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Namespace Uralstech.UXR.Utilities

Classes

<u>SimpleCameraFollower</u>

Simple follow script which allows the follower to be offset from the player.

<u>SimpleMovementController</u>

Simple movement controller using Meta Quest input.

TextInputField

Text input field compatible with OVRVirtualKeyboard input.

<u>TextInputFieldVoiceHandler</u>

Sister-script to <u>TextInputField</u> which adds support for voice typing through Meta's Voice SDK.

<u>XRKeyboardManager</u>

Wrapper class for Meta's Virtual Keyboard.

Class SimpleCameraFollower

Namespace: <u>Uralstech.UXR.Utilities</u>

Simple follow script which allows the follower to be offset from the player.

```
public class SimpleCameraFollower : MonoBehaviour
```

Inheritance

System.Object ← SimpleCameraFollower

Fields

DistanceOffset

Z distance offset from the player.

```
public float DistanceOffset
```

Field Value

float

HeightOffset

Height (Y) offset from the player.

```
public float HeightOffset
```

Field Value

float

MovementDelayDistance

Delay before starting to follow player position.

```
public float MovementDelayDistance
```

Field Value

float

MovementSpeed

Speed at which the object follows the player.

```
public float MovementSpeed
```

Field Value

float

RotationDelayAngle

Delay before starting to follow player rotation.

```
public float RotationDelayAngle
```

Field Value

float

RotationOffset

Rotation offset from the player.

```
public Vector3 RotationOffset
```

Field Value

RotationSpeed

Speed at which the object rotates to match the player's head rotation.

```
public float RotationSpeed
```

Field Value

float

Methods

LateUpdate()

```
protected void LateUpdate()
```

Start()

```
protected void Start()
```

Class SimpleMovementController

Namespace: <u>Uralstech.UXR.Utilities</u>

Simple movement controller using Meta Quest input.

public class SimpleMovementController : DontCreateNewSingleton<SimpleMovementController>

Inheritance

System.Object ← SimpleMovementController

Fields

MovementEnabled

Use this boolean to toggle movement.

public bool MovementEnabled

Field Value

bool

MovementSpeed

The movement speed.

public float MovementSpeed

Field Value

float

RotationSnapAngle

Snap turn angle.

public float RotationSnapAngle

Field Value

float

Methods

FixedUpdate()

protected void FixedUpdate()

Start()

protected void Start()

Class TextInputField

Namespace: <u>Uralstech.UXR.Utilities</u>

Text input field compatible with OVRVirtualKeyboard input.

```
public class TextInputField : Selectable, IPointerClickHandler,
OVRVirtualKeyboard.ITextHandler
```

Inheritance

System.Object ← TextInputField

Implements

IPointerClickHandler, ITextHandler

Fields

OnFieldDeselected

Called when the input field has been deselected.

public UnityEvent OnFieldDeselected

Field Value

UnityEvent

OnFieldEdited

Called when the input field has been edited.

public UnityEvent<string> OnFieldEdited

Field Value

UnityEvent<string>

OnFieldSelected

Called when the input field has been selected.

```
public UnityEvent OnFieldSelected
```

Field Value

UnityEvent

Properties

IsFocused

```
public bool IsFocused { get; }
```

Property Value

bool

OnTextChanged

```
public Action<string> OnTextChanged { get; set; }
```

Property Value

Action<string>

SubmitOnEnter

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

Property Value

bool

Text

The text entered by the user.

```
public string Text { get; }
```

Property Value

string

onValueChanged

```
[Obsolete("Use TextInputField.OnFieldEdited instead.")]
public UnityEvent<string> onValueChanged { get; }
```

Property Value

UnityEvent<string>

text

```
[Obsolete("Use TextInputField.Text instead.")]
public string text { get; }
```

Property Value

string

Methods

AppendText(string)

```
public void AppendText(string addedText)
```

Parameters

addedText string

ApplyBackspace()

public void ApplyBackspace()

MoveTextEnd()

public void MoveTextEnd()

OnCanvasGroupChanged()

protected override void OnCanvasGroupChanged()

OnDestroy()

protected override void OnDestroy()

OnDisable()

protected override void OnDisable()

OnPointerClick(PointerEventData)

public virtual void OnPointerClick(PointerEventData eventData)

Parameters

SetText(string)

Sets the text in the field.

```
public void SetText(string text)
```

Parameters

text string

The new text.

SetTextWithoutNotify(string)

Sets the text in the field, without calling **OnFieldEdited**.

```
public void SetTextWithoutNotify(string text)
```

Parameters

text string

The new text.

Submit()

public void Submit()

Class TextInputFieldVoiceHandler

Namespace: <u>Uralstech.UXR.Utilities</u>

Sister-script to TextInputField which adds support for voice typing through Meta's Voice SDK.

public class TextInputFieldVoiceHandler : MonoBehaviour

Inheritance

System.Object ← TextInputFieldVoiceHandler

Remarks

Requires a DictationService somewhere in the scene.

Fields

StartRecordingIcon

Optional, icon to set for <u>ToggleButtonIcon</u> while not recording the user's audio.

public Sprite StartRecordingIcon

Field Value

Sprite

StopRecordingIcon

Optional, icon to set for <u>ToggleButtonIcon</u> while recording the user's audio.

public Sprite StopRecordingIcon

Field Value

Sprite

ToggleButton

The button to toggle voice typing.

```
public Button ToggleButton
```

Field Value

Button

ToggleButtonIcon

Optional, the icon for <u>ToggleButton</u> that will be changed based on the current recording state.

```
public Image ToggleButtonIcon
```

Field Value

Image

Properties

IsRecording

Is the user currently voice typing?

```
public bool IsRecording { get; }
```

Property Value

bool

Methods

Start()

protected void Start()

Class XRKeyboardManager

Namespace: <u>Uralstech.UXR.Utilities</u>

Wrapper class for Meta's Virtual Keyboard.

```
public class XRKeyboardManager : Singleton<XRKeyboardManager>
```

Inheritance

System.Object

XRKeyboardManager

Fields

InitialDistance

The initial distance of the keyboard, when shown, from the player's forward direction.

public float InitialDistance

Field Value

float

InitialPosition

The initial position of the keyboard, when shown, relative to the player.

public Vector3 InitialPosition

Field Value

Vector3

InitialRotation

The initial rotation of the keyboard, relative to the player's forward direction.

public Vector3 InitialRotation

Field Value

Vector3

KeyboardInstance

The current instance of the OVRVirtualKeyboard.

public OVRVirtualKeyboard KeyboardInstance

Field Value

OVRVirtualKeyboard

KeyboardPrefab

OVRVirtualKeyboard prefab to spawn when needed.

public OVRVirtualKeyboard KeyboardPrefab

Field Value

OVRVirtualKeyboard

LeftControllerDirectTransform

The "direct" transform of the left controller, for example: OVRCameraRig > OVRInteraction > OVRControllers > LeftController > ControllerInteractors > ControllerPokeInteractor > PokeLocation.

public Transform LeftControllerDirectTransform

Field Value

Transform

Remarks

You can add a tracked custom interactor to use as the direct transform:

- Add a new GameObject with a ControllerRef, ControllerPointerPose and ActiveStateTracker under OVRInteraction > OVRControllers > LeftController > ControllerInteractors.
- Drag LeftController into the ControllerRef's "Controller" field.
- Set the "Active State" and "Controller" fields in the ActiveStateTracker and ControllerPointerPose to the ControllerRef.
- Set the Z value in the "Offset" field of the ControllerPointerPose to 0.01.
- (Optional) Enable "Include Children As Dependents" in the ActiveStateTracker and add a sphere as a child of the GameObject.

LeftControllerRootTransform

The root transform of the left controller, for example: OVRCameraRig > OVRInteraction > OVRControllers > LeftController.

public Transform LeftControllerRootTransform

Field Value

Transform

LeftOVRHand

The OVRHand script for left hand input.

public OVRHand LeftOVRHand

Field Value

OVRHand

NormalHandMaterial

The hand tracking material when the keyboard is not being used.

public Material NormalHandMaterial

Field Value

Material

OnKeyboardHidden

Called when the keyboard is destroyed.

public UnityEvent OnKeyboardHidden

Field Value

UnityEvent

OnKeyboardShown

Called when the keyboard is created.

public UnityEvent OnKeyboardShown

Field Value

UnityEvent

PlayerHead

The player Transform. The keyboard will spawn relative to this object's position. Defaults to first OVRCameraRig found in the scene.

public Transform PlayerHead

Field Value

Transform

RightControllerDirectTransform

The "direct" transform of the right controller, for example: OVRCameraRig > OVRInteraction > OVRControllers > RightController > ControllerInteractors > ControllerPokeInteractor > PokeLocation.

public Transform RightControllerDirectTransform

Field Value

Transform

Remarks

You can add a tracked custom interactor to use as the direct transform:

- Add a new GameObject with a ControllerRef, ControllerPointerPose and ActiveStateTracker under OVRInteraction > OVRControllers > RightController > ControllerInteractors.
- Drag RightController into the ControllerRef's "Controller" field.
- Set the "Active State" and "Controller" fields in the ActiveStateTracker and ControllerPointerPose to the ControllerRef.
- Set the Z value in the "Offset" field of the ControllerPointerPose to 0.01.
- (Optional) Enable "Include Children As Dependents" in the ActiveStateTracker and add a sphere as a child of the GameObject.

Right Controller Root Transform

The root transform of the right controller, for example: OVRCameraRig > OVRInteraction > OVRControllers > RightController.

public Transform RightControllerRootTransform

Field Value

Transform

RightOVRHand

The OVRHand script for right hand input.

public OVRHand RightOVRHand

Field Value

OVRHand

TypingHandMaterial

The hand tracking material when the keyboard is being used.

public Material TypingHandMaterial

Field Value

Material

UseDifferentMaterialsForHandsWhenTyping

Should the hand tracking material be changed depending on if the keyboard is being used?

public bool UseDifferentMaterialsForHandsWhenTyping

Field Value

bool

Properties

CurrentListener

The object currently bound to the keyboard.

```
public OVRVirtualKeyboard.ITextHandler CurrentListener { get; }
```

Property Value

ITextHandler

Methods

RemoveListener(ITextHandler)

Unbinds the given object from the keyboard.

```
public void RemoveListener(OVRVirtualKeyboard.ITextHandler listener)
```

Parameters

listener | TextHandler

The object to unbind from the keyboard. Must be the same as **CurrentListener**.

SetListener(ITextHandler)

Binds the given object to the keyboard.

```
public void SetListener(OVRVirtualKeyboard.ITextHandler listener)
```

Parameters

listener | TextHandler

The object to bind to the keyboard.

Start()

```
protected void Start()
```