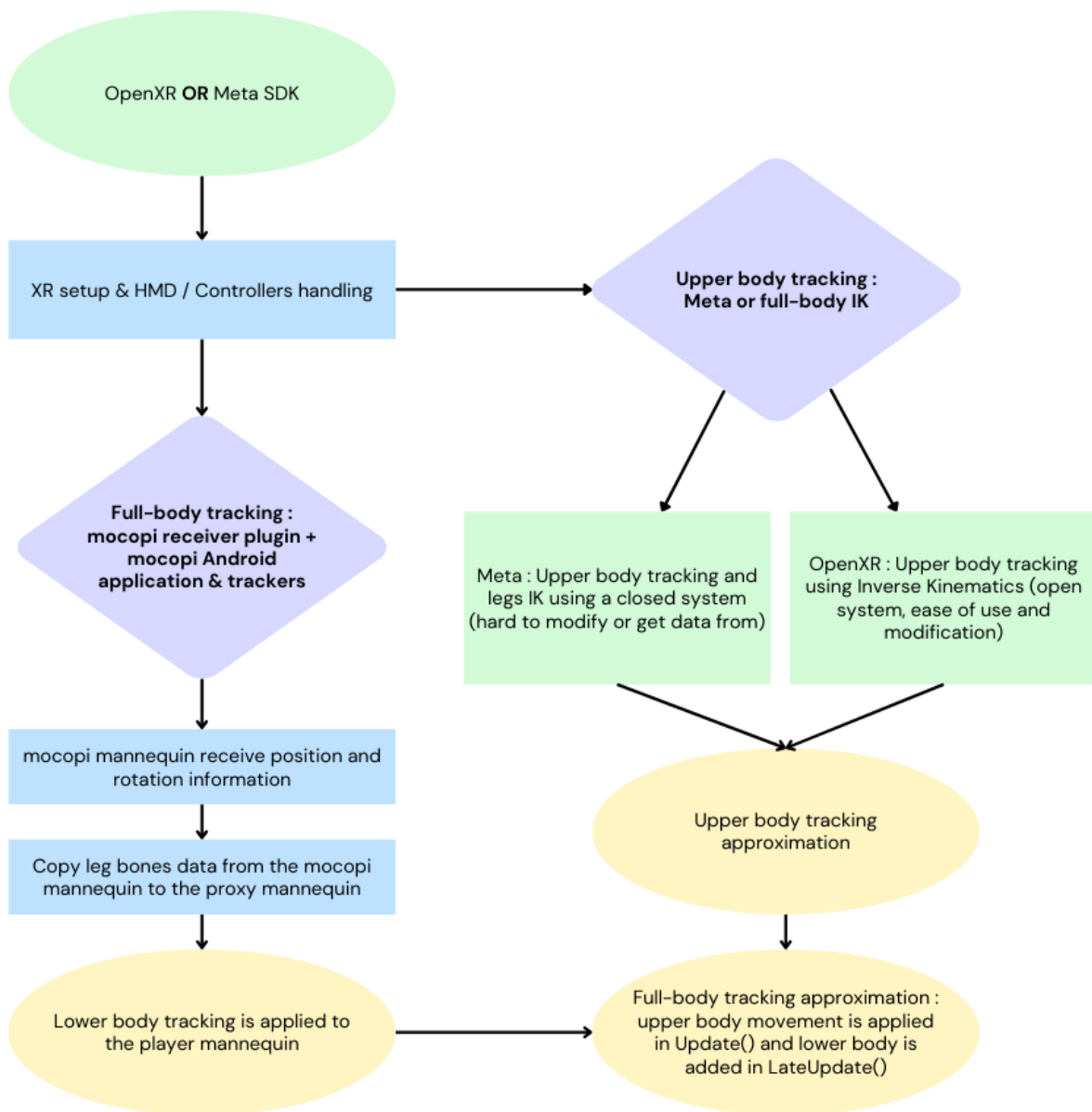


Personal weekly report - 17/07 to 24/07

I have now refactored most of the application code and reworked the project to use OpenXR instead of the Meta SDK as the default API and XR subsystem. The following diagram resumes the 2 different approaches :

XR handling diagram



The Kata animations can be followed and completed although they don't pause for now, the Kata is playing once, you then have to wait for it to finish and I still use debug to show the frames where the player's position is valid. The animations can now be imported directly to Unity from Blender and only require to be exported to .fbx for Unity to open them.

I recently discovered a Unity plugin allowing for .bvh animations to be loaded and recorded in Unity at runtime and I will again try to record the katas from the Unity application. The idea would be to record the animations inside a separate recording application and then load them from the game application via a .bvh file utility. If that is possible, this will allow for the skeletons to be always compatible and get better accuracy in the arms and finger tracking thanks to the headset's hand tracking capabilities.

I also started to create a new player character to use instead of the Mixamo one. If possible I would like it to be finished by the end of this week and test the animation save/load to the headset using the BVH plugin mentioned earlier. For next week I will finish the player character and the kata scene to be ready for the presentation on the 1st of August.

I'm working the new player model from the original Mixamo skeleton to ensure the correct scale and skeletal mesh compatibility

