



Erasmus+

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## **TECHNICAL GUIDE**

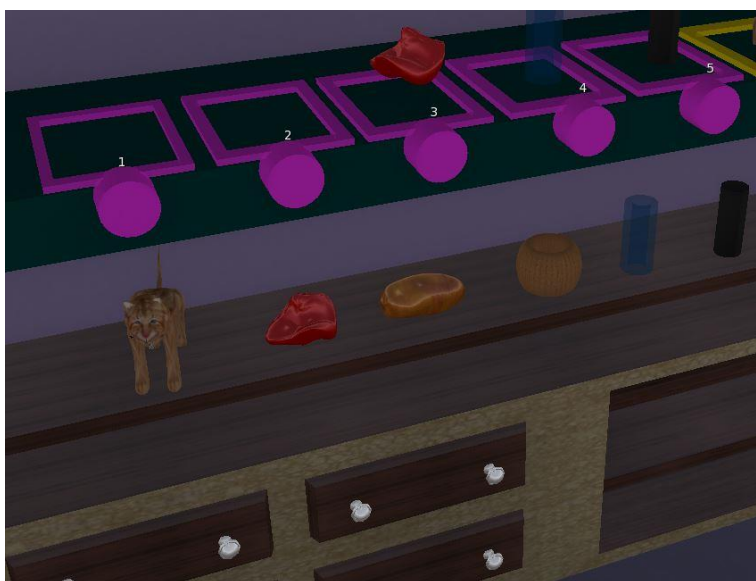
### Creating a sorting activity

## 1. Introduction

Sorting activities are a great way to assess the student's understanding about some concepts. You can use a sorting activity regarding the correct order of the steps of some complicated process, or to have students order a set of items based on some specific characteristic.

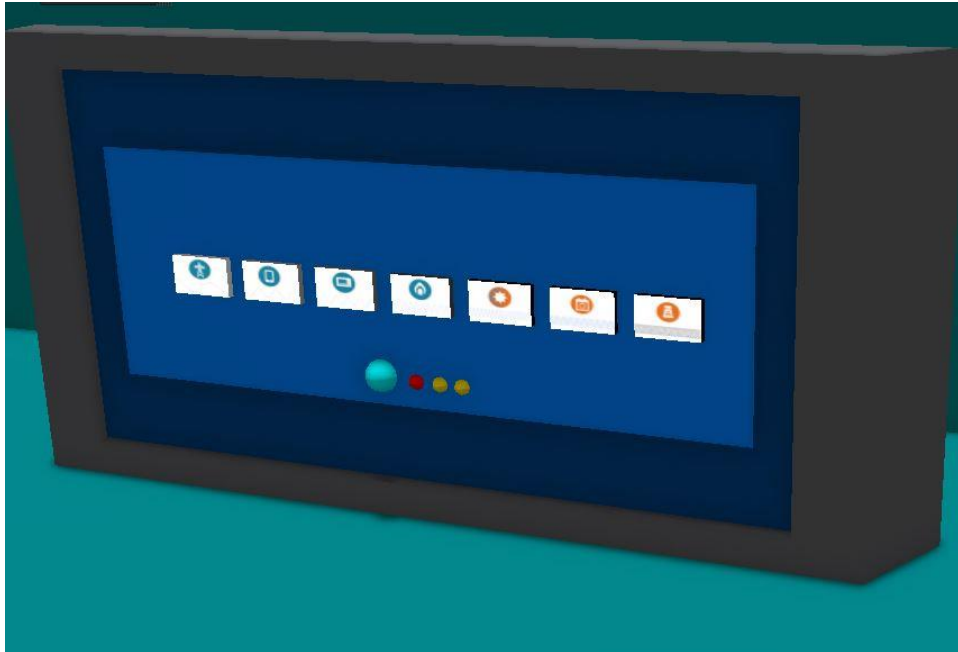
In WOP we have used two different approaches:

- In the first one, the objects are initially in a random order and the student needs to touch each one with the correct order. If the correct object is clicked, it moves to another row below the first one and you gradually produce the correct order of the objects. If the object clicked is not the next one in the correct order, a counter is increased and you need to try again. After three mistakes you have to repeat the sorting from the beginning. There are three led prims that lighten up when the user makes mistakes and a reset button to restart the activity.
- In the second approach, the objects are again in a random order and there is a second row with positions for the correct order that are initially empty. The student needs to first click one of the positions to make it the currently selected one and then select one of the objects to move it to the selected position. When all positions have an object the student clicks a button and validation takes place.



## 2. Technical Details

For the first approach described in the previous section you need a linked set of items. When you link the various parts into a single linked object, the order you selected them will determine their Link Number.



Script in the ROOT object will control the activity. You need three lists in the beginning of the script where you can use the Link Numbers of the child prims to specify which are the cards, what is their correct order, and which are the led prims. The script can use a 'link\_message' event that is triggered by the child card prims when they are clicked. Uses 'IISetLinkPrimitiveParamsFast' to change the position of the cards.

The script you put in each of the child card prims, uses 'IIMessageLinked' to send a message to the ROOT object when it is clicked. The message contains the object's link number (IIGetLinkNumber).

The script in the led prims, changes their color with 'lISetColor' when they receive a message from the ROOT prim. The reset button script just sends a message to the ROOT prim with 'lIMessageLinked'.

You can find the scripts we use and more instructions in the "Scripts Section" here:  
<http://aigroup.ceid.upatras.gr/wop-oer/scripts.html>

### 3. References/Links

<http://aigroup.ceid.upatras.gr/wop-oer/scripts.html>

[http://wiki.secondlife.com/wiki/LSL\\_Portal](http://wiki.secondlife.com/wiki/LSL_Portal)

[http://wiki.secondlife.com/wiki/Touch\\_start](http://wiki.secondlife.com/wiki/Touch_start)

<http://wiki.secondlife.com/wiki/LIMessageLinked>

[http://wiki.secondlife.com/wiki/Link\\_message](http://wiki.secondlife.com/wiki/Link_message)

<http://wiki.secondlife.com/wiki/LIGetLinkNumber>

<http://wiki.secondlife.com/wiki/LISetPrimitiveParams>

<http://wiki.secondlife.com/wiki/LISetColor>