

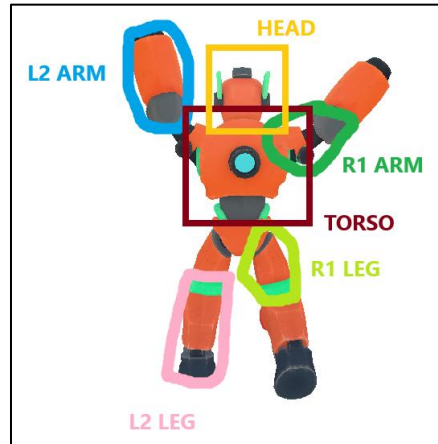
CG Assignment 1

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資工系

Screenshot



Relationship

There are L1 arm, L2 arm, R1 arm, R2 arm, L1 leg, L2 leg, R1 leg, R2 leg, torso, and head.

- Torso : $P * V * M$
- L1/R1 : $P * V * (-T) * R * T * M$
- L2/R2 : $P * V * (-T) * R * T * (-T_{L1R1}) * R_{L2R2} * T_{L2R2} * M$

In formula, T is translation matrix, R is rotation matrix. T_{L1R1}/R_{L2R2} is translation/rotation matrix based on the arm connected with the current L2/R2 arm/leg.

The formula $(-T) * R * T$ is for making the rotation based on the 0 coordinate of the model matrix and rotate it, since the initial position is not at 0 coordinate.

Features

- Mouse press & Drag : Change Camera Rotation
- Space : Pause the animation
- W : Danger from PSY coming closer
- D : PSY go away

IDE & Compiler

Visual Studio 2022, C++ version Default (ISO C++14 Standard), Windows 11