CSCI 3010U Simulation and Modeling Project Proposal Plinko Game Simulation

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For CSCI 3010U our goal for the project is to simulate a game of Plinko. Plinko is a "minigame" from the game show "The Price is Right" where contestants drop a puck down a vertical board that then bounces off several pegs and then lands in a designated pocket, earning the contestant an amount of money associated with where it landed. We aim to emulate dropping a puck at the top of the screen, after which it will bounce off the pegs or the walls (which will be the bounds of the play area) and land in pocket at the bottom of the screen. The collisions will not be purely elastic to ensure the puck does not bounce out of the designated play space. The user will be able to alter the position the puck is dropped from above the game board, and also the vertical and horizontal velocity of the puck. This model will demonstrate an understanding of projectile motion and collisions.