



# Autodesk MotionBuilder 2013

## Programming in MotionBuilder || Focusing on Python

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Module 7



# Characters

## Module 7

# Module's Agenda

- Takes and Layers
- Common Character Workflows
- Another automatic way to plot
- Miscellaneous Character Information
- Character Poses
- Assignment

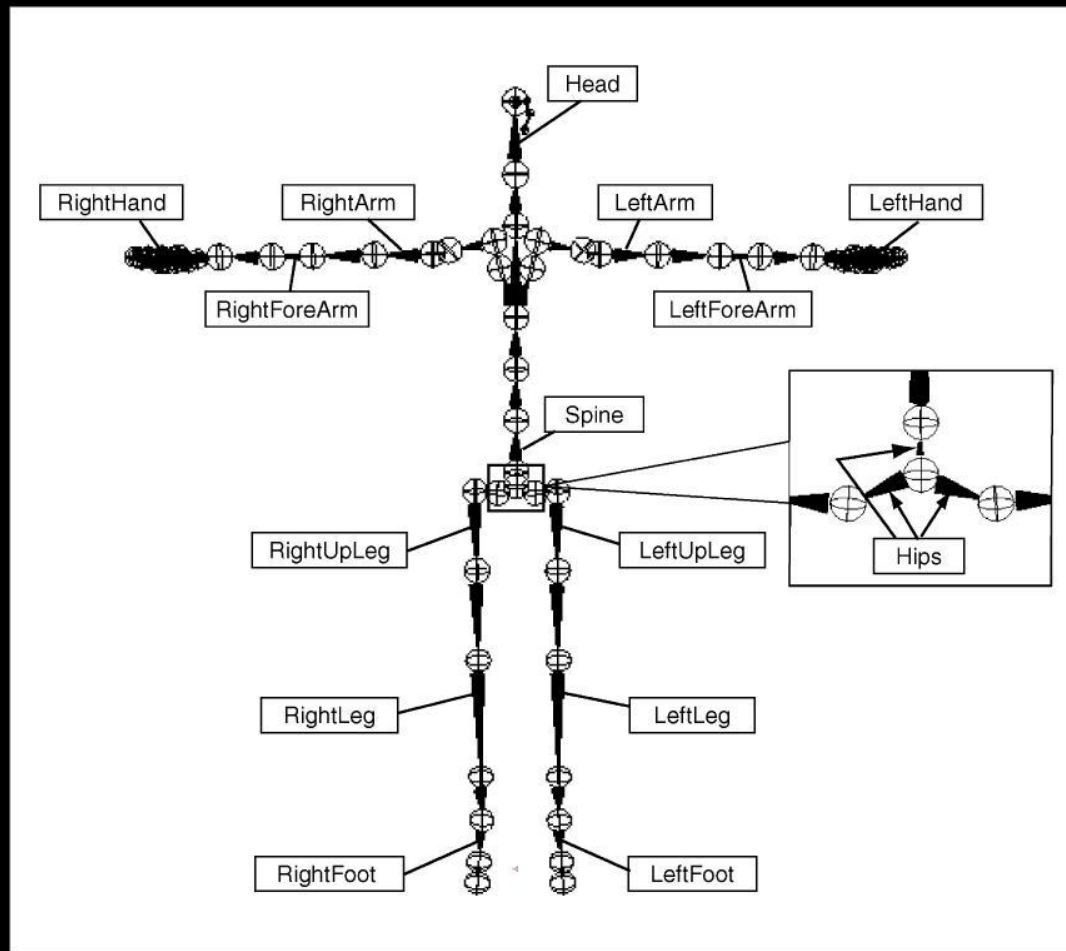
# Takes and Layers

- A take is a container for animation in a scene, it stores data about animation for objects, and you can plot animation onto takes.
- A layer is a level of animation in a scene.
- FBTake class

# Character Workflows

- Characterizing your model
  - Character Mapping
- Control rigs
- Plotting your animation to your control rig or model's skeleton
- FBCharacter class

# Bone Naming Conventions



# Retarget Animation

- Retargeting is the process of taking animation developed for one character and using it to drive another character without plotting (or baking) the animation onto either character's skeleton.
- You can retarget both keyframe animation and motion data.
- Animation can be retargeted from one characterized character to another in the same scene, or you can save takes of animation to be retargeted onto any character.

# Another way to plot

- We can use FileBatch in the class FBApplication
- This allows for more automation and less control



# Misc. Character Information

- Bounding Box of a Character
- Copy Cloning
- Character Extensions

# Character Poses

- To work with Character Poses, we need to use the class `FBCharacterPose` not `FBPose`
- Setting Character Pose Options, use `FBCharacterPoseOptions`

# Assignment

- This assignment is a continuation of day three's 'BatchLoadingFiles.py'
- Every time we merge in an animation file into our character scene, we now want to:
  - Set our input for our Character to the character we just merged in
  - Set our input type for our character to character input
  - Set our character's active property to true
  - Set up the plot option
  - Then plot the animation to our control rig on our character

# Next Agenda

- Animation Nodes
- Keying Animation
- FCurve
- Time
- Player Control (aka Transport Control)
- Filters
- Assignment