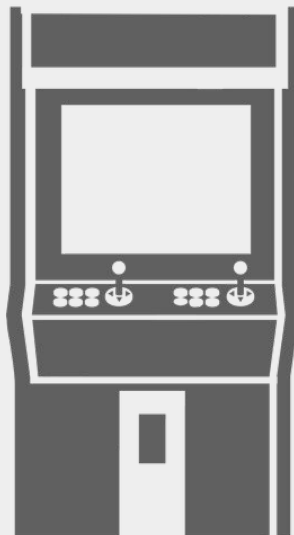# Stack Attack

Bobby Gaines, Davin Muramoto, Diya Saha, Kenny Kim

Project Goal

Creating a captivating arcade experience with a thrilling rendition of the game Stacker is our ultimate goal. Our aim is to transport users into the nostalgic ambiance of an arcade, providing them with an exceptional and enjoyable time.
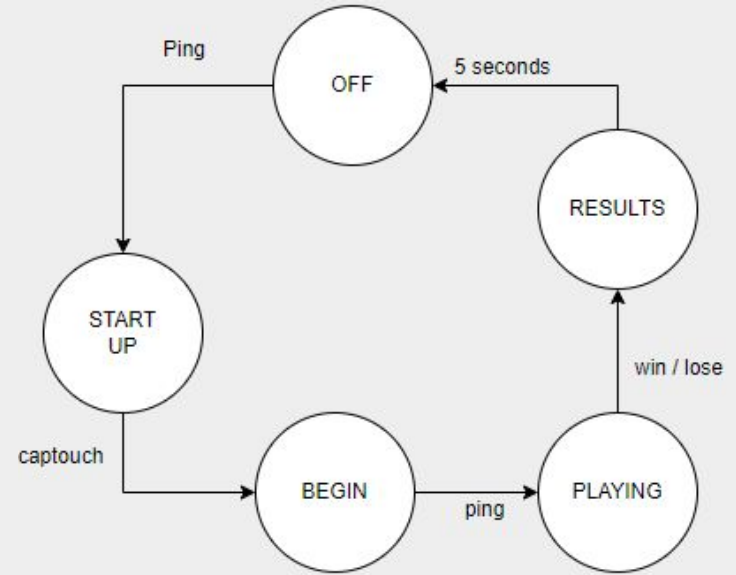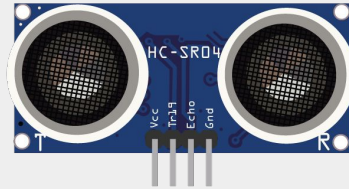
Live Project Demonstration

Hardware and Software

- Ultrasonic Distance Sensor
- Capacitive Touch Breakout
- RGB Leds
- Shift Registers (SN74HC595N)

Game state machine

Project Progress

GANTT CHART

PROJECT TITLE	Stack Attack				
CLASS	ECE 167				

NUM	TASK TITLE	START DATE	DUE DATE	DURATION (DAYS)		PHASE ONE — Breadboard LED bar							PHASE TWO — 3D print with LEDs soldered							PHASE FOUR — Play testing and user feedback											
						Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
1	Setup																														
1.1	Setup Repo	5/12/23	5/12/23	0	link																										
1.1.1	Ordering intial parts	5/12/23	5/15/23	3	link																										
1.2	Figuring out user input	5/13/23	5/15/23	2																												
1.3	Building a test circuit for one LED bar	5/13/23	5/15/23	2																												
1.4	Project Proposal	5/12/23	5/15/23	3	link																										
2	Project Definition and Planning																														
2.1	Finishing 3D prints	5/14/23	5/24/23	10																												
2.2	Skecthing out multiplexor logic	5/15/23	5/26/23	11																												
2.3	Soldering LEDs to the housing	5/22/23	6/3/23	11																												
2.4	Wire management	6/3/23	6/5/23	2																												
3	Software																														
3.1	Coding the game state machine	6/1/23	6/7/23	6																												
3.2	Tone generation	6/2/23	6/8/23	6																												
3.2.1	Fine tuning the game	6/7/23	6/8/23	1																												

Thank You

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