ROBOTIC INDUSTRIAL DYNAMIC ARM

AUTHOR	Michael Soler
CONTACT	michael.soler.beatty@gmail.com
Unity Ver.	2018.3.F1

Index

1.Description of the package	1
2.Colliders and tags	. 2
3.Scripting	
4. Video tutorial	. 3

1.Description of the package.

This is a package that contains dynamic robot arm with 5 degrees of freedom. Thanks to the scripting, you will be able to move the robotic arm in space using the sliders. This package contains:

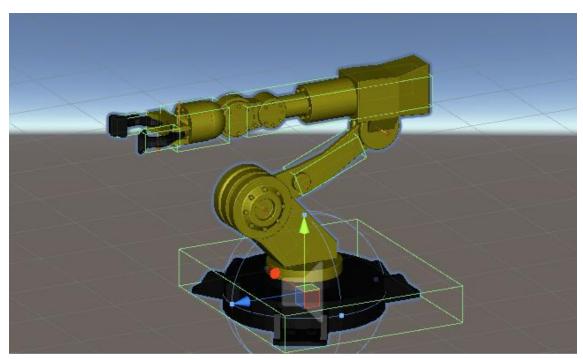
- The fbx model of the arm with its hierarchy well defined. The model is composed of part0,
 - part1, part2, part3 and the grips (left and right).
- The following sample scenes
 - o No physics scene with basic robot.
 - o Basic physics scene.
 - o Advanced automovement.
 - Screw robot scene.

- Multiple robots interaction scene.
- o Multiple tools selection scene.
- Documentation and video tutorial.
- All the models, textures and scripts used in the video example.

From cardboard buddies we pretend to give the best customer service, so we are available 24/7 for all doubts, errors in code and potential modifications. We are available at michael.soler.beatty@gmail.com

2.Colliders and tags

Box colliders are used to implement physics in the game. No tags are needed.

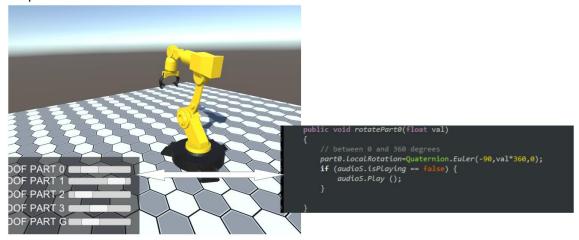


3.Scripting

The "RoboticArm" is the script that controls the movement of the arm

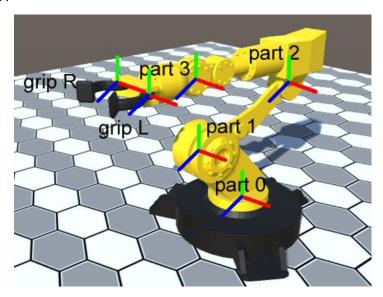
```
//these are the parts of the robotic arm
public Transform part0;
public Transform part1;
public Transform part2;
public Transform part3;
public Transform gripLeft;
public Transform gripRight;
// this is the audio source to play the arm sound
public AudioSource audioS;
```

Rotation of each part is called by the slider, which will trigger a movement function on the script:



The scripts are associated to the player gameObject.

The function also triggers the sound of the servo. Notice that the local rotations have their axis in the following positions:



4. Video tutorial

We have a video tutorial explaining how the scripts and game mechanics works.

https://www.youtube.com/watch?v=GbdWU04ufag