

MIREVI MotionHub

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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

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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
- 6 GB 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](#).

Authors

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Build with

- [Qt](#)
- [Eigen](#)
- [OSC Pack](#)
- [TinyXML](#)

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Pending