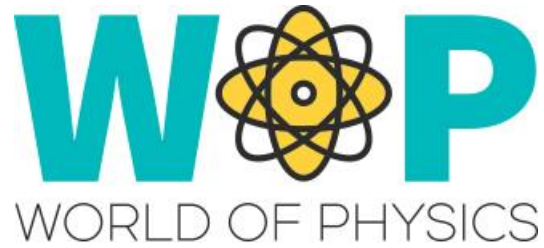




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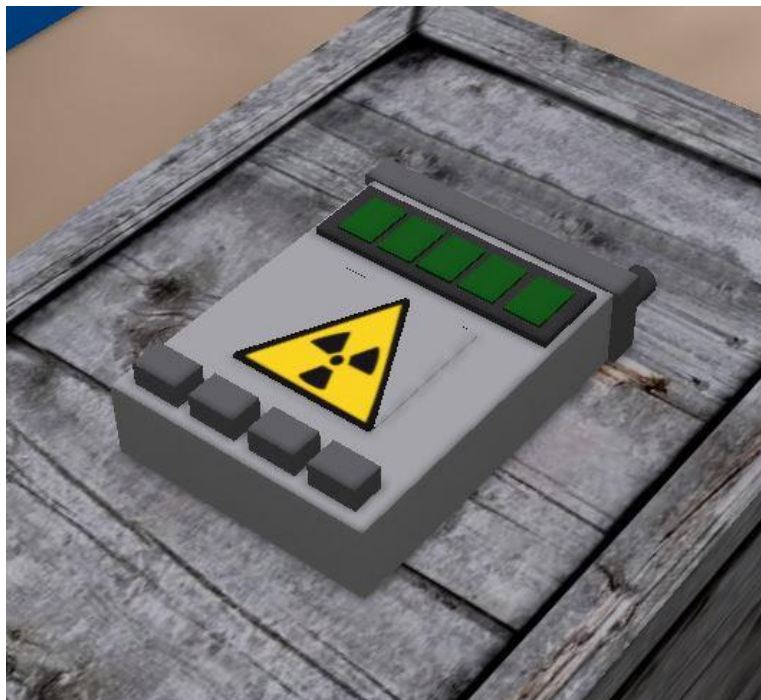
TECHNICAL GUIDE

Creating custom HUD Elements

1. Introduction

HUD elements are custom window panels that are displayed in a specific part of the screen of the avatar and can display important information about the progress of the avatar regarding some activity, and can also contain buttons for them to interact. HUDs are basically objects (simple prims or linked sets) that are attached in the avatar's screen. Since they are attached, they are connected with the avatar and you can take advantage of this.

In WOP we have used a HUD element as part of one of the scenarios. The user receives the HUD object, a Geiger Counter in their inventory and can equip it to display it on their screen. This shows the Geiger Counter on the screen. It contains 5 leds that turn on based on the proximity of radioactive material. It also has 4 buttons that the user can click any time to view information about the radioactive material they have collected already.



2. Technical Details

First you need to create the object that you will use as a HUD. Unless you want something very simple, you will need a linked set of prims. Include buttons if you need them and also objects that will display text (as labels).

Then use scripts in the prims, and set the communication between them (e.g. the button prims will send messages to the ROOT prim when they are clicked.).

When the user will equip the HUD object you can have an 'attach' event be triggered and store the avatar's ID. This way the HUD will be able to use this ID in the future to communicate with the avatar with text messages or dialogue menus if you want to.

Notice that you can use the 'GetPos' function to get the current position of the HUD, which means that you can get the location of the avatar as well. You can take advantage of this to trigger some actions/messages when the avatar enters some specific area of the World. Use a 'timer' event to periodically check the position of the avatar and run the required actions.

When you have created the object you can use 'Take Copy' to bring it on your inventory and then right click and use Equip to select the HUD position you prefer. The object will appear on the selected position of your screen, and you can select it and adjust it by rotating, scaling and moving it as you prefer. When you unequip it, the object will store the adjustments you made and next time it is equipped by you or another avatar, it will appear in the correct, adjusted position as it should!

Finally you need a way to give the HUD object to the avatars. A simple idea is to create a crate object. The crate will be used to give (IGiveInventory) the HUD object to users that click it (touch_start event).

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/Touch_start

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

http://wiki.secondlife.com/wiki/Link_message

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

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