ECE 3300 Final Group G Conway's Game of Life

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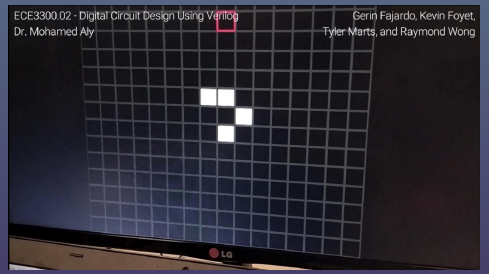
Conway's Game of Life is a zero-player game involving a cellular automaton on a square 2D grid

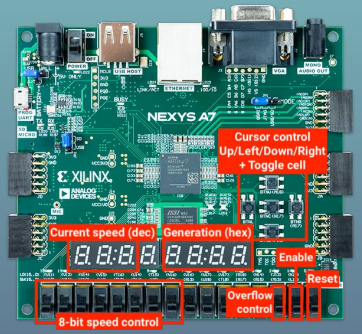
Objective & Execution:

- Develop and implement Conway's Game of Life on Nexys-A7 FPGA board
- 11/16 switches used for 8-bit speed control, overflow control, enable, and reset
- Onboard buttons for cell toggle and movement
- 7/8 seven-segment display digits showing the game speed and current generation number
- Display a 16x16 grid through the VGA interface on an external monitor.



Nexys Board Info:

- 2401 LUTs (Lookup Tables)used
- 422 FFs (Flip-Flops) used
- Total power of 0.218W



Devices and Tools Used:

- Nexsys A7 Artix-7 FPGA Board
- Xilinx Vivado 2018.1
- VGA-Compatible Monitor