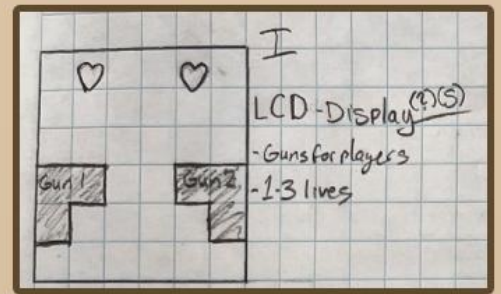# Quick Draw Game

Josiah Medina
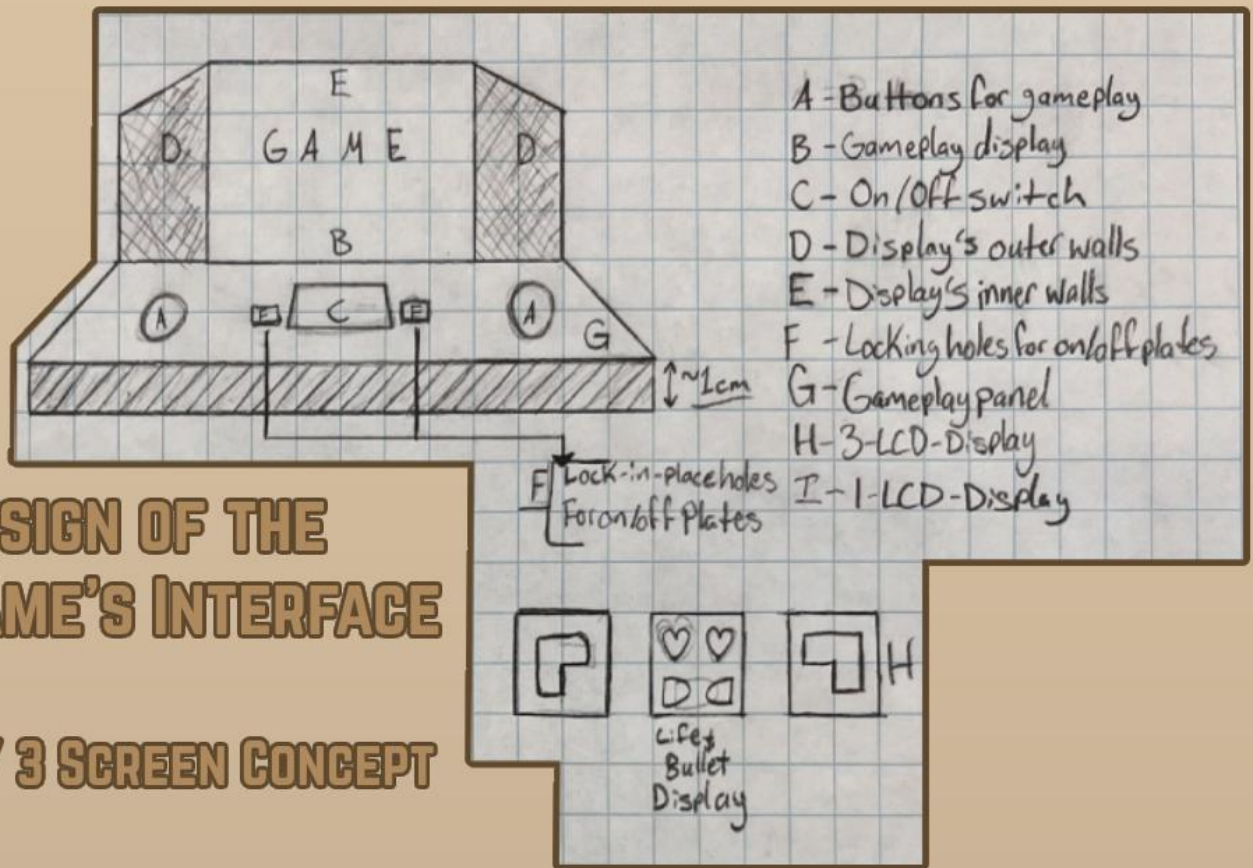## Gavin Hageman

OVERVIEW

THE GAME CONSISTS OF 2 PLAYERS.
IT STARTS WHEN THE GAME IS TURNED ON.

BOTH PLAYERS MUST PRESS THE BUTTON TO START.
UPON START, THERE WILL BE SOUND QUEUES. ONLY
ONE SOUND QUEUE IS CORRECT, WHICH IS THE ONE
THAT SHOUTS "FIRE!"

IF A PLAYER IS TO PRESS THEIR BUTTON WITHIN A
MARGIN OF TIME WHEN THE GAME SAYS "FIRE,"
THEN THAT PLAYER WILL DEPLETE 1 OF THREE LIVES
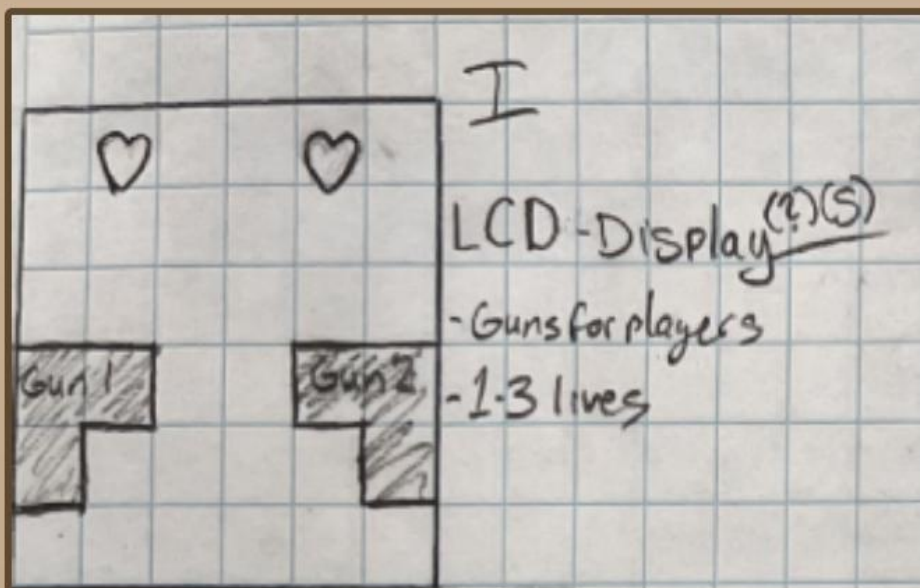OF THE OTHER PLAYER, AND THEIR GUN WILL FIRE.

IF A PLAYER PRESSES ON ANY OTHER SOUND QUEUE
(WHICH WILL NOT SAY FIRE BUT START WITH F, LIKE
FRUIT,) THEN THAT PLAYER WILL NOT BE ABLE TO
MAKE A MOVE NEXT TURN.
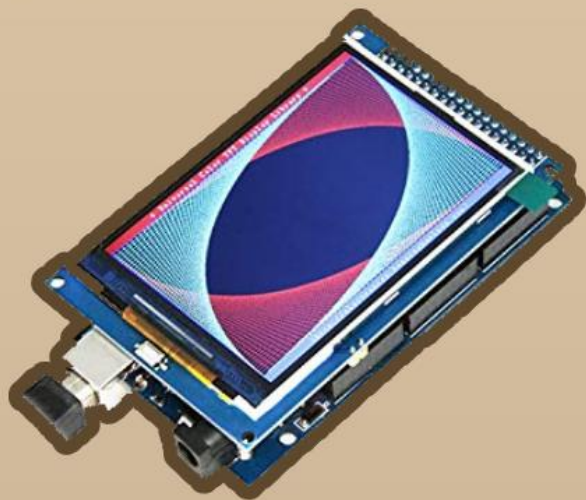
DESIGNS

DESIGN OF THE GAME'S INTERFACE

w/ 3 SCREEN CONCEPT

E
GAME
D   G A M E   D
B
A   C   A   G
↕ ~1cm

F Lock-in-place holes
For on/off plates

Life +
Bullet
Display

A = Buttons for gameplay
B - Gameplay display
C - On/Off switch
D - Display's outer walls
E - Display's inner walls
F - Locking holes for on/off plates
G - Gameplay panel
H - 3-LCD-Display
I - 1-LCD-Display

F Lock-in-place holes
For on/off plates

H

ORIGINAL ONE SCREEN CONCEPT

I

LCD-Display (?)(S)

- Guns for players
- 1-3 lives

Gun 1   Gun 2

Key Components
output display

Display Screen
(TFT LCD)

User Input (Manual)

Buttons (2)
on-off switch

Key Components
Actuators and Automatics

None

Hardware Explanation

We will try to go for 3D printing the interface. It shouldn't be too big of a game- more likely to be a little desktop game. Almost Like the size of a 3DS. We will have the Arduino and such behind.

LOGIC AND PROCESSING

C++ is the Arudino UNO's main programming language. We are using C++ for this Project.

Miscellanious Parts

DFPlayer (Not needed likely)
MP3 Player for speakers

SD CARD - Hold .WAV files

3W Speaker
May count as output display
Used for sound queues.

Explanations + Diagram

We are using .wav files because of the way a .wav-
-file is written, it allows for the arduino-
-to read and play it. Otherwise, the DFPlayer
comes in handy.

We want to 3D print the interface as it is-
-probably our cheapest and most reliable option.
There should not be that many wires used in the-
-project which leaves for plenty of room.
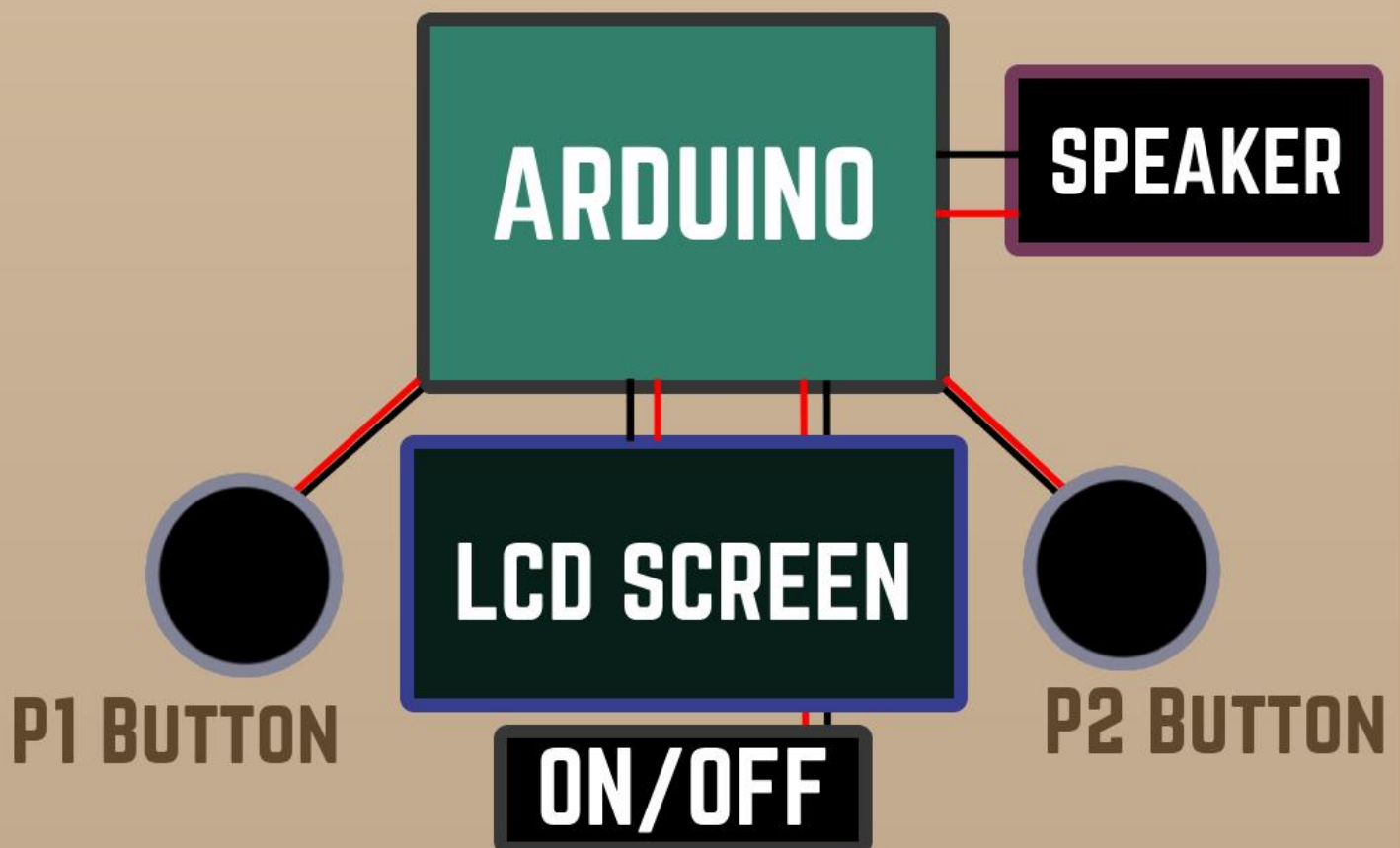
Costs

TFT LCD Screen - $18.50
Buttons - $2.00 (give or take)
Power Switch - $1.10
Arduino Uno R3 - $28 - $30
Speaker - $6.00
Jumper Wires - $5.00 (max)
Micro SD Card - $6.00 (64 GB)

TOTAL COST - $68.60

(We rounded everything to the highest digit)