



A N E N Y



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1 GETTING STARTED

OUR PROJECTS GOALS

1. Create a new and unique physical/digital pinball game.
2. Acknowledging pinball's history, explore designing around "sexy" themes in 2026.



Aside from our two goals, this project gave us the freedom to create anything we wanted, which as you may know can be a blessing and a curse.

So, here is a brief overview of the first few weeks and how we decided we wanted to create an artsy installation piece.



WEEK 1



INSPIRATION / GAMES TO TALK ABOUT

Bride of Pinbot (infamous over-the-top sexy/sextist "robot girlfriend" pinball machine)

Dream Daddy / Date Everything / Boyfriend Dungeon (queer/pan dating sims)

[Hades](#) / [Hades II](#) (queer/pan action games)

[Consentacle](#) board game [A LOT OF VERBS](#)

More...

QUEER & FEMINIST GAME STUDIES

Anita Sarkeesian, Feminist Frequency "Tropes vs. Women in Videogames" YouTube series
<https://www.youtube.com/@feministfrequency> (scroll down to "Tropes" playlists)

Anna Anthropy, "Rise of the Videogame Zinesters" [in this folder]

Adrienne Shaw, "Introduction: Cliches vs. Women," *Gaming at the Edge* (2014) [in this folder]

Bo Ruberg & Adrienne Shaw, "Introduction: Imagining Queer Game Studies," *Queer Game Studies* (2017)

Bo Ruberg & Amanda Phillips, "Not Gay as in Happy: Queer Resistance & Video Games," (2018), https://gamestudies.org/1803/articles/phillips_ruberg
'Not Gay as in [Happy](#) but as in [Fuck U](#)'
Queerness in games finds its political power not in being represented, but in resisting, breaking, denormalizing, and remaining radically unsettled.

Amanda Phillips, "Dicks, Dicks, Dicks" (2017),

<https://www.flowjournal.org/2017/11/dicks-dicks-dicks/>

Using the absurd and uncontrollable floppy dick in games, the article pokes fun at and breaks down the idea that masculinity has to be hard and in control, suggesting that queerness finds its power in refusing norms and constantly messing with them.

The idea of [SOFT & HARD](#)

Amanda Phillips, "Welcome to My Fantasy Zone: Bayonetta," *Queer Game Studies* (2017) [in this folder]

Dave Parisi, "Shocking Grasps" (2016):

[Shocking Grasps: An Archaeology of Electrotactile Game Mechanics](#)

The history of electric shock in games isn't a straight line from something crude to something more refined. Instead, it's a history of how the meaning of [touch](#) keeps getting reworked. Contemporary games didn't really invent haptics—they've mostly forgotten that electric sensation once meant more than just pain or punishment.

Rewrite the initial meaning of the electric shock:

Shock → [Vibration](#)

Teddy Pozo, "Queer Games After Empathy" (2018), [Queer Games After Empathy: Feminism and Haptic Game Design Aesthetics from Consent to Cuteness to the Radically Soft](#)
Queer and feminist games move beyond empathy by using haptic, tactile, and [Consent-Based Design](#) to explore care, difference, and embodied intersubjectivity.

The article criticized the design of merely ask player to put hand on the [cold screen](#) to [arouse](#) empathy but I

We started this project with two things.

A broken 1962 Gottlieb Cover Girl, and a Bunch of sexy research papers given to us by our advisors.



So where did we go from there? Since no one on the team is an electrical engineer and we are all too young to have experienced the heyday of pinball arcades we thought getting some hands-on experience would be a good idea.



So, we visited two places with large collections of pinball machines, PINS which has more modern machines, and Pinball Perfections, which has a large collection of electro-mechanical machines. This trip gave us a good perspective on where to start our design and while we were there, we also got to see some examples of “sexy pinball cabinets”.





Photos of "Sexy" cabinets from our trip to Pinball Perfection





Game that is a
social
commentary
on sex.



After our trip during one of our team discussions there was one major thing we all realized, we don't want to make a sexy game we want to use this opportunity to share our thoughts on sex in 2026.



So, what did we decide on?



AN INSTALLATION





WHY?

We didn't want our pinball cabinet to be in a line of others waiting around to be played we wanted it to be something you experience once.

Our theme may involve sex, but its purpose is to evoke thought and our game won't shy away from making players uncomfortable in order to serve its narrative much like modern art installations.

And, since we are physically building this cabinet, we want to design some physical hardware magical moments that we can sequence within a single session of play, and these moments require a bit of cleanup which makes this cabinet ill-suited for a classic pinball arcade.



So, what is our installation going to be about?





2 SEXY. PINBALL

"The Industrialization of Intimacy"

IN OUR WORLD TODAY...

Sexiness/cuteness is something that is produced and designed to appeal to audiences.



Both CUTE and SEXY things act as a painkiller for the immense stress within our daily lives.



Think characters you enjoy, plushies you can hug, or even celebrities you follow online.
(Thanks Sabrina)



What if there was something
that completely "filled" this
need?



INTRODUCING! BUNNY™



It's a product designed by our stories' alien society, that acts as a companion. It takes the form you desire, a helper, a friend, or even a lover.



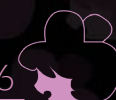


It's not just a companion though, since BUNNY™ is made of an edible mushroom-like substance it's also a product in a more general sense! You can think of it as a mash up between the hologram girlfriend in Bladerunner and Soylet Green, though in our world it's commonly accepted that these are edible.





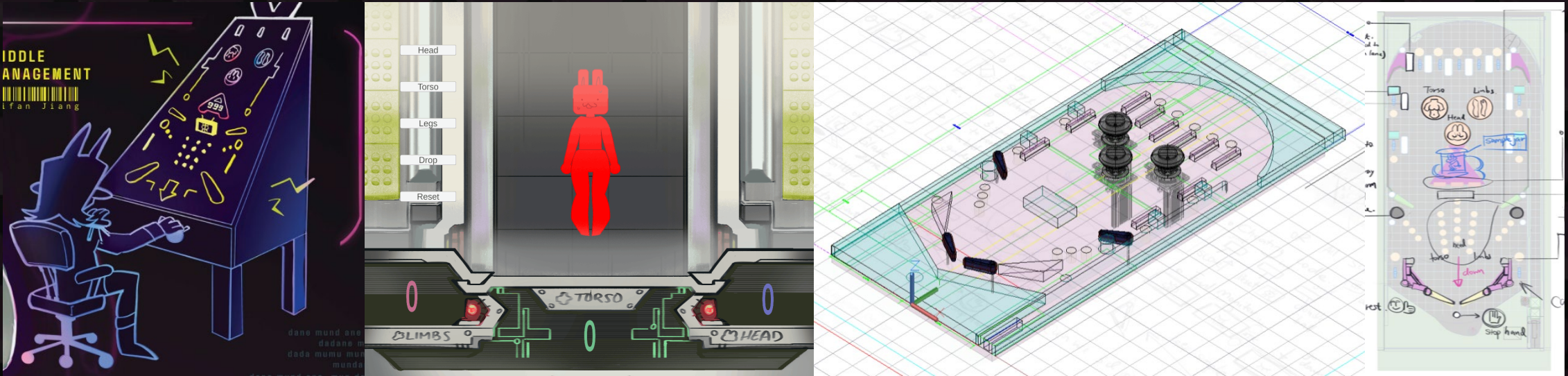
In our game, you play as Wren, an Alien who works at a factory that mass produces this type of bunny girl companion. You will experience her life, in a cycle of daytime and nighttime gameplay.



A stylized, light purple number '3' is positioned on the left. The left vertical stroke of the '3' is replaced by a graphic of a pinball machine's top section, including a coin slot and a flippers mechanism.

PINBALL GAMEPLAY

DAYTIME



During the day you work on BUNNY factory assembly line. Through playing a classic pinball you will mold, cut, and assemble these products.

Above you can see a very WIP demo of our assembly line scoreboard, and a mockup of the factory themed playfield we are designing. The scoreboard will be displayed on the head of the machine and is meant to help facilitate each round of pinball. In our design each pinball you play represents a new order that Wren receives on her factory line, by hitting bumpers and other interactable parts of our playfield you increase each orders quality. At the end of the day, you receive a performance review from your manager which acts as your score!



NIGHTTIME



tap!



tap!



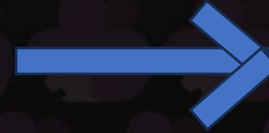
After each and every stressful day of work Wren needs to relax so she goes home where she interacts with her own personal BUNNY™ whom is her lover. The nighttime section of the game is played on the monitor and uses the flipper buttons to navigate through digital UI. This section of the game involves some story through dialogue and also a nighttime mini game!

Above you can see a preview of our dialogue system, and WIP gif of our pachinko style minigame. This simple and short minigame functions as a way for players to unlock some steamy memories of the night they had with their BUNNY™. Players will drop one ball aiming to hit as many platforms as possible to multiply it. From there the balls funnel into a moving film reel at the bottom, where each section of film (representing a memory) will have a number of balls required to unlock. The game ends either when all of the memories have been unlocked, or when you run out of balls. After the game is over, players will be able to click through the unlocked memories to see how their night unfolded, then upon waking up Wren heads into a new daytime shift at the factory.



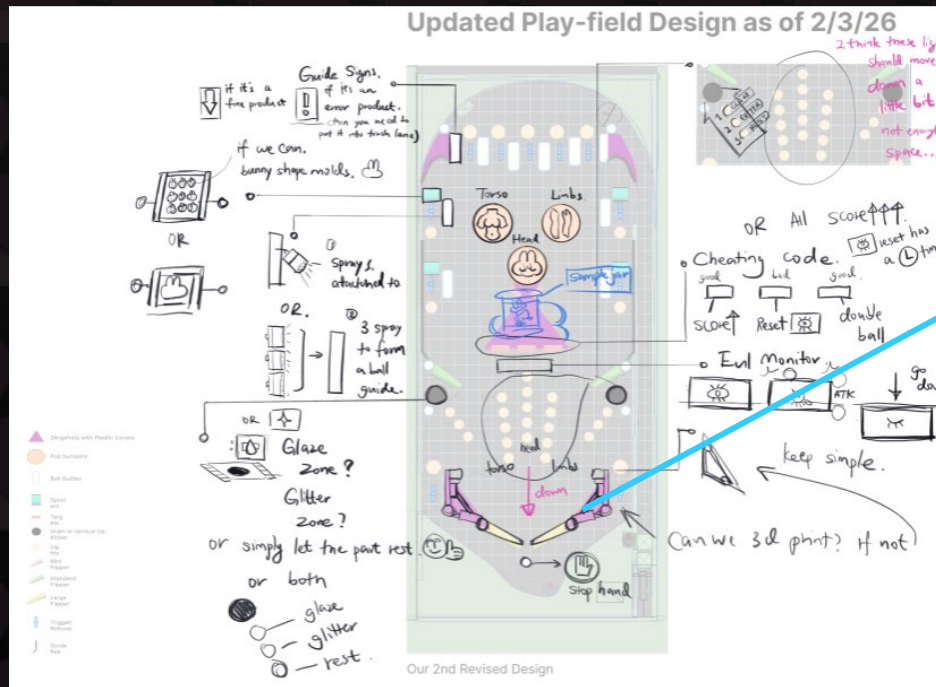


THE PROCESS



So, about the physical machine, it's a great base and helps us avoid constructing the whole cabinet from scratch. However, the playfield it came with is broken and would be more difficult to repair than it would be to replace. So, we carefully removed all of the internal parts and the playfield board. Plus constructing our own playfield will let us update the technology from the old relays, which were very confusing and prone to breaking, to more modern microcontrollers and circuits, which we can integrate with our Unity project, and develop for much easier.





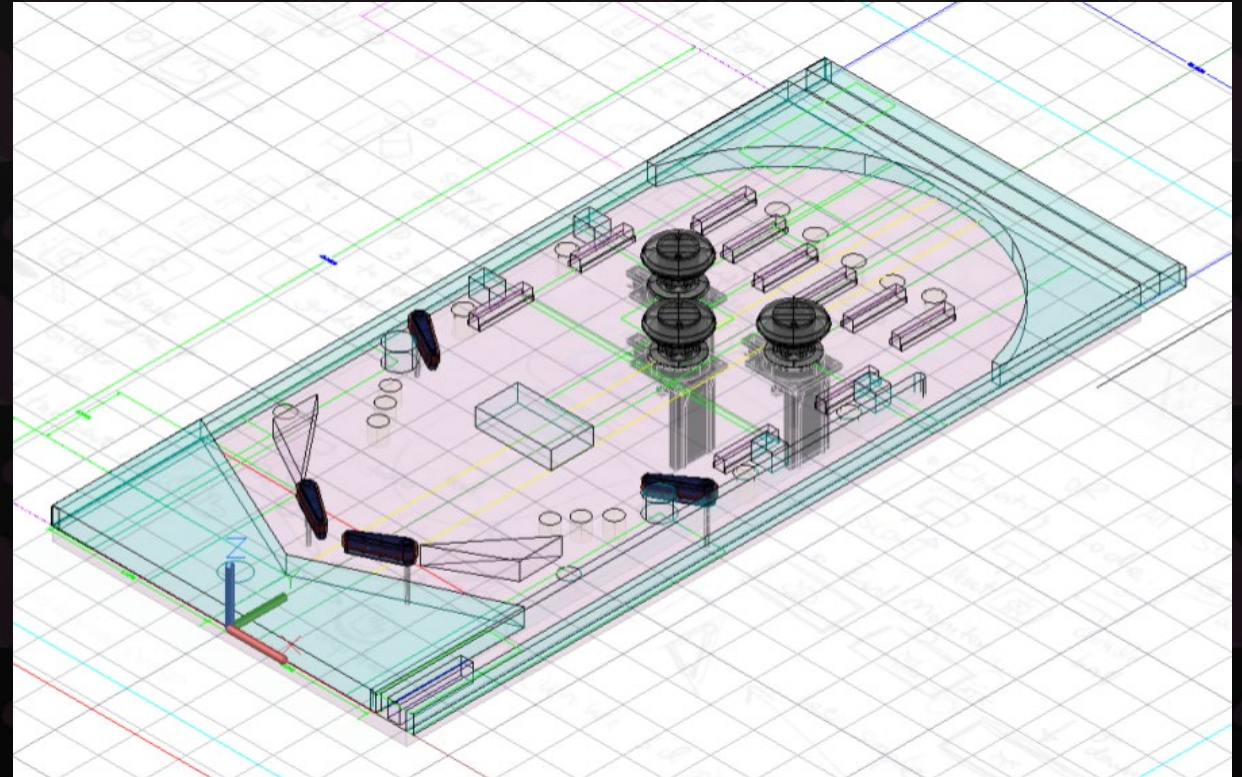
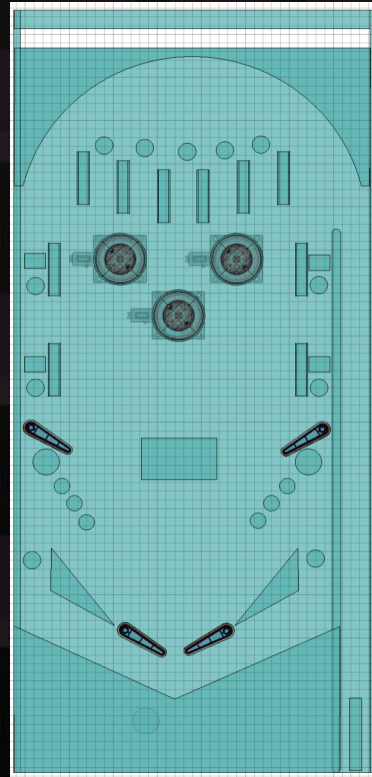
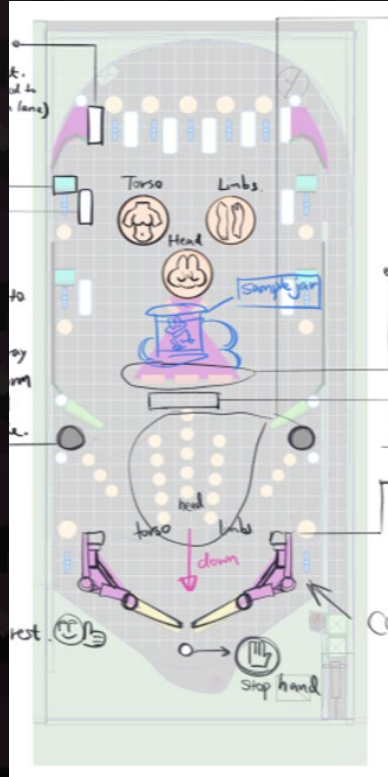
Playfield	
Hardware Materials/Replacement Parts	
Wood/Lumber	
Gottlieb Apron Set	
Playfield Cover	
Power and Electrical	
Arduino Mega	
Arduino Uno	
Solenoids	
Screw Terminal Block Connector	
24V Power Supply	
12V Power Supply 30-40amp	
Crimp Wires connectors	
Wire Kit	
Jonathan Walton 16 Gauge Wire	
Jonathan Walton 18 Gauge Wire	
Screw Terminal for Arduino Mega	
Jonathan Walton 2 Pin & 3 Pin Screw Terminals	
Roller Switch	
Kick Out Microswitch	
Flippers	
Flipper Assembly Right	
Flipper Assembly Left	
Top Flipper Shaft-Bat	
Bottom Flipper Shaft-Bat	
Upper Flipper Rubber Bands	
Lower Flipper Rubber Bands	
Bumpers/Guides/Posts	
Lane Guide Screws	
Standard Posts (Clear)	
Standard Posts (Orange)	
Standard Posts (Yellow)	
Special Rubber Band Kit	
Post Rings	
Gottlieb Covergirl Band Kit	
Lane Guide Covers (Blue)	
Lane Guide Covers (Clear)	
Ball Saver Post	
Pop Bumper Cap (Jpop Pink)	
Pop Bumper Cap (Green)	
Pop Bumper Cap (Transparent)	
Pop Bumper Cap (Blue)	
Metal Ball Guides (Side Metal Rail)	
Sega Pop Bumper	
Targets and Ejects	
Stern 3-Bank Assembly	
30 Degree Ball Eject Assembly	
Ball Trough	
Trough	
Lights	
Neopixel LED Light Connecting Diode	
Neopixel Wire Extender	



I can't stress enough how hard it was to create a parts list for our build.

We had to consider voltage requirements compatibility, part mounting, height, gameplay aesthetics, and more, but after weeks of research and many, many meetings with our technical SMEs we finalized a budget sheet that containing all of the parts we planned to have in our design. As you can see here, this is the flipper we are planning on using.

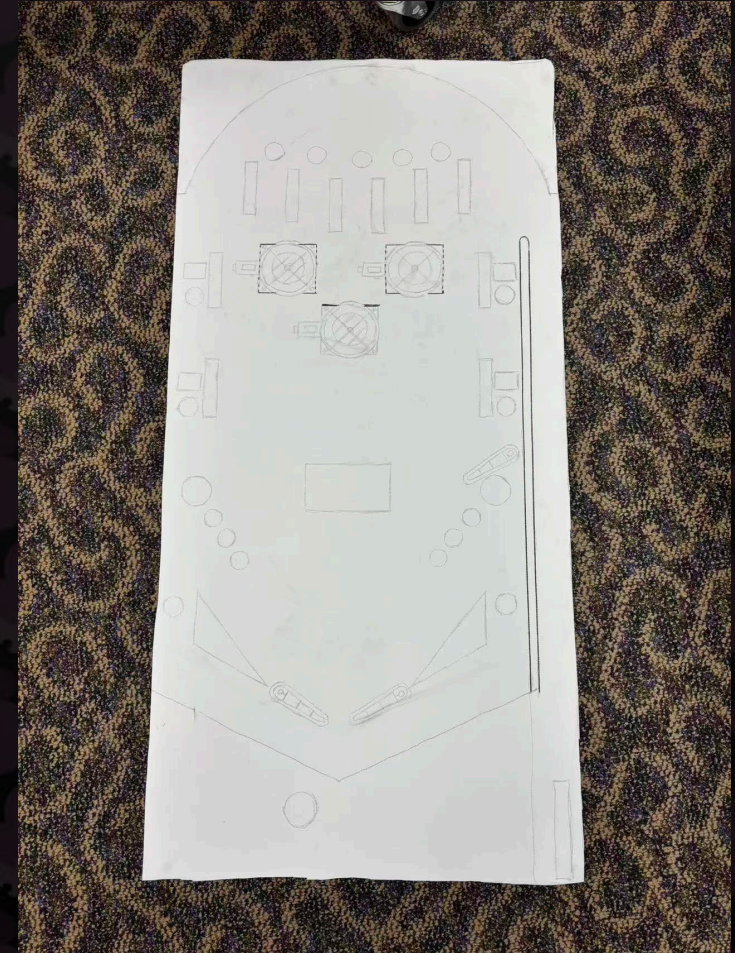
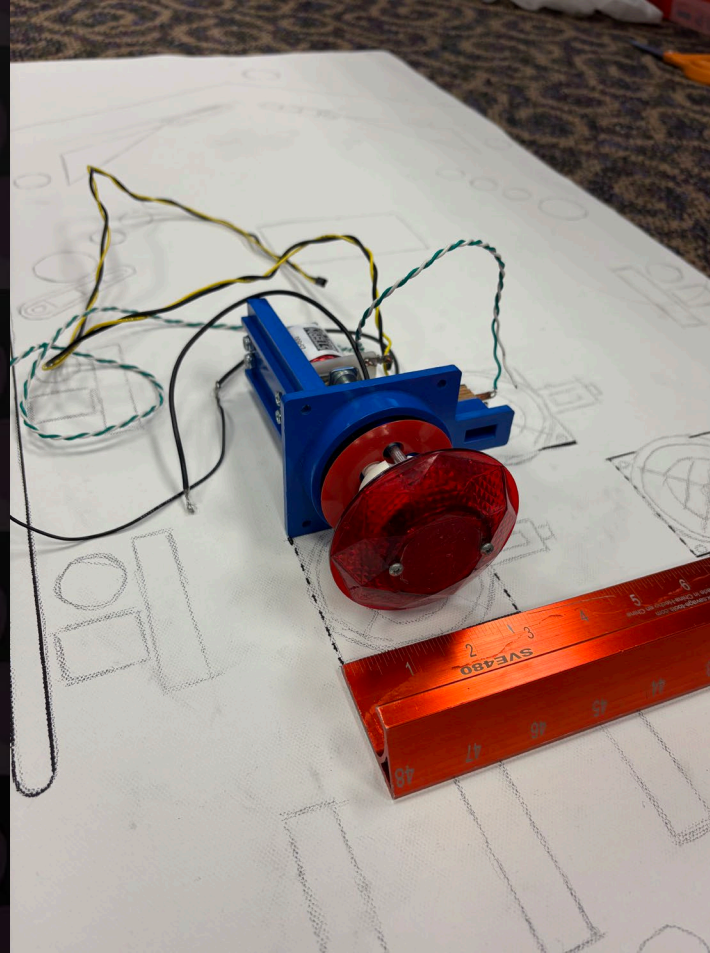
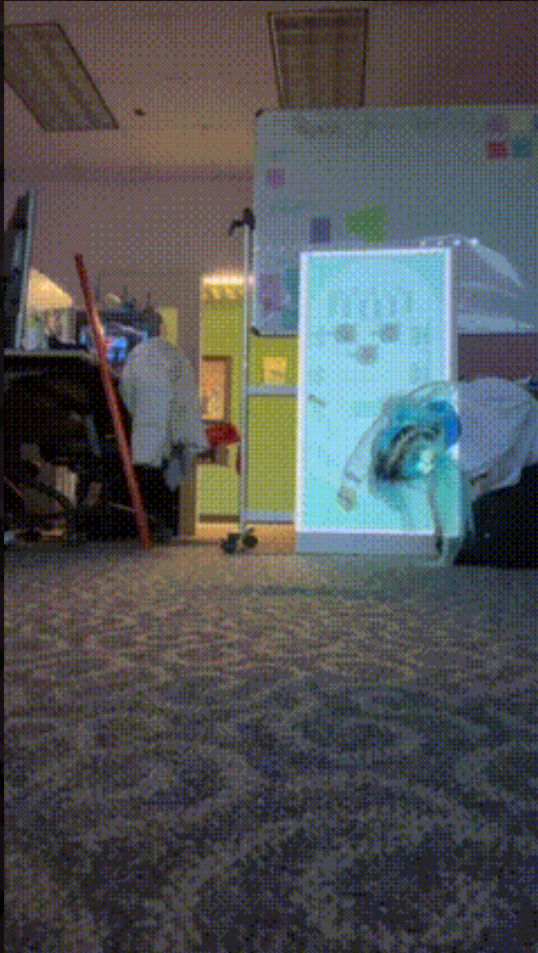




From the parts list and the board design we created a CAD file where we each part we ordered was recreated to scale so we could double check their mounting and size before they arrived!



To ensure the CAD file was accurate we created a blueprint, and as you can see one of the pop bumpers we had on hand lined up perfectly with our design!

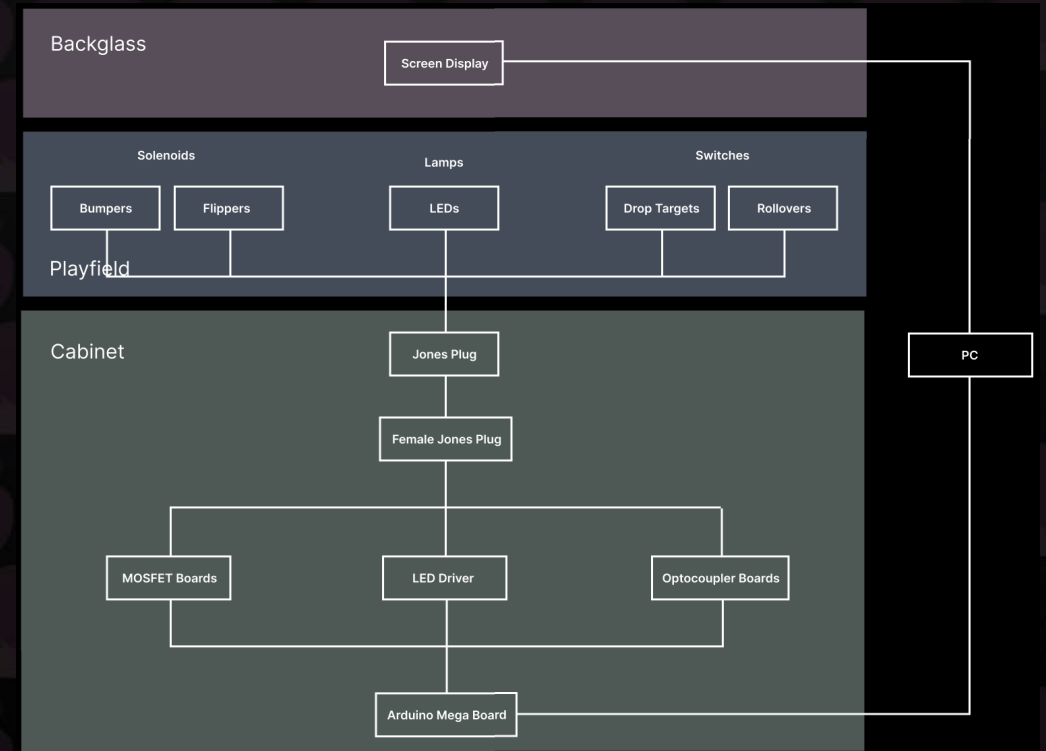


But, what else did we have to do to make this happen?



TECH RESEARCH

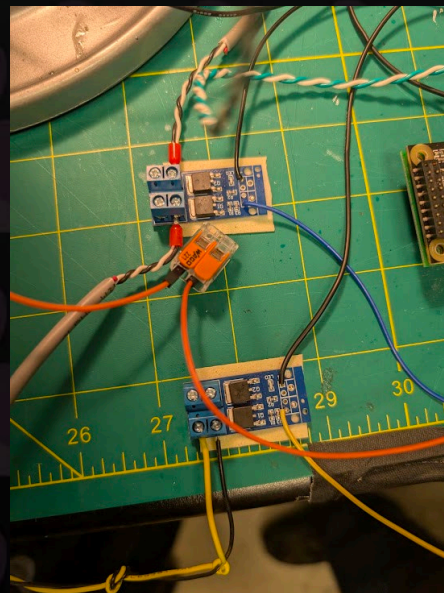
- Power supply calculations
- Wiring diagrams
- But most importantly!
Unity-Arduino communication



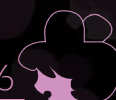
UNITY-ARDUINO COMMUNICATION

This technical challenge was learning how to connect the physical side of our cabinet to the digital side. We couldn't do it without a lot of workshops but, here's what we learned:

Hardware wiring

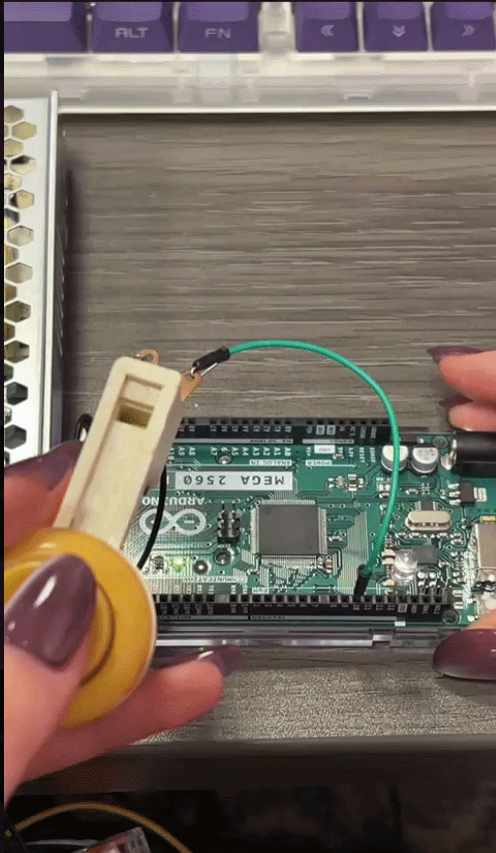


Serial communication

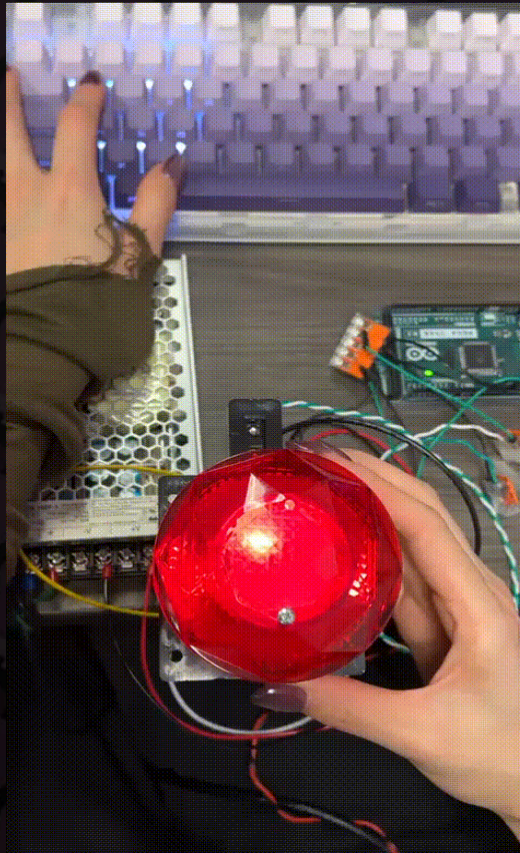


UNITY-ARDUINO COMMUNICATION

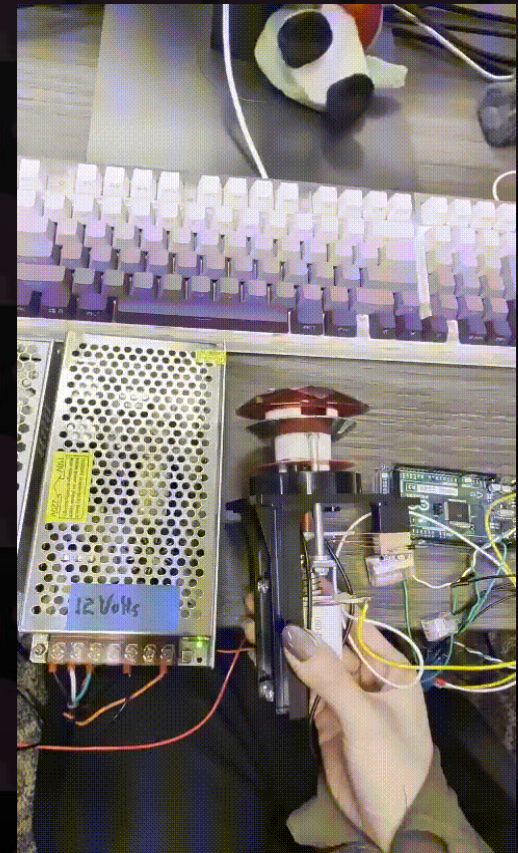
Button (input)



LED (output)



Kicker (output)



HALVES SUMMARY

- We have established communication between our software and our hardware
- The minigame framework has been developed
- We have a simulator that lets us test our playfield design
- Our parts list has been submitted

AND we are ready to build!!





THANK YOU