MIREVI MotionHub

MIREVI MotionHub (MMH) is a middleware for merging body tracking data from different systems into one coordinate space in real-time in order to combine and use their individual benefits.

MMH offers support for several body tracking systems and encompasses a game engine plug-in that connects the MMH with Unity by means of a standardized protocol. The plug-in allows for the usage of a single type of skeleton for any body tracking system and, therefore, facilitates the switch between different body tracking systems during app development significantly.

MotionHub is developed at the research lab MIREVI from the University of Applied Sciences Düsseldorf within the scope of the project HIVE.

Acknowledgements

The project HIVE is sponsored by the German Federal Ministry of Education and Research (BMBF) under the project number **16SV8182**.

Requirements

Currently MMH is only supported on Microsoft Windows operating systems.

- This version of MotionHub was tested on Microsoft **Windows 10 64 bit**.

Minimum Computer Requirements

- Seventh Gen Intel i5 Processor
- NVidia GeForce GTX 1070
- 4 GB Memory
- 700 MB Storage

Documentation

The developer, API and user documentation including a class collaboration diagram can be found in the `doc` folder.

Supported Systems

MMH currently supports the listed body tracking systems.

Supported Systems
Azure Kinect

Supported Systems
OptiTrack

Setup and Building

The CMake system is used to generate project files and for downloading all required dependencies. Please use the `CMakeLists.txt` file for generating.

- MMH is developed with Microsoft **Visual Studio 2017**. *(CMake has only been tested with this IDE version.)*

Please Note that we use Qt Framework for the UI. To build the project you need the Qt Visual Studio Tools and for editing Qt `.ui` files you need Qt Designer.

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Build with

- Qt
- Eigen
- OSC Pack
- TinyXML

License

Pending