

Lesson Eight: The Complete Script



Lesson Eight: The Complete Script

The possibilities are endless with Myo. Have an idea for a project? The [Myo Developer forum](#)¹ is packed with new projects and ideas that developers around the world have for Myo.

Below, we've included a bit more information about using your Myo armband that you may find useful. However, if you are looking for more detail, be sure to check out our [developer blog](#)² and continue to build the future of gesture control with the Myo armband. We have also included the completed script which includes everything we have learned in these lessons.

activeAppName

activeAppName is called when Myo Connect wants to know what app your script is currently controlling. All you need to do for this is store the app title that you get from **onForegroundWindowChange** once you detect an app you want to control, and return it in **activeAppName()**. You can also return **scriptTitle** if it's the same name as the application and you only control one.

The idea with **onActiveChange** is that it will get called with **false** when your script is no longer active. If there is any cleanup you need to do at that point, this is where you put it. This function also gets called with **true** when your script becomes active, but since you triggered that in **onForegroundWindowChange** you can do whatever setup you need in there.

onLock and onUnlock

If you need to do something when the armband is locked or unlocked, do it in here. If you want to create a script where the armband is unlocked with double tap and then not locked again until the user double taps again, you would implement **onUnlock** so it calls **myo.unlock("hold")**. In the following example, we are replicating a mouse control script in which we can double tap to toggle the mouse on and double tap again to turn it off.

```
function onUnlock()  
  myo.unlock("hold")  
  myo.controlMouse(true)  
end
```

The Completed Script

```
scriptId = 'com.thalnic.examples.myfirstscript'
scriptTitle = "My First Script"
scriptDetailsUrl = ""
    locked = true
    appTitle = ""

function onForegroundWindowChange(app, title)
    myo.debug("onForegroundWindowChange: " .. app .. ", " .. title)
    appTitle = title
    return true
end

function activeAppName()
    return appTitle
end

function onPoseEdge(pose, edge)
    myo.debug("onPoseEdge: " .. pose .. ": " .. edge)
    pose = conditionallySwapWave(pose)

    if (pose ~= "rest" and pose ~= "unknown") then
        myo.unlock(edge == "off" and "timed" or "hold")
    end

    local keyEdge = edge == "off" and "up" or "down"

    if (pose == "waveOut") then
        onWaveOut(keyEdge)
    elseif (pose == "waveIn") then
        onWaveIn(keyEdge)
    elseif (pose == "fist") then
        onFist(keyEdge)
    elseif (pose == "fingersSpread") then
        onFingersSpread(keyEdge)
    end
end
```

```

end

function onWaveOut(keyEdge)
  myo.debug("Next")
  --myo.vibrate("short")
  myo.keyboard("tab", keyEdge)
end

function onWaveIn(keyEdge)
  myo.debug("Previous")
  --myo.vibrate("short")
  --myo.vibrate("short")
  myo.keyboard("tab", keyEdge, "shift")
end

function onFist(keyEdge)
  myo.debug("Enter")
  --myo.vibrate("medium")
  myo.keyboard("return", keyEdge)
end

function onFingersSpread(keyEdge)
  myo.debug("Escape")
  --myo.vibrate("long")
  myo.keyboard("escape", keyEdge)
end

function conditionallySwapWave(pose)
  if myo.getArm() == "left" then
    if pose == "waveIn" then
      pose = "waveOut"
    elseif pose == "waveOut" then
      pose = "waveIn"
    end
  end
  return pose
end

```

Footnotes

[1] <https://developer.thalmic.com/forums>

[2] <http://developerblog.myo.com>

