RHVR library – user guide

Core class

rhvr.Core() – returns instance of Core object, which is responsible for updating visualization if there's new data, assuming existence of Visualisation object instance

init() – called upon Core object, every 0.1 seconds checks if there are data to visualize, if so, calls update function upon Visualisation object

Visualisation class

rhvr.Visualisation(options) – returns instance of Visualisation object

Parameter options is object key and value pairs where:

- container – HTML element containing visualization
- gltgModel – URL of 3D model
- specModel – object specifically defined for particular model

init() – called upon Visualisation object, sets up a scene, loads 3D model and adds it to the scene

getAnimationByName(animName) – returns objects of Visualisation object, which are being animated; returned object are defined by names passed as animName parameter

updateTimeScale(anims,timeScale) – chanes property timescale of animated objects passed to function as parameter anims

get3DObjectByName(object3D) – returns 3D object of the 3D model, defined by name passed to the function as parameter object3D

jumpToAnimationPercent(anims,percent) – if the animation is playing, it stops it and jumps to the animation cycle percentage defined by percent parameter; animation is defined by name

getCameraByName(camName) – returns camera object specified by name, passed to function as parameter camName

specModel object

- contains two functions init() and update() specific for particular 3D model

init(visItem) – called when Visualisation object is updated for the first time

update(json,visItem) – called at every update of Visualisation object

visItem – reference to the Visualisation object

json – JSON object containing real-time data required for visualization