

Project Name: Pacman

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Project Proposal: Our project is a simple pacman game-engine programmed in C code implemented on a FPGA chip. The game will require both software programming in C and hardware programming in VHDL. When completed our game will be connected to a PC and take game input from the keyboard and display the graphic results on a PC monitor.

Project Structure: The rough breakdown of our game will consist of game logic, graphics engine, and I/O. The game logic will consist of collision detection, scoring, and enemy AI. The graphics engine will include sprite rendering onto the display. The I/O will include mostly interaction with the keyboard and if we have time maybe a joystick. Currently our plan is to implement the game logic in software and the graphics engine on the hardware. If additional time is available to us, we would like to also implement audio game features within our project.