Unity motion simulator

# Specification

The purpose of the application is to simulate both a motion capturing and a motion controlling system. It can be used standalone, to capture the motion of a character, or to control a character, and also to control the character by the captured data. And also, it can be used with real devices. From the data collected from a real motion capture system, the controlled character shall follow the movement. Furthermore, the captured movement of the character shall be available to control a real-world robot.

# Use cases



* **Control virtual character:** The user can control a virtual character in three different ways, which are the following.
  + **Control with commands:** The character can be controlled with commands coming from the user input.
  + **Control with virtually collected data:** The character can be controlled with motion data, that was collected in the application.
  + **Control with real collected data:** The character can be controlled with data, that was collected in the real world, using a motion capture suit.
* **Capture the motion of virtual character:** Collect the movement data of a virtual character.
* **Control real world character:** With the data collected from a virtual character, control the movement of a real-world agent.