CINEMATIC STUDIES

Bringing a scene to life using Animations







上海科技大学
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CLASS OVERVIEW

- Assignment Review & Feedback
- Setting up an Animated Character
- Rootmotion vs. controlled Movement
- Animation Blending
- Animation Events
- Animation timing practice
- Q&A





- 1. Showcase your assignment
- 2. Receive feedback
- 3. Take note of feedback



- Go to Mixamo
- Choose a Character
- Get the following 4 animations: fight idle, run, punch or kick, flying death
- Integrate character & animations in Unity
  - Model & Animations: Rig → Humanoid
  - Animations: Rig → Use avatar of Model
- Set up 2 characters & timeline

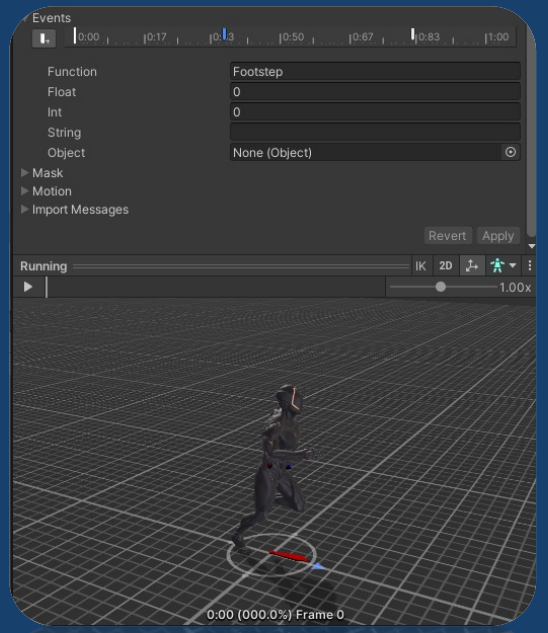


- What is Root Motion?
- Root Motion is **the motion of a character that is based off animation from the root bone of the skeleton**.



- Drag in-scene Character onto Timeline ➔ Animation track
- Place character at starting point in scene
- Notice that animation plays from 0,0,0 position
  - Timeline: Track Offsets > Apply Scene Offset
- Chain 2 animations together
- Notice offset between 2 animations
  - Timeline: Match Offsets to Previous Clip

- Match every animation with a corresponding sound in the Timeline
- Footstep sound manual setup for every st[illegible]
- Use animation events to trigger code fu[illegible]




```
public class AnimSoundHandler : MonoBehaviour
{
    // AudioSource to play the Sound
    AudioSource m_audioSource;

    // List of sounds accessible in the Editor
    [SerializeField]
    List<AudioClip> m_footstepSounds = new List<AudioClip>();

    void Awake()
    {
        // Store the AudioSource
        m_audioSource = GetComponent<AudioSource>();
    }

    public void Footstep()
    {
        // Calculate number of Footstep Sounds setup
        int numFootstepSounds = m_footstepSounds.Count;

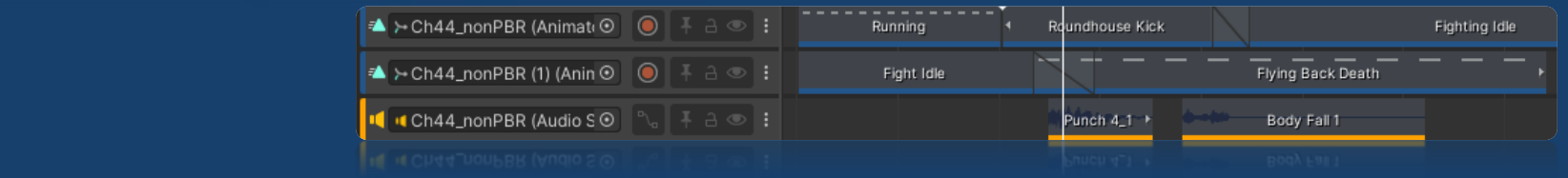
        // Pick a random Footstep index from the List
        int randomFootstepIndex = Random.Range(0, numFootstepSounds - 1);

        // Play the random Footstep sound
        m_audioSource.PlayOneShot(m_footstepSounds[randomFootstepIndex]);
    }
```



Practice:

- Precise Animation Setup
- Animation Blending
- Playing Sound clips at exact moments



- Do you have any questions related to the topics mentioned?

