSR.API</u>
Assembly: TestSR.API.dll

public class ClientCertificateProvider : IClientCertificateProvider

Inheritance

<u>object</u>

✓ ClientCertificateProvider

Implements

<u>IClientCertificateProvider</u>

Inherited Members

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

Methods

GetClientCertificates(string)

public X509Certificate2Collection GetClientCertificates(string subject)

Parameters

subject <u>string</u>♂

Returns

X509Certificate2Collection ☑

Interface ICertificateValidationService

Namespace: <u>TestSR.API</u>
Assembly: TestSR.API.dll

public interface ICertificateValidationService

Methods

ValidateCertificate(X509Certificate2)

bool ValidateCertificate(X509Certificate2 clientCertificate)

Parameters

clientCertificate X509Certificate2♂

Returns

<u>bool</u> ♂

Interface IChatClient

Namespace: <u>TestSR.API</u>
Assembly: TestSR.API.dll

public interface IChatClient

Methods

ReceiveNotification(string)

Task ReceiveNotification(string message)

Parameters

message <u>string</u>♂

Returns

<u>Task</u> ☑

UpdateTime(DateTime)

Task UpdateTime(DateTime dateTime)

Parameters

dateTime <u>DateTime</u> □

Returns

<u>Task</u> ☑

Interface IClientCertificateProvider

Namespace: <u>TestSR.API</u>
Assembly: TestSR.API.dll

public interface IClientCertificateProvider

Methods

GetClientCertificates(string)

X509Certificate2Collection GetClientCertificates(string subject)

Parameters

subject <u>string</u>♂

Returns

Class MyCertificateValidationService

Namespace: <u>TestSR.API</u>
Assembly: TestSR.API.dll

public class MyCertificateValidationService : ICertificateValidationService

Inheritance

 $\underline{object} \, \underline{r} \leftarrow \, MyCertificateValidationService$

Implements

ICertificateValidationService

Inherited Members

Methods

ValidateCertificate(X509Certificate2)

public bool ValidateCertificate(X509Certificate2 clientCertificate)

Parameters

clientCertificate X509Certificate2♂

Returns

bool ♂

Class MyConnection

```
Namespace: <u>TestSR.API</u>
Assembly: TestSR.API.dll
```

```
public class MyConnection : PersistentConnection
```

Inheritance

<u>object</u> ∠ ← <u>PersistentConnection</u> ∠ ← MyConnection

Inherited Members

```
PersistentConnection.Initialize(IDependencyResolver) , PersistentConnection.Authorize(IRequest) , PersistentConnection.ProcessRequest(IDictionary<string, object>) , PersistentConnection.ProcessRequest(HostContext) , PersistentConnection.TryGetConnectionId(HostContext, string, out string, out string, out int) , PersistentConnection.GetSignals(string, string) , PersistentConnection.OnRejoiningGroups(IRequest, IList<string>, string) , PersistentConnection.OnConnected(IRequest, string) , PersistentConnection.OnConnected(IRequest, string) , PersistentConnection.OnDisconnected(IRequest, string, bool) , PersistentConnection.Trace , PersistentConnection.ProtectedData , PersistentConnection.Pool , PersistentConnection.MessageBus , PersistentConnection.JsonSerializer , PersistentConnection.AckHandler , PersistentConnection.TraceManager , PersistentConnection.Counters , PersistentConnection.Transport , PersistentConnection.UserIdProvider , PersistentConnection.Connection , PersistentConnection.UserIdProvider , PersistentConnection.Connection.
```

PersistentConnection.Groups ♂, object.Equals(object) ♂, object.Equals(object, object) ♂,

object.GetHashCode() ☑ , object.GetType() ☑ , object.MemberwiseClone() ☑ ,

Methods

AuthorizeRequest(IRequest)

Called before every request and gives the user a authorize the user.

```
protected override bool AuthorizeRequest(IRequest request)
```

Parameters

request IRequest

The Microsoft.AspNet.SignalR.IRequest for the current connection.

Returns

bool ♂

A boolean value that represents if the request is authorized.

OnReceived(IRequest, string, string)

Called when data is received from a connection.

protected override Task OnReceived(IRequest request, string connectionId, string data)

Parameters

request IRequest

The Microsoft.AspNet.SignalR.IRequest for the current connection.

connectionId <u>string</u>♂

The id of the connection sending the data.

data <u>string</u>♂

The payload sent to the connection.

Returns

<u>Task</u> ☑

A Task that completes when the receive operation is complete.

Class ServerTimeNotifierService

Namespace: <u>TestSR.API</u>
Assembly: TestSR.API.dll

public class ServerTimeNotifierService : BackgroundService, IHostedService, IDisposable

Inheritance

<u>object</u> ☑ ← <u>BackgroundService</u> ☑ ← ServerTimeNotifierService

Implements

<u>IHostedService</u> ☑, <u>IDisposable</u> ☑

Inherited Members

BackgroundService.Dispose() , BackgroundService.StartAsync(CancellationToken) , BackgroundService.StopAsync(CancellationToken) , BackgroundService.ExecuteTask , object.Equals(object) , object.Equals(object, object) , object.GetHashCode() , object.GetType() , object.MemberwiseClone() , object.ReferenceEquals(object, object) , object.ToString()

Constructors

ServerTimeNotifierService(ILogger < ServerTimeNotifierService > , IHubContext < ChatHub, IChatClient >)

public ServerTimeNotifierService(ILogger<ServerTimeNotifierService> logger,
IHubContext<ChatHub, IChatClient> context)

Parameters

logger <u>ILogger</u> < <u>ServerTimeNotifierService</u> >

context IHubContext ChatHub, IChatClient >

Methods

ExecuteAsync(CancellationToken)

This method is called when the <u>IHostedService</u> starts. The implementation should return a task that represents the lifetime of the long running operation(s) being performed.

protected override Task ExecuteAsync(CancellationToken stoppingToken)

Parameters

Triggered when <u>StopAsync(CancellationToken)</u> is called.

Returns

<u>Task</u> ☑

A <u>Task</u> that represents the long running operations.

Remarks

See Worker Services in .NET of for implementation guidelines.