VRSpace.org - Feature #131

save/copy character animations

06/16/2022 02:06 PM - Josip Almasi

Status:	Closed	**Start date:**	06/16/2022
Priority:	Normal	**Due date:**	
Assignee:	Josip Almasi	**% Done:**	0%
Category:		**Estimated time:**	0.00 hour
Target version:		**Spent time:**	0.00 hour

Description

Character has a number of AnimationGroups, each contains a number of TargetedAnimations.
Each TargetedAnimation contains an Animation and a target, and the target is a TransformNode associated to a Bone.

Avatar class contains names all known bones in bonesProcessed array, and Skeleton class has getBoneIndexByName method.
That's not sufficient information to map these to Avatar.body structure, e.g. recognize that a specific animation targets right leg.

But once that's in place, a partial animation group from any character can be applied to any other character.
Bones that aren't recognized won't be animated, but we need to see how it looks like.

It's easier of course when a rig is known, e.g. ready player me avatars have the same rig, so animations can be easily applied to any character, and in full, without any skeleton analysis. But there's no animations for these avatars available.
They do support mixamo animations:
https://docs.readyplayer.me/ready-player-me/integration-guides/unreal-engine-4/mixamo-animations

So there's two use cases: skeleton matches exactly, or does not.
Thus, whatever we save, has to include original Bone/TransformNode name, and optional identified bone info.

Avatar.processAnimations() method is starting point, currently used only in avatar-test.html.

Related issues:

Related to Support #133: ready player me avatar animations	**Closed**	**06/17/2022**

History

#1 - 06/21/2022 09:19 AM - Josip Almasi

- Related to Support #133: ready player me avatar animations added

#2 - 06/22/2022 12:55 PM - Josip Almasi

- Status changed from New to In Progress

- Assignee set to Josip Almasi

#3 - 06/23/2022 04:01 PM - Josip Almasi

So I got it copied from https://redmine.vrspace.org/attachments/download/34/animationRP16.glb to some other characters.
Pushed to copy-animations branch.

avatar-test.html now has save button once animation is selected. Save json somewhere under content, so it gets published.
On top of animations list there's an url to load that json.

This is going to take some more time to be useful.

#4 - 06/25/2022 12:08 PM - Josip Almasi

- Status changed from In Progress to Resolved

RPM avatars are quite functional now.
And a bit extra:
- movement activates walk animation if available
- stopping activates idle animation if available
- chat may activate animation, if a typed word matches animation name

Copying animations in general case doesn't make much sense, due to different skeleton structure, and bone orientation even if the structure is the same.

#5 - 06/28/2022 05:36 PM - Josip Almasi

- Status changed from Resolved to Closed