

Lab 6 Project Description and Video Link

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Project Description:

We decided to implement the classic arcade game “Pong” on hardware utilizing the N8 controller for user input and the VGA screen to display our game. In order to create a functional system we used a module to create and move the ball, another module to move the paddles and color the screen, and finally another module to manage collisions of the ball against paddles or walls. The game can be played on LabsLand by using the VGA and N8 interfaces. To start the game, the user needs to either press the “Start” button on the N8 or the “J” key on their keyboard. Once the game has begun, the user can use the N8 left and right keys to move the user paddle at the bottom of the screen. Each time the player hits the ball, his score goes up by 1. If the player feels comfortable at the default, easy difficulty,, they can also increase difficulty by toggling SW 9 for hard difficulty and SW 8 for medium difficulty which increases the speed of the ball. The computer-controlled paddle always follows the ball and never loses. The game is designed to be used for training when actually playing pong against real opponents. The video demo is on Zoom, and whoever opens the video will need a UW Zoom account to access the video.

https://washington.zoom.us/rec/share/WuTY93sgR_yG6s1cwt384kyB1bgRH_J_9E3v4dc0_bux6Nq4ylvvhaLRT772udU9.2vIDuiNuX3D6kcbY?startTime=1654288138000