

## e-Yantra Robotics Competition (eYRC - 2016) Task 2 – Model a Terrain

## **Problem Statement 1: Dangal**

(10 points)

Develop a two player game where opponents will wrestle with each other. The objective is to push the opponent outside the wrestling rink/arena.

- The game arena is a 6x6 square
- Players are represented by 1x1x1 cube, with different colours (say red and blue)
- Add a letter to denote each of them (say G for cube 1 and E for the second)
- Start position would be the diagonally opposite corners of the arena.
- The cubes should move using two sets of keyboard keys,
  - o Player 1: Up, Down, Left, and Right (near the numpad)
  - o Player 2: W, S, A, and D (on the main keyboard)
- Add Physics parameters to the cubes, such that we experience a reaction when they hit each other or fall off the arena.
- Pressing 'Esc', should quit the game.
- The player remaining on the arena is the winner!

## Now, here is a chance to earn some brownie points:

(5 points)

Create an expression of the special moment for the winner. It can be flashy lights, a medal popping up, confetti, textual message etc. You can go creative with this.

Evaluation would be done on the basis of your modeling, optimization of Python scripts, adding Physics, and the overall functionality of the game.

Finally, save the Blender file as ProblemSolution1.blend and make a video of the game you have made. Video may be of maximum 3 minutes duration. Instructions are given in Problem Statement Read Me file.