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EE 271 SU 22  
Lab 6: Flappy Bird

## **Block Diagram of Project**

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Included in file

## **Description of Project**

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The project is a recreation of the hit mobile game “Flappy Bird”. It was recreated in Verilog to be run on a DE1-SoC FPGA and displayed on a 16x6 Led Matrix Display. Once you reset the board using SW9 the game will start. Green lines (pipes) with gaps in them will begin to appear and move towards the player/bird (red dot). When you press the button KEY0, the bird will “fly up” one pixel on the display. If you don’t press the button, “gravity” will pull the bird one pixel down. The player’s goal is to cross as many pipes as they can (score is displayed in real-time on the HEX displays) and the game is over when the bird crashes into one of the pipes. If you want to start again, you can simply reset the game again with the reset switch, SW9.

## **Design Files**

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Included in file