Using Animation Callback Functions

Animation Event Listener

If an application shall be notified about events of the triggered animation, a listener needs to be implemented. The class Candera::Animation::AnimationPlayerListener allows to listen to a versatile set of animation events like:

- OnStartAntimation,
- OnResumeAnimation,
- OnPauseAnimation,
- OnDirectionChange,
- OnStopAnimation,
- OnFinishAnimation,
- OnPastEnd.

Implement AnimationPlayerListener Functions

In order to register an AnimationPlayerListener to an AnimationPlayer simply derive from Candera::Animation::AnimationPlayerListener and override pure virtual functions with custom code.

In the example below the 3D application derives from AnimationPlayerListener and overrides the listener's functions.

```
class AnimationPlayerWidget : public CgiWidget3D, public Candera::Animation::AnimationPlayerList
```

```
        virtual void OnPastEnd(Candera::Animation::AnimationPlayerBase
* animationPlayer, Candera::Int32 completedIterationsCount);
        virtual void OnStartAnimation(Candera::Animation::AnimationPlayerBase
* animationPlayer);
        virtual void OnStopAnimation(Candera::Animation::AnimationPlayerBase* animationPlayer);
        virtual void OnFinishAnimation(Candera::Animation::AnimationPlayerBase
* animationPlayer);
        virtual void OnResumeAnimation(Candera::Animation::AnimationPlayerBase
* animationPlayer);
```

```
        virtual void OnPauseAnimation(Candera::Animation::AnimationPlayerBase
* animationPlayer);
```

Use Candera::Animation::AnimationPlayerBase::AddAnimationPlayerListener and Candera::Animation::AnimationPlayerBase::RemoveAnimationPlayerListener for registering or removing a listener.

```
        static_cast<void>(m_animPlayer->AddAnimationPlayerListener(this));
```

```
        static_cast<void>(m_animPlayer->RemoveAnimationPlayerListener(this));
```

Now the application is notified about all animation listener events it has implemented. For example when implementing the Candera::Animation::AnimationPlayerListener::OnStartAnimation, the application is notified about all started animations.

```
void AnimationPlayerWidget::OnStartAnimation(Animation::AnimationPlayerBase* /* animationPlayer
{
    // do something when an animation has started
}
```

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