# Namespace TS.GazeInteraction

### Classes

#### <u>GazeInteractable</u>

Represents an interactable object that responds to gaze-based interactions.

#### **GazeInteractor**

Manages gaze-based interactions with interactables.

#### **GazeReticle**

Visual representation of the point of interaction.

#### <u>ResourcesManager</u>

Loads assets from the Resources directory.

### **Enums**

#### <u>ReticleType</u>

Types of reticles (visual feedback) for gaze interactions.

# **Delegates**

#### GazeInteractable.OnActivated

Delegate for handling the activation event.

#### GazeInteractable.OnEnter

Delegate for handling the gaze enter event.

#### GazeInteractable.OnExit

Delegate for handling the gaze exit event.

#### **GazeInteractable.OnStay**

Delegate for handling the gaze stay event.

# Class GazeInteractable

Namespace: TS.GazeInteraction

Represents an interactable object that responds to gaze-based interactions.

```
public class GazeInteractable : MonoBehaviour
```

#### Inheritance

System.Object ← GazeInteractable

# **Fields**

### OnGazeActivated

public UnityEvent OnGazeActivated

### Field Value

UnityEvent

### OnGazeEnter

public UnityEvent OnGazeEnter

### Field Value

UnityEvent

### OnGazeExit

public UnityEvent OnGazeExit

### Field Value

UnityEvent

# OnGazeStay

```
public UnityEvent OnGazeStay
```

Field Value

UnityEvent

# OnGazeToggle

```
public UnityEvent<bool> OnGazeToggle
```

Field Value

UnityEvent < <u>bool</u> ♂ >

# **Properties**

## **IsActivable**

Indicates whether the interactable is activable.

```
public bool IsActivable { get; }
```

Property Value

bool ♂

## **IsActivated**

Indicates whether the interactable is currenlty activated.

```
public bool IsActivated { get; }
```

### Property Value

### **IsEnabled**

Indicates whether the interactable is enabled.

```
public bool IsEnabled { get; set; }
```

Property Value

<u>bool</u> ☑

# **Methods**

# Activate()

Activates the interactable and invokes the activated event.

```
public void Activate()
```

# Enable(bool)

Enables or disables the interactable game object.

```
public void Enable(bool enable)
```

**Parameters** 

```
enable <u>bool</u>♂
```

True to enable, false to disable.

# GazeEnter(GazeInteractor, Vector3)

Invokes the gaze enter event.

```
public void GazeEnter(GazeInteractor interactor, Vector3 point)
```

### **Parameters**

interactor <u>GazeInteractor</u>

point Vector3

# GazeExit(GazeInteractor)

Invokes the gaze exit event after the \_exitDelay duration.

```
public void GazeExit(GazeInteractor interactor)
```

### **Parameters**

interactor GazeInteractor

# GazeStay(GazeInteractor, Vector3)

Invokes the gaze stay event.

```
public void GazeStay(GazeInteractor interactor, Vector3 point)
```

### **Parameters**

interactor GazeInteractor

point Vector3

### **Events**

### **Activated**

Event triggered when the interactable is activated.

public event GazeInteractable.OnActivated Activated

# **Event Type**

**GazeInteractable.OnActivated** 

### Enter

Event triggered when the gaze enters the interactable.

public event GazeInteractable.OnEnter Enter

# Event Type

**GazeInteractable.OnEnter** 

### Exit

Event triggered when the gaze exits the interactable.

```
public event GazeInteractable.OnExit Exit
```

### **Event Type**

**GazeInteractable.OnExit** 

# Stay

Event triggered while the gaze remains on the interactable.

```
public event GazeInteractable.OnStay Stay
```

# Event Type

<u>GazeInteractable</u>.<u>OnStay</u>

# Delegate GazeInteractable.OnActivated

Namespace: TS.GazeInteraction

Delegate for handling the activation event.

public delegate void GazeInteractable.OnActivated(GazeInteractable interactable)

**Parameters** 

interactable <u>GazeInteractable</u>

The interactable object.

# Delegate GazeInteractable.OnEnter

Namespace: TS.GazeInteraction

Delegate for handling the gaze enter event.

public delegate void GazeInteractable.OnEnter(GazeInteractable interactable, GazeInteractor
interactor, Vector3 point)

### **Parameters**

interactable <u>GazeInteractable</u>

The interactable object.

interactor <u>GazeInteractor</u>

The gaze interactor.

point Vector3

The point where the gaze entered.

# Delegate GazeInteractable.OnExit

Namespace: TS.GazeInteraction

Delegate for handling the gaze exit event.

public delegate void GazeInteractable.OnExit(GazeInteractable interactable,
GazeInteractor interactor)

### **Parameters**

interactable <u>GazeInteractable</u>

The interactable object.

interactor <u>GazeInteractor</u>

The gaze interactor.

# Delegate GazeInteractable.OnStay

Namespace: TS.GazeInteraction

Delegate for handling the gaze stay event.

public delegate void GazeInteractable.OnStay(GazeInteractable interactable, GazeInteractor
interactor, Vector3 point)

### **Parameters**

interactable <u>GazeInteractable</u>

The interactable object.

interactor GazeInteractor

The gaze interactor.

point Vector3

The current gaze point.

# **Class GazeInteractor**

Namespace: <u>TS.GazeInteraction</u>

Manages gaze-based interactions with interactables.

public class GazeInteractor : MonoBehaviour

### Inheritance

 $System. Object \gets GazeInteractor$ 

# Class GazeReticle

Namespace: TS.GazeInteraction

Visual representation of the point of interaction.

```
public class GazeReticle : MonoBehaviour
```

#### Inheritance

System.Object ← GazeReticle

### **Methods**

# Enable(bool)

Toggles the visibility of the reticle GameObject.

```
public void Enable(bool enable)
```

### **Parameters**

enable <u>bool</u>♂

Whether to enable or disable the reticle.

# SetInteractor(GazeInteractor)

Assigns the GazeInteractor using this reticle.

```
public void SetInteractor(GazeInteractor interactor)
```

### **Parameters**

interactor GazeInteractor

The GazeInteractor to associate with this reticle.

# SetProgress(float)

Updates the progress visual indicator.

```
public void SetProgress(float progress)
```

### **Parameters**

```
progress <u>float</u>♂
```

The progress value (0 to 1) to display.

# SetTarget(RaycastHit)

Assigns the current hit point to adjust the reticle position and rotation.

```
public void SetTarget(RaycastHit hit)
```

### **Parameters**

hit RaycastHit

The RaycastHit containing information about the hit point.

# SetType(ReticleType)

Sets the type of reticle (visible or invisible).

```
public void SetType(ReticleType type)
```

### **Parameters**

type ReticleType

The desired reticle type.

# Class ResourcesManager

Namespace: TS.GazeInteraction

Loads assets from the Resources directory.

```
public class ResourcesManager : MonoBehaviour
```

#### Inheritance

System.Object ← ResourcesManager

# **Fields**

FILE\_PREFAB\_RETICLE

```
public const string FILE_PREFAB_RETICLE = "gaze_reticle"
```

Field Value

<u>string</u> <a>□</a>

# **Methods**

# GetPrefab(string)

Loads and returns the asset specified in file from the Resources directory.

```
public static GameObject GetPrefab(string file)
```

### **Parameters**

file <u>string</u>♂

Name of the asset to load. Use one of the constants.

Returns

# GameObject

Returns the loaded GameObject.

# **Enum ReticleType**

Namespace: TS.GazeInteraction

Types of reticles (visual feedback) for gaze interactions.

```
public enum ReticleType
```

# **Fields**

Default = 0

Visible only on detection.

Invisible = 2

Always invisible.

Visible = 1

Always visible.