

MUSIC 256A / CS 476A (Fall 2023)

Final Project Milestone 3 Presentation

In-class Peer Critique (Monday 12/4/2023)

Please create an entry for your milestone below with screenshot + URL

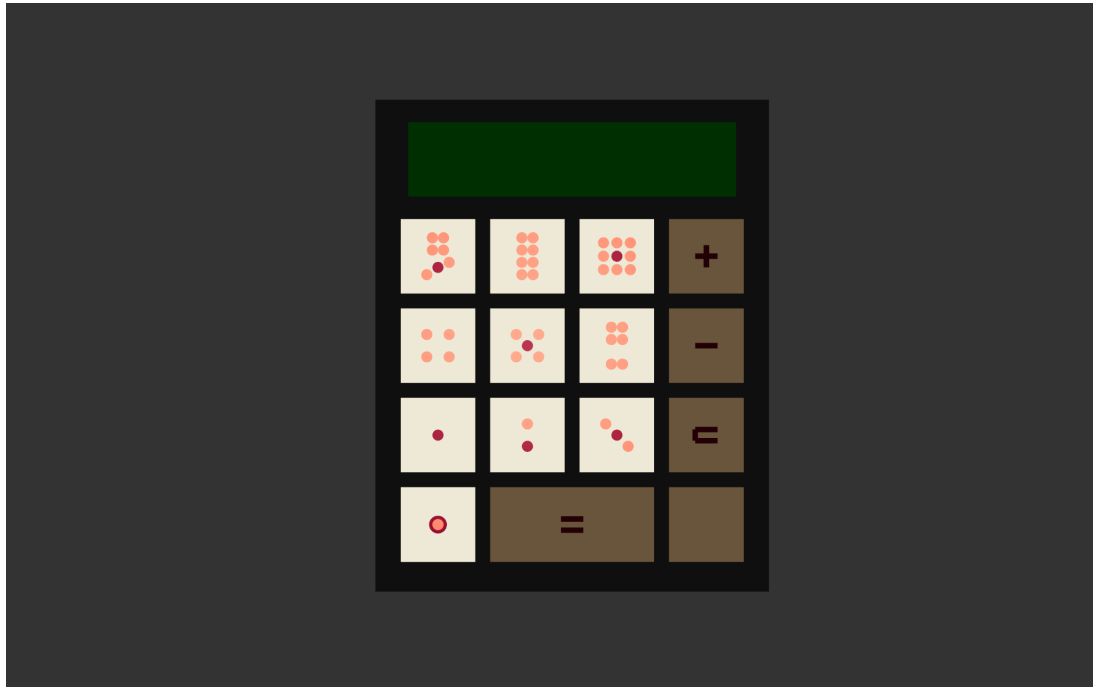
Name

URL

Screenshot

Senyuan

<https://ccrma.stanford.edu/~senyuanf/256a/Final/>

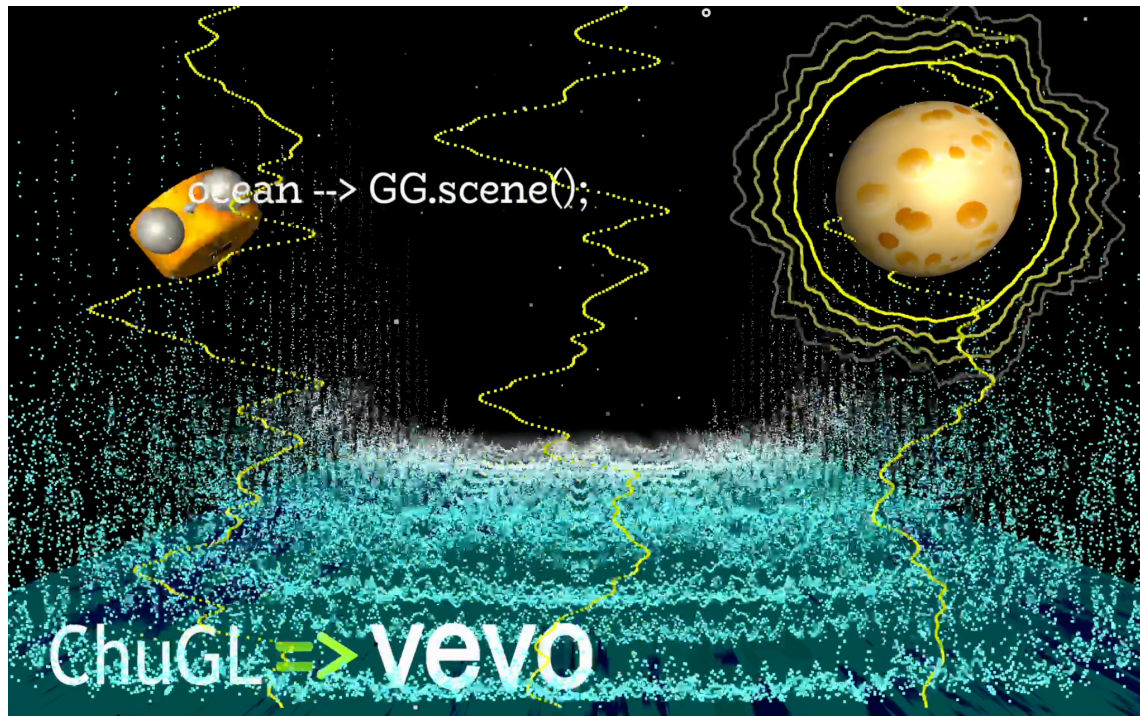


- Soohyun: Definitely playful. More use of calculation?
- Tristan: I love how you kept the mahjong tiles! And now there's so much sonic content! It's better than an actual calculator since you can actually have multiple lines going on at the same time. It's very charming!
- Josh: It's so musical! Definitely agree with Ge about using the negative space more, but I think you should ramp into it from this super clean thing at the start.
- Amy: looks sooo sick and I like the math operator inputs to calculate
- Ethan: this is so fun, i want to play around with it so bad!! Is it keyboard or mouse input? Still love the aesthetic of the interface and the sounds are really fun. I wonder how you can more so incorporate the math operators of the calculator? Maybe you're already planning on using them to incorporate harmonies, but that might be a cool addition
- Ivan: A musical calculator is too powerful, wow. I wonder how we can

- Seyi: I love the added functions! It looks like you can set a pattern to play in the background now which is cool, especially since you can still add more sounds on top of it. When you save a pattern to repeat in the background it might be cool to have it appear on the sides.
- Ryan Wixen: Great performance! The interface makes a lot of sense. It is funny how you have to clear and reprogram the chord. Yeah, I like the idea of the = sign producing a visual and/or sonic result.
- Logan: This is so fun! It sounds great. The result was so musical!!!
- Julia: Yayyyy!!! The calculations produce sounds and answers!!! This would've made math homework so much fun growing up!!!! I'm curious how you determine which keys to press!!! Oooo multiple calculators would be fun!!! Maybe also having a designated score that people should try to play may be fun???
- Elisse: A fully musical calculator!!! Absolutely love that you kept the mahjong tiles, thought the darker red dot is a bit hard to read on the screen. And while I don't have color blindness, I do think that the red-green could benefit from a bit of contrast. Love the musical narrative and the presets that you have! It's really satisfying, and lovely.
- Matan: This is so awesome. Super smooth and clear mechanics. It would be cool if the output screen was continuous and slid over as you added more stuff.
- Richard: Woah, I can't imagine how much effort it took to get the calculations down. So incredible. Love the sounds so much. It would be cute if you had graphing calculators on the side that visualize stuff, which hopefully isn't too hard to show.
- Gray: omg yay it displays on the screen! Omg this is such a flex, this is so fun! I really love how you embedded a narrative into your milestone!
- Rochelle: very cool mechanics and really like the mahjong blocks :)
- Sneha: V cool!
- Neha: Fun playing + math instrument. Very cool.
- Emily: I love the music you created! I think it would be helpful if the calculator screen scrolls as you play the notes. Right now, because the screen can only show 5 numbers at a time, sometimes we would hear notes that don't get shown on the screen. Also, maybe consider making the screen show two lines to show what numbers are being added? Awesome job though!
- Tae Kyu: This is hella awesome!!! Love the sequencer aspect of this design! The sounds are super satisfying, and the buttons look great. What if pressing the bottom right button spawns another calculator that spawns a self-playing calculator?
- Chengyi: Nice calculator instruments! Great intuitive design over the numbers and pitches. If there can be some eastern eggs that will be better!
- Wesley: So fun and cute! What if you could add even more octaves?
- Raghav: The musical narrative is really starting to come together now, glad to see it!
- Nathan: Really like how playful this one is! Having trouble figuring out how the calculations work but really like how it's coming together.

Julia Yu

<https://ccrma.stanford.edu/~juliasyu/256A/final/>



-
- Soohyun: What a beautifully composed song. Maybe you can do a live performance?
- Amy: +1 live performance
- Seyi: I like the addition of the ChuGL codes in the background. I like that there is an audio component associated with the appearance of the code. I like the references to everyone's other projects. It's nice to see some of my Soundstorm there haha. This seems already quite polished to me so I guess maybe just pile on even more references if possible?
- Tristan: Oh it's a different intro this time! I love how the code going into it is shown, it's quite the artful strange loop! Love the sample names. All the references are so great! Honored to have my sequencer in there :) Wow it's so much better than last time and I can't even imagine how good it'll be in the final. Very hard act to follow 🥹!
- Josh: this is art
- Ryan Wixen: The ChuckK backing track is fantastic! Great orchestration. I love seeing the code change the moon along with the chime sounds. That was a great addition. And oh my gosh the references! The waveform and spectrum analysis look amazing and build very well over the course of the piece. They are so dynamic. Bravo!!!! You're playing the song live! Woah!! Mesmerizing. I see what you mean now about getting lost in ChuGL haha. Awesome.
- Rochelle: well done!! Not really sure if i can give helpful feedback xD liked that you spotlighted a few of people's projects too!! Good use of the textures. Reminds me of the end credits in games where the player can also interact with the visuals.
- Ethan: this is so meta. ChuGL quine would be a crazy concept. The audio quality is so pristine. I support the movement to use this as the advertisement for chugl when it launches fully.

- Gray: I loveeeee the random code bits floating by and interacting with the moon + lyrics! Ohhh my gosh all the callbacks this is soo so cute and sweet and cool.....
- Tae Kyu: Love the stars!!! Oh hell yeah I love this atmosphere and the moon spawning with the different commands coming in. That was freaking awesome, super cool integration of the other projects into your final project! What if you had miniAudicle come in and the commands were typed in, instead of the text just appearing... then there can be an anticipation aspect (the text being typed in, then when the command is entered, the command takes place and visually changes the screen).
- Sneha: Woah. You never fail to impress!!
- Logan: Oooo I love how you flipped the frequency spectrum upside down and made it the sky and rainbow! I love how you included peoples projects, so cute!
- Andrew: how are all yall getting GText before GText is released lol. Interesting how karaoke usually has the lyrics on screen, but you've put the code which controls the visual. Ok this is meta. Okay I'm speechless.....Julia what have you done. Okay terrible idea to this wonderful thing: add vocal synthesis / modulation effects!! You're voice is so beautiful, anything you add would make it worse but might be funny (e.g. pitshift on mic input 1 octave above and below)
- Elisse: PLEASE the actual code floating on the screen, I absolutely love. What's controlling these color changes? Is it due to each new lyric? I like the flip of the frequency spectrum, it looked like an aurora borealis. Like the change to the ocean colors. THE BABY. The ending is so beautiful.
- Wesley: WTF. This is such an insane level of effort and hits so hard. I'm so speechless. I want the interaction elements to come along when each funny reference comes up, like what if you can move the alarm clocks around and make the taiko drum twerk, all with one button. Like those pokemon interactions where you just spam the next button but it actually does something.
- Neha: This came out soooo well. A great reminder of all of our projects and a memory of the class! This video will stay close to my heart also because of "Colors of the Wind" in such a creative way!! Congratulations and sooo happy for you <3 <3
- Richard: Love how it shows what is getting chuckled to change the scene. Glad my taiko twerking went somewhere. As always your voice is so incredible!
- Chengyi: Great narrative. Love all the lyrics in this song! Masterpiece!
- Matan: This is such an amazing story and so wholesome and amazing. I love it. I feel like this will be such a good artifact from this class
- Senyuan: it is a power move to use text as texture maps. For suggestions, balls could work as meteors that crashes to the moon, and the text (if GText is available) could be rendered in a mesh to merge with background better.
- Ivan: 1. You are a great singer 2. Everything that you are saying here is facts 3. Using text inside of ChuGL before it is released is a power ful
- Emily: Wow I love the ending with the earth! It made the visualization so artful :) I also love the inclusion of other people's projects! The sphere with teletubbies on one side and buddha on the other is so funny xd
- Raghav: What an all encompassing audio-visual experience. Bravo!

- Nathan: Haha I love how you've iterated this, love that it is a piece/song first. Love all the details, can't wait to see what you add.

Logan Kibler

<https://ccrma.stanford.edu/~lokibler/256a/final/>

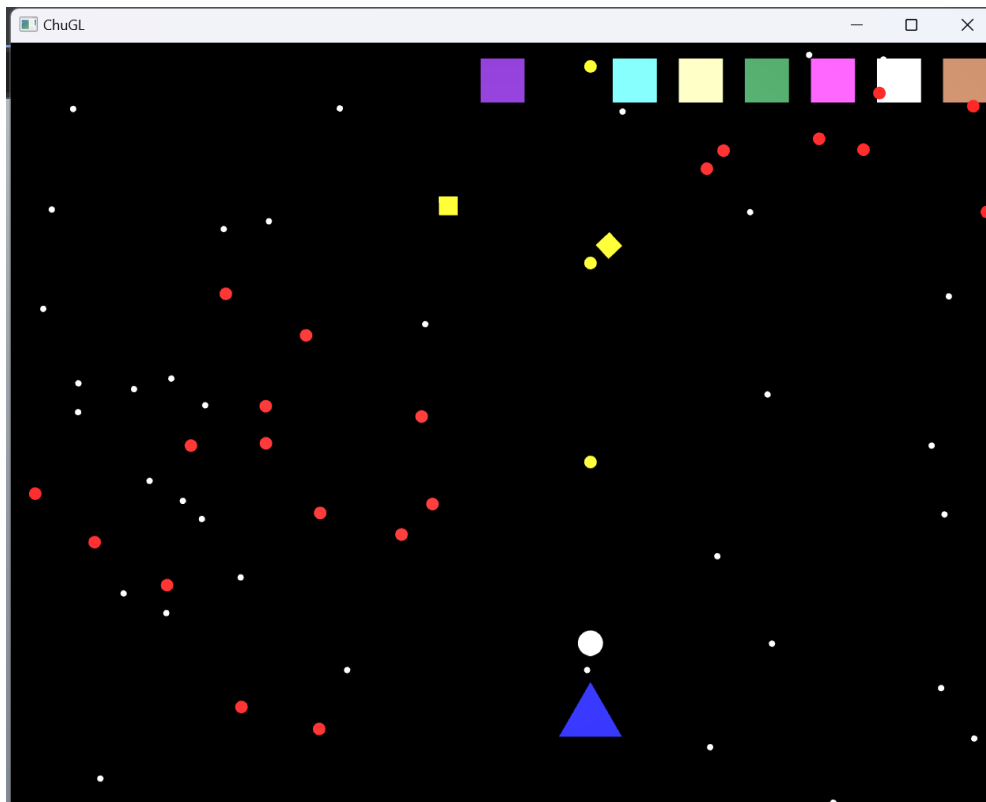


-
- Josh: This is such a cool way to experience a song, it's like participatory musical theater maybe? Seconding Ge on "become corn"
- Amy: I love the vision and the music and the corn is especially cute
- Andrew: ahh I'm sorry there are so many things for optimizing large 3D scenes like this that chugl is not doing right now...appreciate the vision you're shooting for, the music is lovely. Interested by the narrative too. Not sure if it's just the screen recording, but if you're running into fps issues lmk and I'll try to add a small one (backface culling) tonight before the release
- Seyi: Great work on designing the town and populace within! The way the audio phases in and out is well done. For the purposes of a full vertical slice you might just need to make one or two few interactive elements on top of all of this, but this seems like an amazing setup for a game or interaction. The owl is a nice way to guide the player within the scene.
- Tae Kyu: Really beautiful assets, maybe to make it more immersive, you could play with the camera FOV and lighting? If you're able to separate out the blender elements, adding a bit of animation with the corn or the people (even a bit of swaying), would be fabulous. Right now, it feels a bit dead still. I love the vocal swap of the character. On the vantage point idea, what if there were certain spots you can stand in, and it makes you take the vantage point of the corn, or of the crow? Make it fit into the story! Excited :)
- Sneha: I love this! It's a great world that you've set up, and I'm excited to see what you do with it
- Neha: Sooo realistic like a video/ VR game. I wonder if there could be text on top of the characters when they interact with each other. Something like "Have you seen the bird?" etc. Very very beautiful

- Tristan: Wow the intro! Reminds me of Mendelssohn's Midsummer's Night Dream. It's so cool that you were able to build a whole scene! I love how the chords keep going but the lyrics still keep in time when you get close to the POIs. It's so calming and immersive! A small suggestion could be attaching the camera's y-position to a SinOsc to make it more like walking? It's just a small suggestion but maybe it could add to the immersion?
- Wesley: Looks so cool! It seems like the mechanic is when you walk closer to things it fades the melody in. What if you could do a choose-your-own-adventure type thing by choosing which path you follow? Then the musical choices would kind of dictate how the story changes... idk just a bad idea.
- Ethan: this is ridiculous holy shit. I think having some subtitles when there's GText would be helpful, I really want to hear the whole story. Super dope, and i feel like this works really well as an interactive story.
- Richard: I mean... so much intricacy. You literally did VR in chugl it seems. Love the ambisonic aspects. Nice voice acting. So cool!
- Elisse: Oh my god, this is a full world. Are you supposed to follow the bird? The spatialization is wonderful.
- Ryan Wixen: Woah! The town looks amazing. Does the bird show you where you are supposed to go next? Cool! The road is also nice and the fading between different verses is really smooth. The journal reads well. The story also makes sense so far.
- Rochelle: world building ahhh. Cool voice acting and looking forward to seeing the story you write out!
- Matan: So wild that this is in ChuGL. The art is so amazing. The buildings are amazing.
- Ivan: Wow that 's alot of graphics! How did you create such a large world? This is really impressive!!
- Chengyi: Soooo Coool! Wonder how it is built in ChuGL! Definitely want to watch the whole story.
- Gray: Woahhhh omg the complexity of your scene! The interactivity of it is also very neat, and I love how you were able to create like such an immersive environment. Hmm as a game, it kind of reminds me of like What Remains of Edith Finch in the way that it's kind of more like an interactive visual novel that tells a story.
- Julia: Wow, the mods and world building is simply stunning!!! And love the singing!!! Love how you went with the interactive narrative essay; I'm very intrigued with how things will progress due to a good world build you've got going on here.
- Soohyun: Calm and beautiful.
- Senyuan: The amount of modeling work is craaazy! Maybe placing the camera further up and back make the fov look better.
- Emily: How did you build a 3D world like that in ChuGL??? The visuals are so impressive. Is the idea that when you approach a person you'll hear that person sing? I feel like it would be cool if you hear bird / owl sounds when you approach the owl. And maybe you can add more objects that make different sounds :)
- Raghav: Its a duet!! This is straight up like a Unity mini game or something, nice work!
- Nathan: I'm sure this would be so much easier in Chunreal haha, the fact that this is ChuGI is so impressive. The graphics are so detailed and intricate, curious what the new lighting updates would look like on here.

Matan

<https://ccrma.stanford.edu/~mabrams4/256A/FinalProject/FinalProject.html>



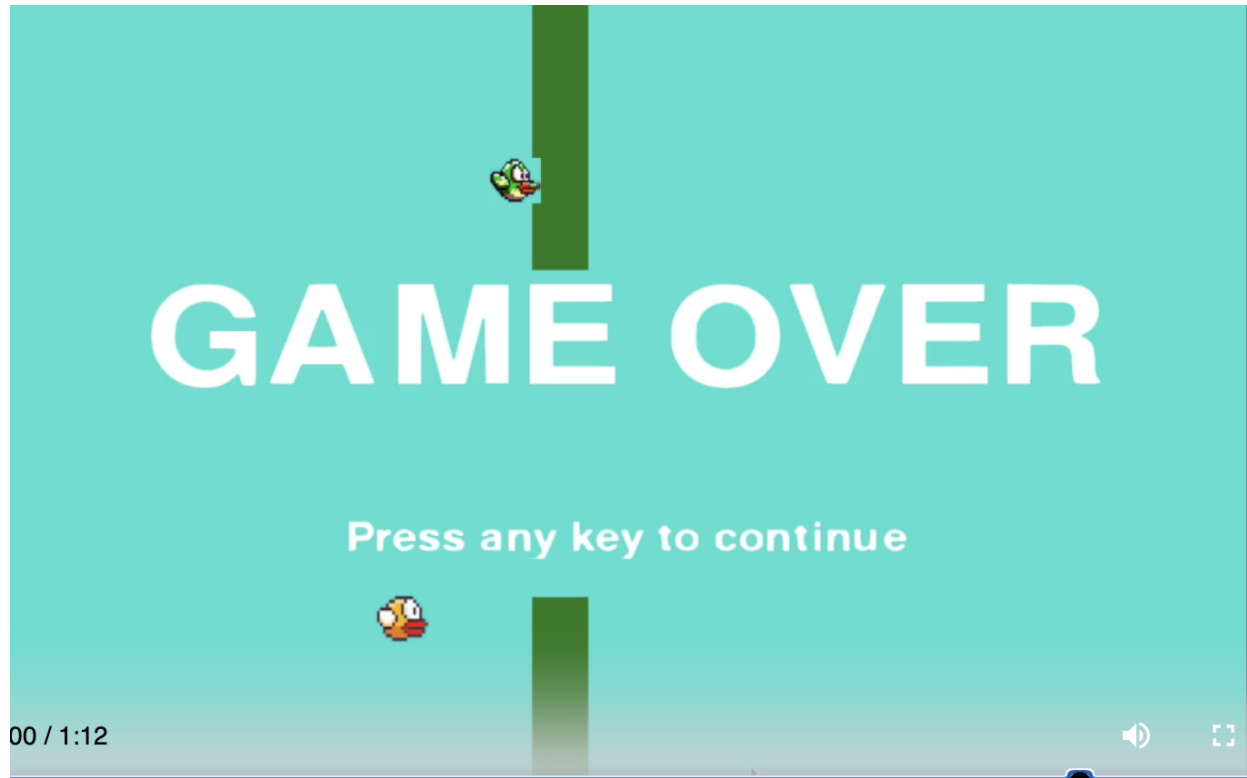
- Andrew: CCD is awesome. Like how synced the visual / audio elements are, having the enemy be chuck would semantically make sense like why the powerups are musical. Now that you have the system in place enjoy the fun part of fleshing it out with powerups/enemies/sound effects!
- Amy: I love the enemies and the feeling of the game rn!
- Tae Kyu: Great job with the game! It looks really good – maybe making the enemy bullets faster / giving the enemy more health would make it feel more like a true space invaders game! Experiment with different enemy types and choreographies!! Happy to brainstorm ideas with you if you want :)
- Sneha: This is really cool!! I wouldn't have thought of using power ups for the music! It might be cool to allow the user control over the beat, for example adding extra shots in the middle of the steady beats
- Logan: So fun that you sonified a game we know. The collisions look like they work great!
- Ryan Wixen: Collisions! Cool! Oh do the ships shoot at you? That makes it seem hard. How many lives do you have? What makes the little bullets point one way or another?
- Tristan: Wow this is so much better than your last milestone, the collisions look great! And the particle effect when you die, wow! One small suggestion might be to change some attribute of the bullets to differentiate it more from the stars? Love the chuck invaders theme.

- Neha: Not sure of the mappings but really love the idea of the game. Is there a penalty if you shoot down something you shouldn't? Like something attacks and stops you from clearing the blocks? Just a thought. But love the work!!
- Elisse: The playing feels so smooth! Did you lose? O.o Is that a charged attack?
- Seyi: Nice to see you can shoot the squares now! Can the triangle touch the squares without dying? I'm curious what happens if you fail to shoot the squares? I feel like there could be more from the enemies, I'd like them to play a sound effect when destroyed which I don't think they did if I'm remembering correctly?
- Rochelle: woah nice collision detection. Has clear game mechanics and cool animation for when the spaceship blows up. Not sure if you're considering, but it would be cool to add more variety in sounds when there's collision detection.
- Ethan: Awesome game mechanics and super smooth animations and collision detection. I'm sure you've thought of this but i think the music could definitely get more complex as the levels progress. I was a little unsure what each of the different collectibles did but i think this is awesome as is.
- Nathan: Animations are really clean and satisfying, the gameplay seems super fun.
- Gray: The animation that plays when there's a collision is a very nice touch! I really like how you really fleshed out the environment. I wonder if there is a way to distinguish the power-ups a bit more? I feel like sometimes there's a lot on the screen that I can't tell where the power-ups are 🤔
- Ivan: This is so satisfying to watch except when the blue ship died that was super sad, yay the blue ship is back! This is also satisfying to hear!
- Chengyi: Great game! If it can add more harmonies after eating more bonus.
- Josh: Insect-bugs sound like they'd read really well for intermediary enemies. Maybe enemy bullets could be more pad-like to put them in the background?
- Wesley: So fun to watch! I'd love to see the groups of bugs as like their own melodies... or any way that the bugs can feel like a musical statement both when they come dancing in and also when you kill them.
- Richard: Excellent collision detection and thank you for sharing the code! I'd love to see where you want to take the graphics
- Julia: Oooo so cool that you got the chicken invaders ideas going!!! Also awesome design how depending on what block you hit it can trigger certain sounds. Wondering if you could communicate what blocks you need to hit in order to add which elements to your music. The animations and mechanics look so smooth, looking forward to seeing the final polished version!!!
- Senyuan: This is a smooth and solid game! Imo randomizing the frequency of the bullet tones would make it more organic.
- Soohyun: YES~~ looking forward to more power-up modes!!! I think stars for now are a bit visually distracting?
- Emily: I feel like it would be helpful to add sound effects when the shooting balls hit the squares. It's a bit hard for me to see the correspondence between the visual and audio right now. Maybe you could make each color square play a different sound when they are hit by a ball? When the snare came in, I wasn't sure what in the visual scene corresponded to it. But otherwise I love the game idea and how interactive it is!

- Raghav: Kinda reminds me of astro party or space invaders. Very 80s which I really do dig!

Chengyi:

<https://ccrma.stanford.edu/~chengyix/256a/hw4/>



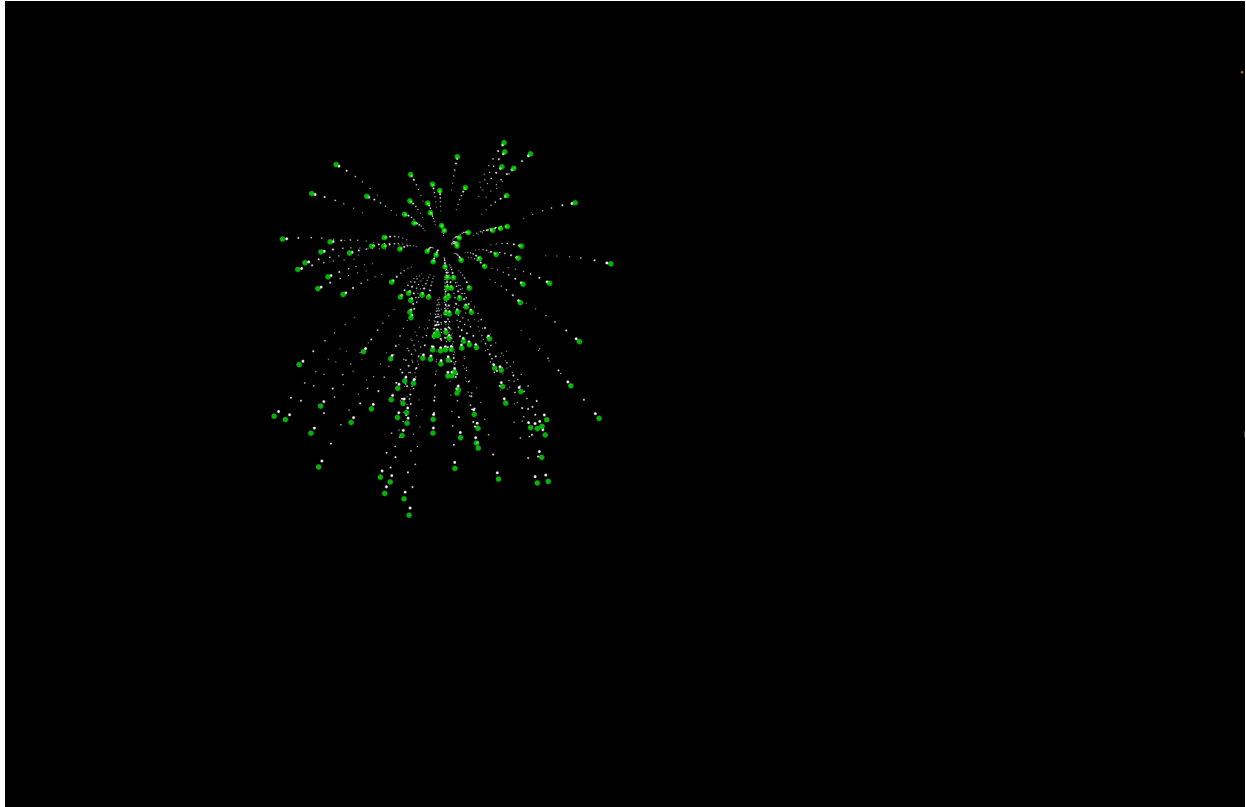
-
- Seyi: You're attempting to control it with an instrument this time instead of your voice? I like the addition of the second player, though that makes the difficulty even more intense. Adding more audio features like Ge said is cool, maybe if you make a very loud sound or something could destroy a pipe or something and a quiet sound could produce a shield
- Amy: I love how to see the game is growing to become more and more hard
- Andrew: Lmao is this local 2 player? Interesting how musical this is, would be cool to see a run that lasts more than a few seconds and get to hear more musical development. Congrats on making an impossible game even harder
- Tristan: Yo the double birds! It's almost guitar hero-esque! The pitch detection seems so smooth as well. Hearing how the pitch detection was done makes it so much more impressive.
- Wesley: This is hilarious. I do want it to feel like it is somewhat possible to get better.
- Ethan: The double birds looks so hard. This sounds so fun, maybe there could be an on screen visualization of the chroma in terms of like a speedometer or accelerometer? I feel like this would make the connection between the chroma input and the jumping physics more tangible/easier to understand
- Tae Kyu: Really curious how they're being controlled. To combine the musical input as both a controller but also a design to move the player towards creating music, it would

be cool to have a groove mode, where the game is a lot easier as long as you're making good music! Not sure how this would work, but some ideas.

- Rochelle: woah pitch detection!! Well done. Has a musical side and game mechanics.
- Gray: It's really fun how you use an instrument for your demo this time. The two-player mode is sooooo chaotic it's hilarious omg. I think this would be a frustrating level of teamwork/cooperation...
- Neha: You did itt!! The pitch based game is sooo much cooler than regular flappy! Very challenging too! Like how two birds give a different feel of music all together. Now would be how well they can be stable to go through till the end. Amazing effort!
- Ryan Wixen: I like how you are approaching a musical piece. I like the idea of playing a musical piece to pass through the gates. Maybe program the music that will perfectly beat the game.
- Josh: This is getting out of hand! Now, there are two of them? Do they have different control methods (i.e. pitch for one and volume for the other)? And then they could each have separate colored pipes?
- Elisse: Is the pitch determining the direction it's going? Or is it producing sound based on the direction? NO not the TWO OF THEM THAT'S SO HARD.
- Senyuan: Making the pitch directly mapping to the y location would also make it easier, and it could be nice to see more glides in action.
- Raghav: This seems insanely difficult. Glad it's coming together! Maybe u could have an AI bird boss swoop in?
- Julia: Oooo hearing the swoops down into the lower register is interesting; does that help you make the bird fly lower to avoid hitting the pillars? Oh no hard mode!!!! Definitely having two ducks being controlled by different aspects of input sound is very fascinating (and frustrating as a player haha, good level of difficulty). Is there a way to select which mode you are playing on? Can see this as a fun app on the phone.
- Richard: so smooth with the envelopes. I wonder if there can be an educational component to it too! Love the polyphony!
- Sneha: I really like this! Would be cool to have more variety in the music somehow
- Matan: The second duck is so cute. Omg two ducks!!! Maybe with two ducks you have two lives so you don't lose if only one dies. So cute though and very smooth.
- Logan: cool sounds! What are they changing about the way the character moves? I love the way that you just keep going after and hit milestones to add more characters.
- Soohyun: Maybe two different paths for each fish to make a harmonically aligned left-hand right-hand piano playing.
- Nathan: Love this — bad idea, what if it took a real instrument/voice as an input, and used the pitch as the control?
- Emily: Wa just when I was thinking it would be fun to have multiple birds you added one more bird! The game looks very difficult to play xd

Ethan (audio may be horrible sorry):

<https://ccrma.stanford.edu/~eljibuck/256A/final/>



- Soohyun: Oh no I happened to like the audio glitch. It makes sound more like firework hahahha.
- Amy: YESSS FIREWORK GIVE ME USA!
- Raghav: Explosive video haha. The music and visuals go really well together though.
- Seyi: The added effects to the visuals are well done. There seems to be some audio glitches, but I'm sure Andrew and Ge know more about how to fix that than me. I like the sequenced explosions, that's very cool. I think there's still room to add some flourishes and aesthetic to the background as well instead of a black screen. I think just controlling the fireworks with keyboard is cool; maybe just add some type of visual to show which fireworks are queued up.
- Richard: Love the visuals so much, so serene. The clipping actually makes an elegant fizzle to my ears. I love seeing slow burn fireworks. So appreciate the background music. It would be really cool if you had lanterns that kind of swing as they float up, which could be an oscillator.
- Neha: Very calming and beautiful!!! I can imagine sitting in a dark room and just admiring the fireworks and the sound. The line showing the travel of the firework and the history have come out really really well. <3
- Andrew: music and visuals are lovely, we've already talked about ideas for optimizing but lmk if you run into more issues
- Gray: The audio that goes along with your fireworks is soooooo nice omg! I really like how you got it to model actual fireworks with all the effects omg. I wonder if (with the new chugl release) you might be able to make the black background kind of atmospheric in a

way... I remember you were going for a screensaver kind of effect, and i think that might add to it

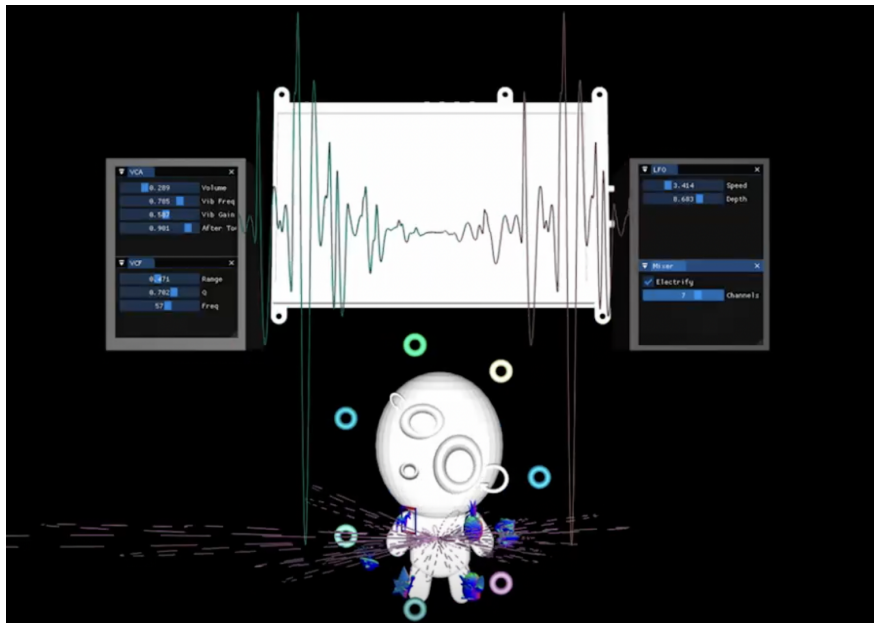
- Tristan:  Love the breathy pad sounds! Also the juxtaposition of a usually transient firework sound and the calming timbres that you have here. Woah the different firework types! The chords are so great, the dissonances are very pleasing.
- Ryan Wixen: It looks and sounds great. Nice aesthetic choices. I love the multicolored fireworks and the chord progression in the background driving the narrative. The double firework is awesome. The different kinds and really realistic. It looks really fun to watch. I want to see a finale.
- Logan: Ooo the different types of fireworks are so cool! They look awesome. Pretty choice of sounds and harmonic relationships.
- Rochelle: really like the fireworks that squiggle/move!! Good sound choice and the new chugl release might be useful for adding luminance/changing up the lighting for your fireworks?
- Wesley: Musically this is so beautifully simple and haunting and yet matches the visuals so well. If you can just find a way to get around the computation difficulties this is gonna be so sickkk.
- Soohyun:
- Elisse: The sound is so warm, and beautiful. The fadeout works really well, and the particle trails look amazing, I'd love to get those working. I can imagine that this with bloom would look so pretty. The extra propagation is fun. What's determining the colors at this point? I love the suspension in space really making it feel like a disappearing firework.
- Chengyi: The two types of fireworks are great! Seems the second one will cause the audio problems. Maybe reduce the particles a little bit?
- Josh: I know it's not intentional, but the way the audio breaks is kinda beautiful! I really like this!
- Matan: The aesthetics are amazingggggg. OOh that third firework goes harddd. Can you throw multiple at once?
- Tae Kyu: Wait this really beautiful, the different firework effects are great.... The audio issues are really unfortunate, but seems like something that could be troubleshooted :) I would love to see more colors and overlaid sounds!!
- Julia: Already loving the fireworks, it's so pretty!!! Yeah, had similar issues where when the computations are too much the audio starts crapping on me. Which may work in your case if it was intentional! Whoa, seeing the fireworks points go off in separate directions was mesmerizing. Wonder how the chord / background track is determined? Yesssss particle systems would be nice, I like the sparkly!!!!
- Sneha: So pretty! I love just watching it.
- Ivan: The fireworks are just so satisfying to see. The way in which their explosion dissapate into tiny fine grain examples. OOhh it's cool to see
- Emily: Wow nice music correspondence with the fireworks! I personally find the noisy firework a little bit distracting in the calming music, but it is a cool sound effect. I liked how some fireworks move in unexpected motion. Maybe you could include actual firework sounds for some fireworks? Also, this might be a bad idea, but I wonder how

fireworks falling upward would look, or the shooting star idea that Ge suggested would be cool too!

- Senyuan: So beautiful, I love the way it is simple and mesmerizing, (without glitches)
- Nathan: The chords here are absolutely gorgeous and the fireworks are absolutely perfect for it too. Wondering if there's room for more interactivity!

Richard:

<https://ccrma.stanford.edu/~rilee/256a/final/>



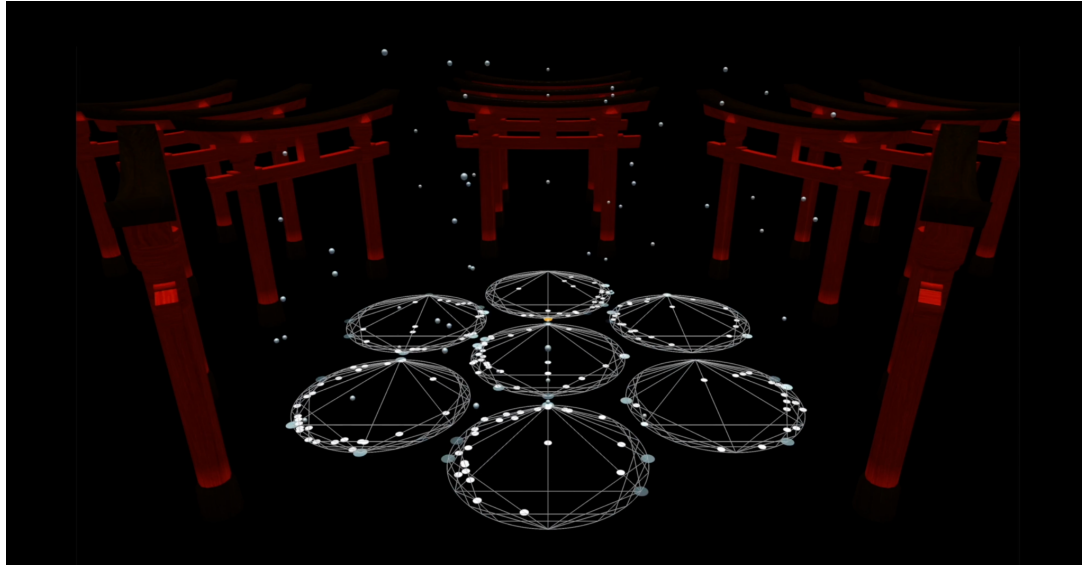
- Gray: Ohhhh it's interacting with his body parts.... I really like how you formatted? Stylized? The box in the middle of the two things—it definitely reads as the two things interacting with each other.
- Amy: I love the feeling of the body parts being represented
- Seyi: I can't read all the parameters being adjusted with the phones from my position in class unfortunately but the layout of them looks really clean, I like the addition of the white screen with the waveforms. Watching all the lines and circles around the little guy is fun; even if I still don't entirely understand what's going on.
- Josh: If you're interested, chaotic filter feedback could make some super neat sounds here that'd be still in this type of sonic environment. I really like the balance between the wild interpretive artful philosophy guy and the very number-based menus, it communicates a balance between the two!
- Tristan: The integration of imgui is so seamless, and what cool sounds it produces! The design feels quite psychedelic, but it is really nice.
- Neha: Would love to see the tiny guy explode in the end haha. It feels like the waveform shows the tiny figure's EEG signals for clarity of thought. Would love to see more of the panels. Would also love to see the guy bob after a cool sound.
- Ryan Wixen: The way the screen looks like a screwed-on plate is interesting. The sounds are interesting, and I don't understand them. What is the character doing? What are we hearing? What happens when you move that electrify panel?

- Soohyun:
- Wesley: I love the vibes of this. Reminds me of some early cgi/start of the internet denpa wave energy i.e. serial experiments lain. One question I have is what is the purpose of this tool? Is it more for performing a musical piece, or more for teaching about this type of synthesis? Or maybe more for experimentation? Any of these is valid but I think the kind of narrative you find in the interaction really depends on which of these you're going for. If it's more of a tutorial there could be text/arrows coming up explaining aspects of the thing, but if it's more for experimentation maybe there could be more informative visualizations. On the other hand, if it's for performance I would want to see a lot of dynamic things fading in and out or moving on the screen.
- Ethan: Love the aesthetic. I don't know anything about modular synths but i would use this. Maybe add animation to the circle dude. Or you're inside a submarine and out the window you see your whale from the 1st project
- Rochelle: cool exploration of sound design, maybe you can also tinker with the visuals that pop up when you add changes to the sound? For better clarity. Or maybe changing the background according to sound too?
- Andrew: unsettling, the audio does give an old-school modular vibe
- Sneha: V interesting, I really like the concept!
- Ivan: I have no idea what's happening here. I think I'm watching an engineer tinker with different tools in a very complicated machine.
- Tae Kyu: what the heck is happening. I love the cool futuristic sounds ^^ i want the circle dude to do something!!! I want him to react to the weird sounds. Maybe he could be the test subject of some contrived experiment, and we could squish and throw him around. IDK. He's so cute and squishy looking. Maybe if he's supposed to be *us*, then we could see everything from his perspective or something... idk
- Chengyi: Great sound synthesis. Love to see it on your previous ipod.
- Logan: Seems like a really fun sound making tool! It could be cool if the whole screen had a bunch of random buttons and stuff that you don't know what they actually do haha.
- Matan: What di the circles around the guy do? The visuals are very cool but I'm not sure whats happening haha.
- Soohyun: More of understandable visuals????
- Julia: Yayyyy!!! Dang really exciting to see all the little figurines surrounding your person. The sounds are also quite funny and reminiscent of a siren haha. Oh I see how the spinning object in the center of the person is like a helicopter chopper! I'm also fascinated by how you are modulating the different aspects of the GUI window, wonder if you can show what each window / sub-parameter manipulates in the sound (I probably also just couldn't see the text on the screen).
- Elisse: Oh the toruses/elements near the dude are rotating!!!! I like the connecting white thing that makes it easier to read the waves changing. I can't read the parameters and I'm unsure if I'd understand if I did see them closer.
- Emily: Wow this is too hard for me to understand xd The sound is super interesting tho
- Senyuan:
- Raghav: Very psychedelic, great work! Kinda reminds me of the SCP siren sound.

- Nathan: really vibing with the sound design here, would love to see music man here in the middle move around some more.

Soohyun:

<https://ccrma.stanford.edu/~soohyun/256a/fp/>



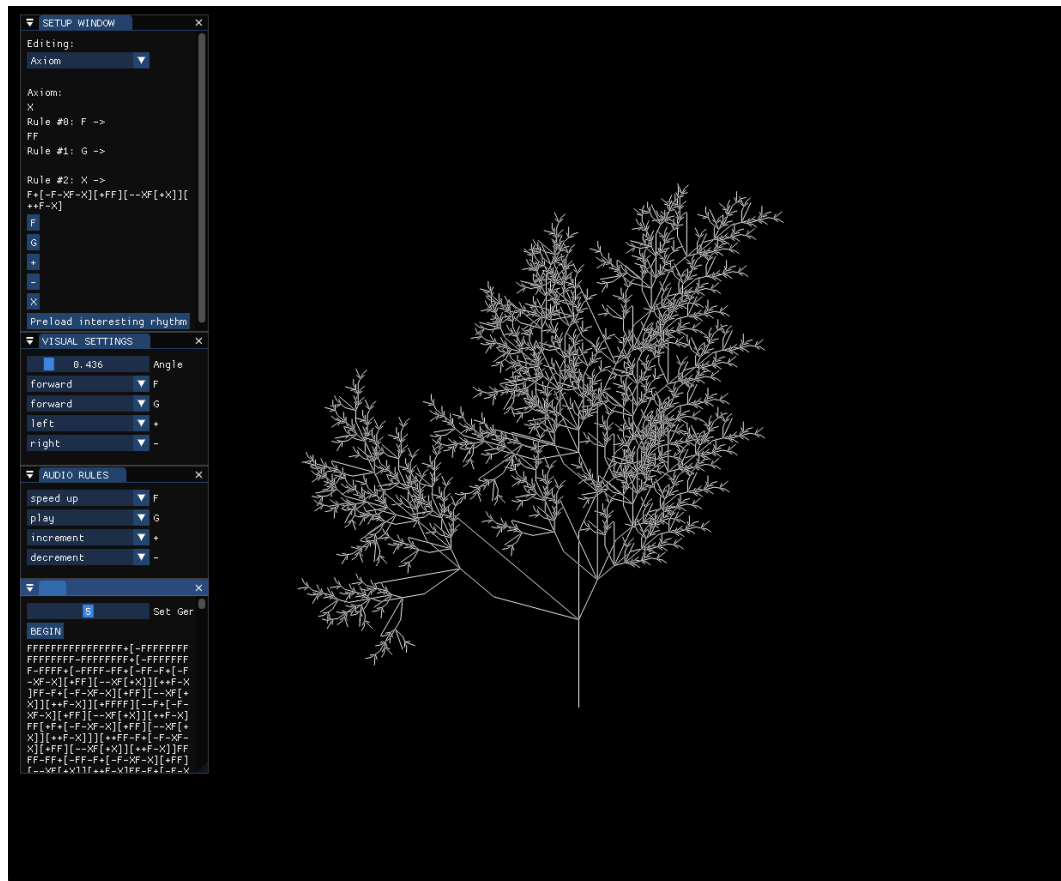
- Gray: ^WOAH. Agree w/ the cult statement... OOOh it falling from the sky is actually so cool... And the sounds that you changed them to definitely sound like rain! It reads really well, great job! I think it would be fun to add fog or something to your scene to make the atmosphere more eerie hehe. SOOHYUN WHAAAAT this is so scary omg
- Andrew: this is so sick I love it. First project I've seen to attempt and pull off the horror vibe. Intense. The camera should run straight up to the ghost. There a relentless sense of build-up here towards something terrible, how much further can you push it?? Increasing amount of reverb, flashes of light, maybe the gates start rotating?
- Amy: extreme cult vibe
- Seyi: The perspective shift of the irrational rhythm instruments is cool to see, with the balls now becoming rain drops. The aesthetic of the dropping balls corresponds to that audio quality well, alongside with the added visual flourishes. Nice jumpscare! I was just about to say it looks like some cult ritual is going on and it's great to see that it successfully summoned a ghost! I'm not really sure what to add for this to be honest, I still kind of want to see everything explode at the end perhaps. I kind of want to see the gates do something too.
- Wesley: Yessss. Im so sold on this... You told an even more convincing narrative this time somehow! The world is so cohesive here and the droplets are so convincing. I almost want the cult lady to get huuge and glow and teleport behind things unpredictably like she's stalking somebody (maybe us?)
- Tristan: Wow it's an alternate camera angle this time. The rain is so well made, and the setting is so eerie. Love the jumpscare and ensuing animations. The juxtaposition of chaos and order is so beautiful and mesmerizing. It would be fun to see the apparition glitch between the circles.

- Elisse: THE DOTS DROPPING IN ARE SO COOL. THE SOUNDS ARE SO NICE TOOOOOOO. Composition's great too. I love the fading effect as the drops impact the ground plane. gd, ooo jump scare. o.o THE SHAKING. Dude this is so freaking cool, and haunting. The miracle really came T^T
- Ethan: what sort of cult... oh my god the rain drops are such a sick feature. It looks like new circles are spawned in without the rain drops but I would like it would be cool if those were spawned in from rain falling. Love the horror arc truly horrifying
- Josh: Is that last sample a typewriter? Sounds uncannily familiar... Also the unmoving lady feels super weird, in a way you might not be going for? Maybe she could even stay still but flicker in and out a bit more smoothly according to the audio? Idea related to Ge's 3D circle-shapes comment, oscillation periods on a torus can get super weird and bring you into non-repetitive but also non-chaotic territory.
- Ryan Wixen: Wow, temple looks great! It is so cool how the droplets fall where the dots hit the corners. The different choices of sounds, like typewriter, create an interesting cacophony. The noisy movement of the circles is very exciting. Lighting like lightning could be interesting.
- Elisse:
- Sneha: Interesting! I like the droplets and the sound they make
- Matan: Holy that animation and fluidity is mesmerizing. The effect of when it hits the ground is amazing. One idea could be when you play note one of those red arch things could light up or something along with that lady in the middle.
- Rochelle: the raindrops were so aesthetic!! Also really liked the shaking aesthetic when the lady shows up. Since you have the background set up so nicely with the gates, it would be cool if the user can interact with them some sort of way?
- Logan: Wow the way you flipped the scene and made the droplets falling looks beautiful.
- Richard: Love the temple aesthetic so much, reminds me of rainy days in Tokyo. The sounds are also so keen. I'm scared tbh, would love it if it was less scary if you'd like. Aesthetically if you want to take inspiration from Emily's HW2, you could lift up the lines in the middle and then make the other pads Green to make it look like a lotus in a temple? Or make a fountain? Idk so cool tho.
- Ivan: The dropping sounds sound really satisfying. I like that sound design. I also really like the impact sound that the rain drops make when they fall down. I do wonder what the surrounding figures are. They kind of look like characters in minecraft. Like there's a satanic ritual happening oh oh okay yeah that was the vibe.
- Neha: The screenshot looks amazing. Woahhh you actually implemented the rain droppsss! So cool. The ghost is so scary. You've captured the vibe of your inspiration pretty well. The sound of the pitter patter towards the middle feels like rain on a roof. I wonder if the sequencer elements could be on a roof
- Senyuan: Yeahh! I was expecting something being summoned and there really is. Before a ring is activated, the corresponding gate could be kept dark. After the lady is being summoned, the gates could be dancing with rings as well. For narrative, give it a jump scare element to make the lady suddenly appear close and big after we have stopped playing? Also if the raindrops come from behind

- Chengyi: I love the 3D and 2D coming together. Nice animation! It looks more like rains now.
- Tae Kyu: Oh yeah this visualization is awesome, the rain dropping and landing is also super aesthetic too. I want to be able to spin around the center of this cult circle thing. I want to be able to go into the center of this and be inside this madness. OKAY ACTUAL JUMP SCARE wish the woman in the center would fade out instead of jumping in and out... Oh yeah, adding onto Ge, making more trippy effect like the circles duplicating or the dots coming in from the side would be cool... Make it bloody and gory (???)
- Julia: Wow, utilizing the 3D space is a very nice extension on your sequencer project! I love it so much. If you're still on the bandwagon for a creepy aesthetic, love the red archways that surround your sequencer. Really impressive how you are able to make the circles splat as they hit the ground too! Makes it look really realistic as rain. Bad idea: what if you added ripple effects??? Omg the ghost girl is a nice touch! And the jittering of the circles is also well done!!!
- Emily: I love the raining ball idea! The red gate visual is so fitting too. Omg the statue scared me so much lol Is it supposed to be a ghost? Or rain god? I love how the circles shake with the lady too. If you're going for a god-like figure for the lady, maybe you could give the lady the ability to move the circles up and down? Maybe you could add other types of weather elements like thunder? I second Ge's idea about changing the camera angle to first-person. I feel like that would make the experience really artful.
- Raghav: Great narrative! From both a narrative, musical, and technical perspective this is very impressive! I was totally not expecting the "ghost?" girl to pop up
- Nathan: And it *looks* like rain too! Super curious how the interaction component is done, and if the temple stuff will become interactive too.

Elisse

<https://ccrma.stanford.edu/~elisse/256A/final/#m3>

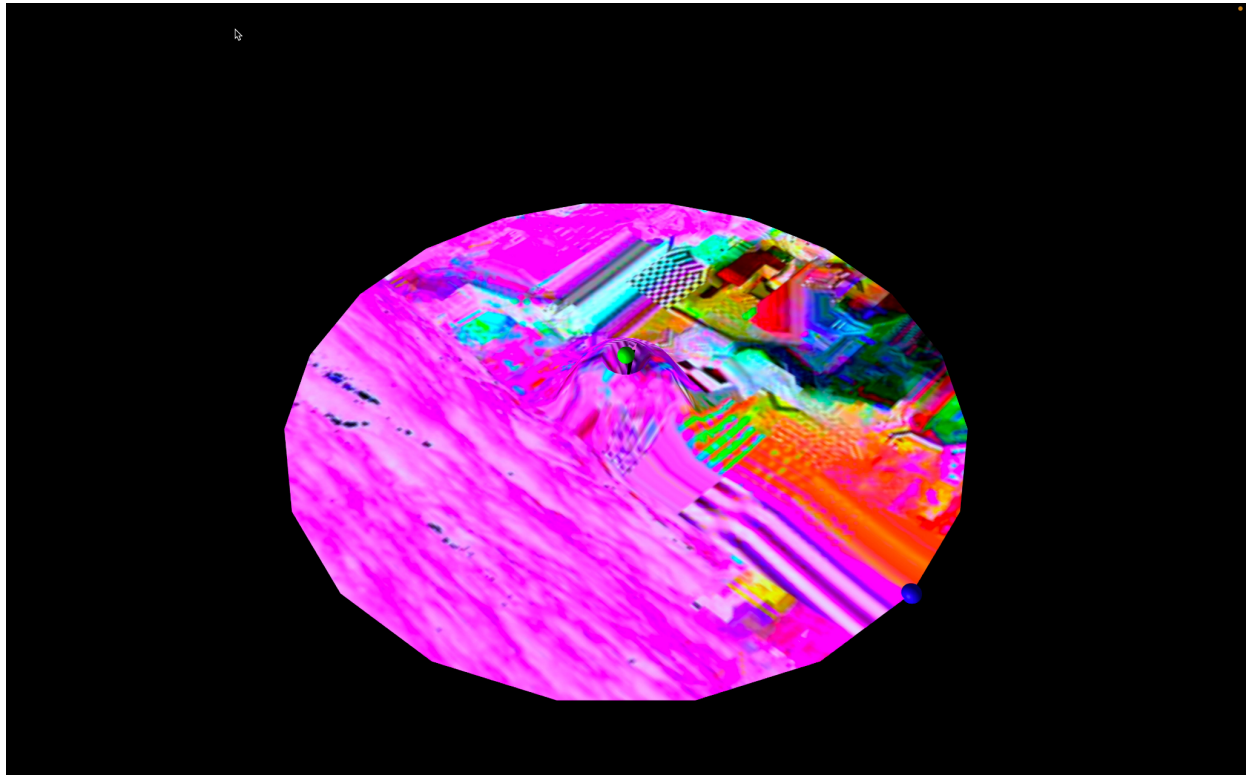


- Wesley: So coool as a core mechanic. I'm so down to see this be the only thing on the screen, the pattern really sells itself! I'd love to hear some more dynamic musical rules to this too! How can you make the rate speed up/slow down, or maybe change the color that it draws or the thickness of the line in tandem with the sounds changing?
- Seyi: I can't see what you're adjusting with the GUI from my perspective in class but it looks complicated. It's really cool how it seems you can use those settings to make it draw patterns in the way you desire, there's a lot going on there that I don't fully understand. It seems like it would be a really fun tool to play around with. I'd ask to make it more simple to understand but I get the impression that the scope of what you could draw would be limited if you did that. Streamlining it with some presets to help what everything does is probably the best idea.
- Amy: I love the aesthetic & super excited!
- Andrew: cool to see how customizable the controls are, both for audio and visuals. Sounds like you already have ideas for where to take this. Graphics challenge: make the leaves and branches sway with wind! Also wonder if something could be done with polyphony, maybe if you build out multiple branches concurrently?
- Logan: So impressive that you made it so you can change the audio rules in real time and the resulting visuals are really beautiful.

- Neha: That was sooooo cool and complex. Very impressive of how aesthetic and precise it already is, especially the design is clean. It feels like an interactive artpad. Amazing effort and very excited to see the final design <3 <3
- Rochelle: woah the tree is so pretty!! Good use of the gui in your design.
- Ryan Wixen: Huh, we are hearing a tree grow. This looks like an expressive system visually. Was the rhythm irregular? How do you want it to sound musically? If you want to update the interface, do you want to try making it button-mash friendly, so interesting things happen without much thought? What if there is a lifecycle, with life and death and regeneration?
- Tristan: Oh I love the clicks, it's so satisfying. There's something so cool to see the wonderful patterns in math. Also the aesthetic is so clean and minimalist!
- Josh: This is super cool! With the GUI stuff it's a really neat combination between education and performance that I think you should lean into!
- Sneha: I love this! The tree looks super pretty and the sound it great too!
- Matan: This is so cool Idc that idk whats going on. The white works tbh.
- Julia: I already love how the screenshot looks haha. Such a delicate tree branch / plant? I love how you can draw different shapes depending on the sound produced!!! A visualization of the sounds you've created!!! Dang. Incredible that you are able to draw an entire tree with your tool. Excited to see how the sounds can map more to what you want to draw.
- Ethan: this is so cool whatttt. There's so much going on here which is so crazy, but I think it might be hard to follow in the context of a final presentation. Ge's suggestion of having it be a live-coding performance type thing would be sickkk tho.
- Tae Kyu: asmr? Oh lol the collective ohhh is so funny. This looks really good!! Love how satisfying and aesthetic the sounds and visuals are.
- Richard: Love the camera following. The clicking sound is dope. Congrats on being able to implement CS theory into this! Axioms and fractals, so impressive and cool.
- Emily: Wow this is such a cool visual to look at. The aesthetic is already pleasing with white! Excited to see more trees in the future.
- Ivan: The clicks are very satisfying, and I really like the fractal nature of the design that you are creating.
- Soohyun: Beautiful.
- Chengyi: Amazing Tree! Hope the tree can have more colors and different colors have different sounds.
- Gray: The amount that you can tinker with and adjust is so so cool... Like it's such an adjustable system, it's so cool! And it looks sooooo wonderful when it's drawn out like that!
- Senyuan: The tree cures my minimalistic heart!
- Raghav: Wow! The procedural structure generation is crazy!

Josh:

<https://youtu.be/3xnTwEj0iJc?si=wR3fltSzjSg49P7u>

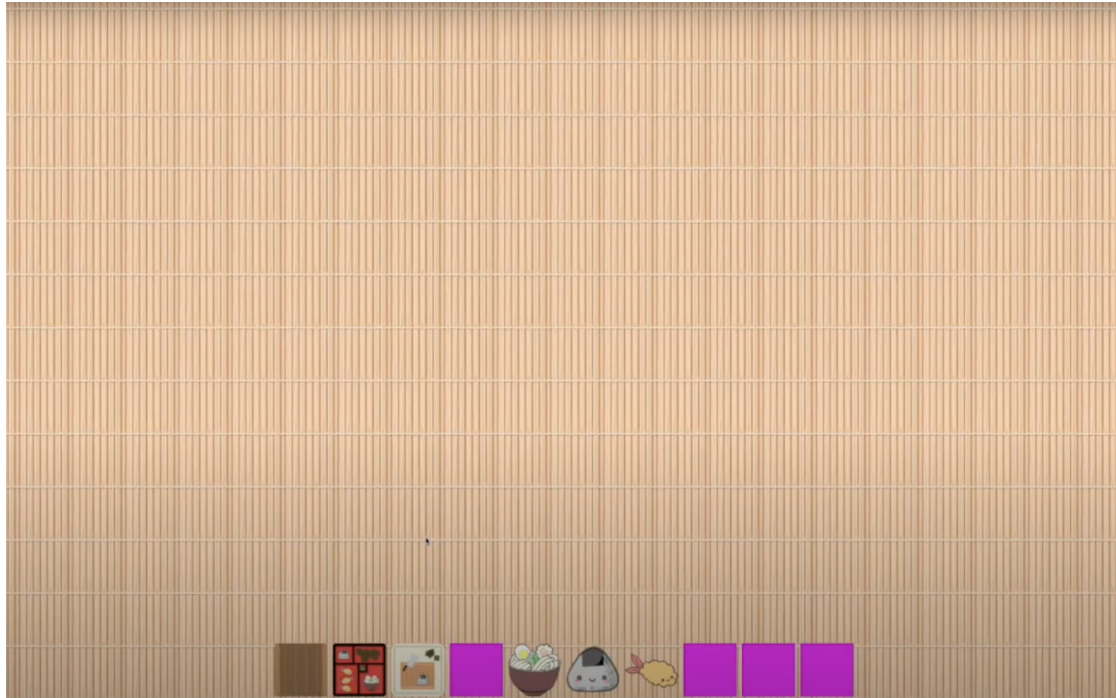


- Josh: potential loud sound warning
- Raghav: The jello is great! I like how it's vibrating and rumbling around!
- Seyi: What in the world is that texture? It's nice that you added some reactivity with the underlying membrane moving up and down. I don't entirely understand what's going on so I'm not sure what to suggest. What I do know is that it looks trippy and weird; maybe just make it more of a total mind screw since I already don't understand what's happening. Maybe some swirls in the background or something.
- Soohyun: THIS IS CCRMA
- Andrew: THIS IS CCRMA
- Tristan: Love the artful glitches! I can't say I understand how it works, but I can see that there is audiovisual correlation, which I appreciate! The colors also match the vibe of the sounds!
- Gray: WOAHHHHH no more mango but this is so cool omg. Interesting texture that you have on it, and I love how it ripples with the sound
- Wesley: Hmmmmmm wow this sounds sick. I want to see this thing sync and dance to a beat, but maybe that's just me... How do you perform a piece with this? I see you have a lot of experience working with this kind of instrument and that is definitely coming through, I want to see even more contrasts and foreground/background differentiation in the music!
- Richard: Love the sound so much. Glitch music af. Also really like the aesthetic, there's probably so much intense physics going on behind the scenes. Maybe if you did some drops of rain?

- Ryan Wixen: Oh yeah! Sounds nice and noisy. Are you changing the input pitch? I really like seeing the visual distortion. Is the audio rate too high to see the visuals? What if you downsample the audio to get the visuals? Where did the texture come from?
- Logan: woahhhh crazy it's pretty cool how you got a membrane-like response visually to work!
- Amy: MANGO UV rip - soooo cool
- Elisse: no mango ;-; BUT WOAHH IT VIBRATES. This is so so interesting. Does the texture affect anything (like specific colors) or is just given to show the differences in regions?
- Rochelle: woah crazy sound. Not sure what's going on but cool visual and vibrations.
- Matan: Woah it looks so cool when its in the middle. Idk whats going on but its super cool looking.
- Ethan: membrane AF. it sounds like a blown out speaker on the verge of collapse at any moment in the best way possible. I totally want to see someone use this this in some noise-core music set
- Chengyi: Cool sound, definitely CCRMA. Is it a modal synthesis? What's the function of these balls?
- Neha: Its amazing that you tried to incorporate the wave like ripple pattern. I am curious to know how you came up with that unique tone. Very interesting and looking forward to more
- Tae Kyu: respectfully what the heck is happening. Insanitarycore. What is the visual based off? What else can you do with the background? What if that was a zoomed-in version of the circular membrane, so it's like super trippy?? Also, filling in the rest of the space!!
- Sneha: Haha this is crazy! I love the membrane effect. Maybe use a log spectrum to get more range in the movement? I don't understand the rest but I want to see more
- Ivan: I really fucking love this man. You really cooked here. The glitch art is really cool. I wonder how you can make this look even more glitchy with the CustomFX pipeline once that gets released.
- Emily: I would love explanations of what's going on xd
- Julia: Already loving the animation and graphics here. It's like a canvas, with how your controls ripple out on the circle!!! CCRMA music indeed. Chaosssssssssss.
- Senyuan: Is it simulated by finite difference scheme? It is cool to hear the glitches and visual aliasing at the same time!

Tristan:

<https://ccrma.stanford.edu/~pengt/256a/hw4>



- Seyi: Oh wow you're cooking now. Is there like a goal, do you need to send plates the right foods or can you just send them anything and it produces a sound? Seeing as the plate texture seems to be the same I assume so. I don't think there needs to be that gamelike element but it could be considered, this is really cool as is so far. Great work on the drawings! I'll second adding some background noise and musical effects in places other than just the bento box. Maybe adding some more ways to mess with the flow would be cool too.
- Andrew: LET HIM COOK
 - ^^^^^^^^^^^^^
 - ^^^^^^^^^^^^^
- Elisse: The assets are so cute. OMG CONVEYER BELT SUSHI. I see what you meant by the infinite scrolling background. It looks SO good. That must have been so much work. I wonder if the black dots could be depicted a bit differently, but the aesthetic you have right now looks really good already. Maybe they could light up when the food splits? This is so satisfying to watch. Sounds a little like hot cross buns at the end oop. I wonder if you could add a bit of ambient background noise like sushi being made, general restaurant noises, or even just a slight conveyer belt whoosh. It'd be interesting if you could set priority for specific bento boxes and make food accelerate/decelerate depending on where it's heading??? (I feel like I'm thinking of Kura Sushi when you order something specific, the upper conveyer belt speeds towards you).
- Amy: sushi!!!! Soooooo cute
- Rochelle: sushiiiiiiii. Like the art that you designed :) also impressive camera + circular buffer lol. It works really well with your design!!
- Wesley: Cheffing it up lethemcook. I want to see what a 10000 iq player of this game looks like creating a whole bento box assembly line for musical purposes. I think a big bottleneck in this feels like how quickly you can edit loops... from rts we know the more

things you can map to keys the better, also if you can make macros that create entire loops with a keypress or maybe some node which can be toggled on and off like a logic gate but for sushi, those feel like convenient ways to make the performance potentially more dynamic in this. Or what if there was like a hunger meter and the response to things going into bento boxes depends on the hunger meter? All just food for thought...

- Gray: yayyyy sushi + ur assets!!! Ahhh it's so cool, and I really love when you make the infinite loop wah... so fun. I wonder if the black circles could be made to distort the existing sounds for the sushi or modify it? :0
- Tae Kyu: yesssssss INFINITE LOOP WITH SUSHI!!! I want there to be DUPLICATION and INSANE sushi creation... like i want to push this *thing* to its limits... The plopping sounds are yummy and satisfying.
- Richard: Sushi slay ~ the aesthetic is incredible. Could we get conveyor belt sushi? Amazing I would play this in my free time.
- Chengyi: Soooo cute! Nice mechanism of splitting objects on the nodes.
- Ryan Wixen: Ooh cute yummy. Wow creat choice. I am at a restaurant. I love how the chef has to send out the food. The bottom GUI looks good. The scroll and the sushi mat are nice. I am scare for the feedback, but it is actually somewhat tame. I wonder if it could go unstable and go out of control. I was so excited when you designed a feedback loop sequence. Do you want to make it a game with orders to prepare? Do you want to make an automatic producer element, in addition to being able to construct one from the duplicators?
- Logan: The visuals on this are crazyyyy they look amazing. So fun. Would love to hear you play with the sound design maybe a bit more? The way that the splitting works and the ramen just kept going has such cool implications for sound design. All of the sound effects for sure could make you feel like you are in the setting of a chaotic restaurant.
- Neha: Loveeee the sushi concept!!!! Especially the algorithm that it splits . Very aesthetic as well.Can the black holes be tables that send back orders? Maybe there could be an extra flash fry sound for the tempura , and other sounds for different dishes too. Like chopping, frying and tossing. Or a person saying “yummm” when the food is delivered.
- Ethan: incredible aesthetics. Can you please tell me how you did the icon dock at the bottom?? I was trying to do something like this but it just did not work at all. I think the sound could potentially be more interesting, I wonder how you can play more with the narrative of the sushi restaurant. Could some of the objects dance to a sequenced beat? That may be too sequencer-y but that could be cute.
- Matan: This is so fricking cool and the art is amazing.
- Soohyun: You can LOOP it!!!!
- Ivan: I love this one. This is better overcooked. Okay so this seems to me that each food corresponds to a different pitch. What are the purple squares on the left? Unlockable ingredients? This is some really cool gating mechanics that I'm seeing here.
- Sneha: Hahaha I would play this game!! To add more sounds, could you have more options for the sounds/ more food? I feel like this has a lot of scope already
- Julia: Yummy!!! This makes me hungry, I want a bento box nowwww.... Great that you've kept the node idea. I'm curious to see how the different types of food can create different sounds. Like slurping for ramen??? And what exactly the nodes can mean in a

food-themed game. Like a conveyer belt that dispenses food to its customers, etc... Seeing them rock would be cool! And also having a preparation portion of the food would be fun, kinda like cooking-mama, restaurant style games? As others have mentioned, overcooked comes to mind.

- Emily: OMG BENTO BOXES I LOVE THIS ALREADY. This reminds me of Overcooked so much xd Maybe when ingredients arrive at each station dishes are built up? Maybe when different ingredients touch each other they combine and turn into a type of sushi / rice balls?
- Senyuan: I wish my sushi box could be duplicated in this way.
- Josh: Now I want to see some sort of infinite loop with the duplicators that crashes the program for the end of your performance >:)
- Raghav: I like how the visuals are starting to have more flavor now!

Gray Wong

<https://ccrma.stanford.edu/~mayannw/256a/final/>



-
- Seyi: THE TAMAGETCHI. I think the lines on the screen could be adjusted so that they are more clear to see. I do kind of wish there was more on the screen rather than just the lines though. Are you supposed to match the piano pitch vocally? Maybe you could put the TAMAGETCHI on the stage and move the waveforms to the side; since I feel like that cool element is sequestered in the corner.
- Tristan: So happy to see that you got it done :) All of the SFX are so cute! Ge finding out about tamagetchi was so artful! Love that your subliminal messaging worked!
- Tae Kyu: wait this is so cuteeeee. Ge tamagetchi. Maybe as you get better, the game speeds up, like you have to match the note faster? What if you had music notes on a

musical staff on the concert stage scrolling, if you're thinking about the musical interval / melody idea?

- Chengyi: Soooooo cute! Hit the notes.
- Wesley: Niceee I like how it got much more interactive since last time. One technical piece of advice I have is to weight the spectrum so the human vocal/instrumental range shows up in the middle of the screen and in a much larger amount of screen space, and maybe with a thicker/more dynamic line. That would make the interaction feel even more consequential and like a performance!
- Andrew: Imaoooooooo. Finding a game loop that flows is always challenging, maybe adding a beat and a rhythmic / time element to this would help. Also wonder if the empty stage on the space could help to visualize, maybe a stream of notes or the rhythmic grid you're trying to follow
- Amy: AHHHHHHHHHHHHH! Adorable!!!
- Ethan: Awesome visuals obviously, love Tamagetchi so much that's so funny. Love the pitch detection, i'm wondering is it for vocal pitch matching? Is the piano for reference or is that just to demonstrate the pitch detection?
- Neha: Wow so amazing that you created a tuner. Would love to see what the end project looks like. Great thinking on the character.
- Sneha: I love this, the sounds are so cute!
- Elisse: YES I'm READY. OMG IT'S SO CUTE. I love that you went the pitch trainer route. I know you were waiting for GText, but this looks so good already! NOT THE TAMAGETCHI PLEASE. The lines on the stage are just a little hard to see from the back here, and I'd love to see something more there possibly.
- Ryan Wixen: The game looks fun and like the pitch detection is working well. I want to see a character on the stage. What if there was a song to play along to? What if the adjustment arrow scales with how far away you are from the pitch?
- Rochelle: oo nice addition of the gui for pitch detection. Lol the character design xD +1 on the color change for pitch correction. Would be cool too if the speakers also pulse along with the audio/animate the speakers a bit. Very cute and fun to watch!!
- Logan: Awe this is soooooo cute I love it sm.
- Julia: Love the interaction where the user is instructed to hold certain notes and adjust things. Seeing tamaGetchi is TOO FUNNY!!!! WHAT DOES THAT MEAN LOLOLOLLLLLLLLL.
- Ivan: ENCORE!!! ALSO OMG TAMAGETCHI!!!!!!!!!!
HAHAHAHAHAHAHAHAHAHAHAHAHAHAHAHAHA this is top-tier tuner. I will use this to tune my geetar from now on
- Richard: omg! So cute and educational. Avoiding copyright! Keep it
- Josh: This is awesome! The final boss could be singing a song! OOooh with intervals like Ge's talking about
- Soohyun: TAMAGETCHI. There is so much potential in that cute tamagetchi.
- Emily: Please make the Tamagetchi bigger xd Maybe you could consider having the player match note first, and then match harmony, and then match chords? Or maybe make it so that following your instructions would teach the player to sing a well-known song? I feel like it would help to show more visual changes on the main stage too.

Maybe you could make the Tamagetchi sing on stage as the player sings? Excited to see how this goes!

- Matan: So cute. I would love to see it get mad if you dont do things right.
- Senyuan: Shifting background color as indicators of the tuner would be helpful! Epic TamaGeChi we have.
- Raghav: You got the pitch detection to work!!

Rochelle Tham

<https://ccrma.stanford.edu/~rochelle/256a/final/>



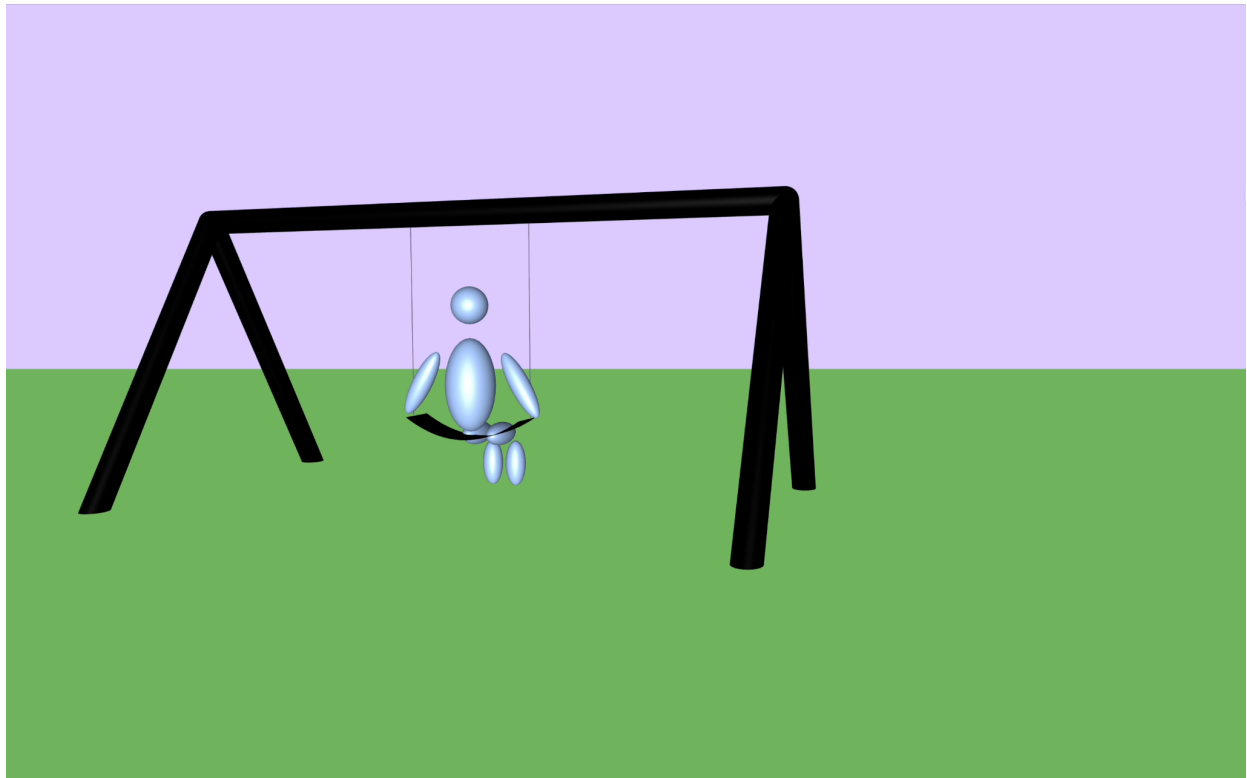
- Seyi: Oh they cry when you mess up, nice touch. It was a little hard to see the faces. Maybe you could zoom in more since the rest of the screen isn't being used for much right now. For the final, I suppose it's best to focus on making one song play well in the game; so you could think about musically adjusting the song like Ge said and tune effects to the specific song.
- Josh: Amazing end screen! Potential alternative or add-on to zooming in like Ge suggested, maybe the characters could get a close-up head shot text box-type thing with a little quote from one of the characters at the bottom of the screen?
- Ryan Wixen: The song sounds so good! How did you make it? The game looks hard because the spin is not always on the first beat. I like how the tomatoes land on the stage and how a big one comes at the end. What happens when you win? What if there was a reward? The characters have a lot of personality.
- Andrew: The leftmost player is a mood. So much character / personality in this, love the tomato finish haha
- Tristan: OMG I love them falling over! Hearing the music with it makes it so much more coherent now. Woah the cool effects, there's so many of them. It's so whimsical and upbeat.
- Ethan: music is soooooo good. Love the animations and effects. +1 on Ge's point about facial expressions, i did not really notice them the first time, but that adds such an

awesome layer. I think the actual flow of the game is a little hard to follow, maybe there could be visualization of when the game starts?

- Amy: Loveeee the death
- Tae Kyu: THEY DIED. For the game reward loop, it would be fun to have a music track with different tracks (drums, bass, guitar, synth) that start playing and make the music more fun and interesting as you do better. And then maybe, the rhythms get harder. Or, visually making an audience behind the tabletop that builds up if you do well.
- Neha: Soooooo cute. Loving the sparkly animation. Was waiting for the tomato knocking over the characters haha. It happenedddd. Great job.
- Matan: This is some amazing music holy crap where is this from. Love the tomatoes.
- Wesley: YES on the music and tomatoes, super nice. I want the people to be bigger on the screen, maybe even closeup on individual figures. I also wonder if the tomatoes could be automated in response to you messing up sometimes.
- Elisse: THEY DIED. Ooh, the sounds and the expanding red thing to show you were off beat. Are the tomatoes still a thing? I love the little sound effects! OH! They cry. The tomatoes actually hit and knock them down, I'm crying. Can they jump?
- Julia: Very cute, the musical context is very strong this time!!! Very cute how you are invited to spin in time with the others. Tomatoes are cute, also sad LOLOL. Love that the characters also interact with how well you are playing the game.
- Logan: The game looks so fun! The music is great. The camerawork idea to see the expressions more seems great cuz their expressions are so amazing! We want to see them!
- Sneha: OMG wow this is genuinely amazing. It's so fun to watch! I wish it was more clear what's happening visually though, I felt like I had to find the cues, they weren't as in your face
- Chengyi: It's like the Rhythm Doctor! Great game!
- Richard: this is so so so incredible. Love the tomatoes so much. The falling mechanic is also awesome. I would totally use your curtain animation from HW2 that you did! Crying one is so me.
- Emily: Omg I love the visual style and the music! Right now it feels like the paper character spins are not super in sync with the music. I feel like the game would be more artful if the music and visuals are more synced up. Maybe you could make each paper character play a type of drum sound when he or she jumps? (so that when the "you" character misses the jump it is more obvious)
- Gray: the animations are soooo lovely omg! I love how intense the negative feedback is for when you play it at the wrong time. The way that the person like died 😭TOMATO DEATH 🍅
- Soohyun:
- Ivan: This is so cute omg but I'm so sad that they fell!!! That fall is gonna be what all of twitter will talk about in the next few hours. This is so darn cute omg I can't get over it. The tomato mechanic is so great hahahaha
- Senyuan: Nice! I would love more feedback when I hit the right move.
- Raghav: The art is great and just the entire aesthetic really

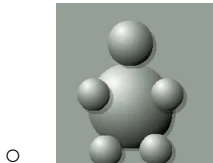
Ryan Wixen

<https://ccrma.stanford.edu/~rwixen/256a/final/M3.mov>



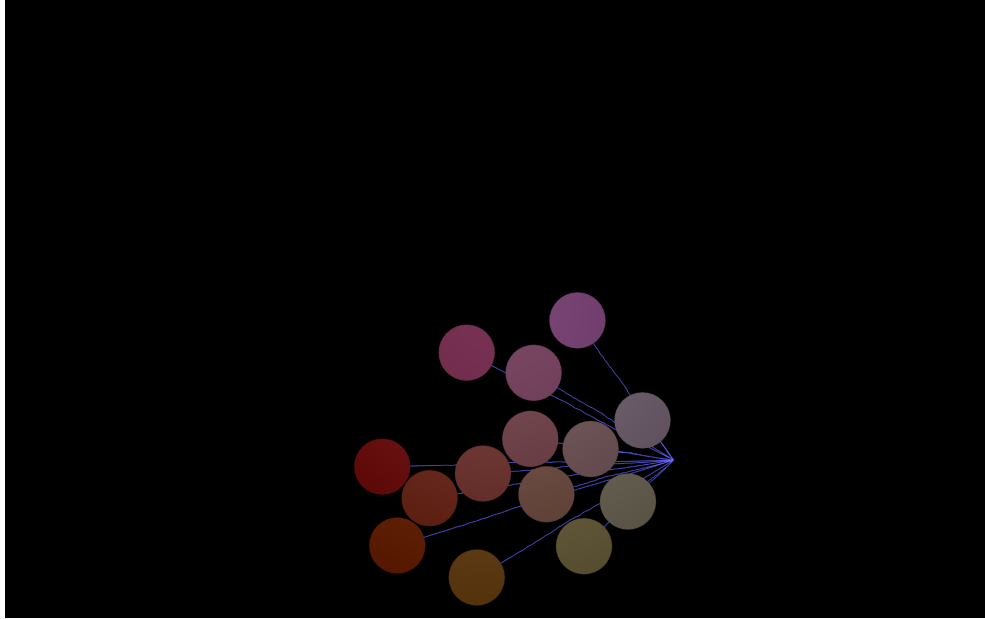
- Seyi: The anticipation sure is building with those ominous, slowly growing tones. There we go, I knew I wanted to see him take off. It'd be cool for the audi to change more in response to them taking flight, maybe it can become more upbeat and less ominous once you start flying? Some visuals in the background or maybe even a camera change could still add a lot too.
- Andrew: this makes me feel a confusing mix of dread / humor / and serenity??? Seeing all your smooth joint animation makes me wonder if you could implement a super simple IK solver in chuck and give QWOP style controls for the character...
- Tristan: Can't wait for the plot twist lol. Haha this is textbook potsmoke. Ahh leaving us on a cliffhanger. Do they crash to the ground if they don't flap anymore? Oh this could be like a qwop thing where you have to frantically input stuff on the keyboard to keep it going but the low-key vibe creates a great juxtaposition, like a classic foddian game.
- Neha: There's something very eerie about the start but the flying was the best. Would love to see more happening in the sky
- Wesley: [Reminds me of this if you want to go this direction](#): I want to feel something really big and complex happen when the person jumps off the swing! Some loud and incomprehensible sounds, something fast, something energetic. Also some crazy colorful visuals... anything to strongly contrast the buildup at the beginning. Then once we go through this buildup can we end back where we started somehow?
- Senyuan: That's exactly what I wanted to do with the swing. It would be cool if the sound of the swing, person and space objects are detached and spatialized.

- Rochelle: +1 on the audio change. Maybe have the camera angle change around the figure as it's flying too?
- Amy: very very ominous
- Soohyun:
- Richard: The audiovisual correspondence is so awesome. Love the legs! Yessss jumping off!!
- Julia: Yess keep the unsettling swing vibes. Seeing the person start flying off into space is surreal, omg. And having the music have harmony when that happens is perfect timing. Wondering how the scenery will expand as he continues his flight, kinda like drifting off into his daydream / nightmares??? Really intriguing interactive essay for sure, and I'm excited to see how this blooms for the final presentation!!!
- Tae Kyu: Great animation.. It looks really good. And the feel is good too.
- Logan: Wow the flying is so cool. It's really beautiful and peaceful. It would be really cool if birds fly by you or something so it is more clear the way you are moving when flying with the pretty up down animation of the arms you have
- Sneha: So serene! I love the surprise of having the figure leave the swing. Will there be a part 2 while flying? Also the animation is v cool.
- Josh: If you want to keep the minimalism and vague creepiness for a new musical moment as the figure takes off, a plain super-low drone note could work really well. Can the background slowly get darker purple a bit into flying to give more of a perception of motion?
- Gray: AHHH he's flying.... Goobybye... I remember the name of the guy it reminded me of... it reminds me of interactive buddy. The sound that you changed it to is really nice! It's like a lot more pleasant and less creepy in a fun way



- Elisse: s w i n g. Ooh the legs swinging are animated now, vvv smooth! HE FLY. I'd love to see clouds going by so we get a sense of how high into the sky he's flying.
- Matan: omg yessss jumping off the swing. I think some stars or clouds could add a lot to the sky.
- Ethan: Love it. I think adding some subtle texture to the sky could more sell the flying animation (since the background is all flat) but I do like the very plain look to it. I want the music to be creepy and unsettling but more active during flight
- Chengyi: Incredible! It's soooo smooth. The feeling is nice.
- Emily: The semitone interval is so unsettling xd I'm curious about what the player can control. The flying motion is so artful :)
- Ivan: Oh my god they are flying!!! Those semitones were very unsettling.
- Raghav: hahaha i was totally not expecting bro to be chunked off the swing, very cool though

Tae Kyu Kim



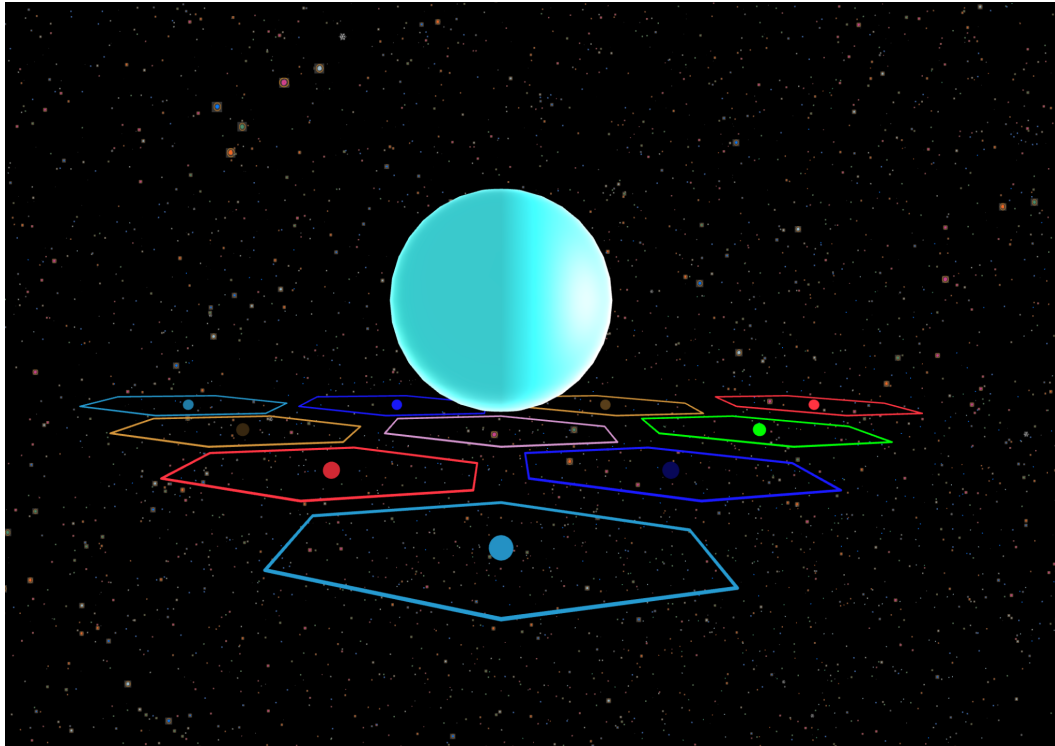
<https://ccrma.stanford.edu/~taekyu/256a/final/>

DEMO DEMO DEMO DEMO DEMO DEMO DEMO

- Gray: yayyy demo! The flashing lights is like omg. Circle rave! It's really cool how you make it move and like kind of follow your cursor in like a not-so-straightforward way. I also wonder if maybe the circles can spawn in based on certain events or if certain frequencies are reached? ← asked because the colored balls kind of remind me of Ivan's chroma circles
- Seyi: Does the audio also change the colors of the circles? The waveform visualizations are super cool too. It's a great physics engine, I'm unsure what more you should add for the final project. I think having some more interaction would be cool. I think right now it responds to the mouse and there's the audio visualization, but as you said I want the balls to make noise or sound as well. If the balls aren't 2D some camera changes could work well here too.
- Elisse: d e m o. eh oh. I see why there's a rubberband.ck file. This is so cool! What do the colors mean? Is there any history? Maybe if your mouse stops moving there could be a center point generated that acts as a mouse and randomly moves around w noise?
- Andrew: sick demo dude. The dynamic physics feel very alive, wonder how you can add a similar quality to the audio. Maybe a starting point could be to play a sound effect on collision
- Tristan: DEMO DEMO DEMO DEMO. Wow it's like a spring physics simulator. This is so cool! Love the strobe light effects. Screensaver? I hardly know her!
- Ethan: this is such a cool visualizer. I'm with u on the screensaver aesthetic that is the direction that I have been going in. Maybe the balls could make a feedback loop by creating sounds and taking that in?
- Amy: i loveeeethe collisions
- Neha: Love the collisions with waveforms. Its pretty natural. I'm curious if you can implement the DVD trying to touch the corner screensaver but with the collisions.

- Ryan Wixen: Collision looks great, as do the colors changing with the sounds. It seems like it has a logic, but I don't know what it is. I want collision sounds.
- Julia: You're project was so good it broke chuck lol. This is really cool though!!! I love how the sound is mapped to the lines connecting the circles!!! Having them be like balloons following your mouse is soo cool, and I love the rainbow color selection!!! BLOOM TO THE CIRCLES WOULD BE SO COOL.
- Sneha: I really enjoy this and it works to relax
- Rochelle: really cool collision building and good use of the strings as waveforms.
- Josh: Audio samples on collision, perhaps?
- Matan: Woah I love the balls changing colors. This looks awesome with a bunch of circles!!
- Soohyun: Amplitude of waveform increases the spring constant? More vibrant when larger spring constant.
- Richard: Love the screensave aesthetic. Wonder if you could use 3D spheres and make the camera move too.
- Logan: Really pretty! The colors and the visualizer aspects are cool. Crazy how everything interacts with each other.
- Chengyi: Cool! Really cool, the strings are wave of the voice.
- Wesley: looks very satisfying. I wonder what the goal is or if there is a goal... This gives me like fidget spinner on crack x audiovisualizer vibes. I want to be able to interact with this thing in a very repetitive way that satisfies a tick I have in that same way that stress balls or biting your fingernails does.
- Emily: This is such a cool audio visualizer! I love how you made the balls follow the mouse. It would be nice to be able to remove circles as well.
- Ivan: This is really cool! The fact that you managed to get collisions working is pretty impressive!
- Senyuan: This is very fancy, and I wonder how you made the elastic pulling of the strings so lively. The blinking might be a bit to responsive tho, so adding smoothing function may help?
- Raghav: Very fluid movement, quite satisfying haha

Neha Rajagopalan

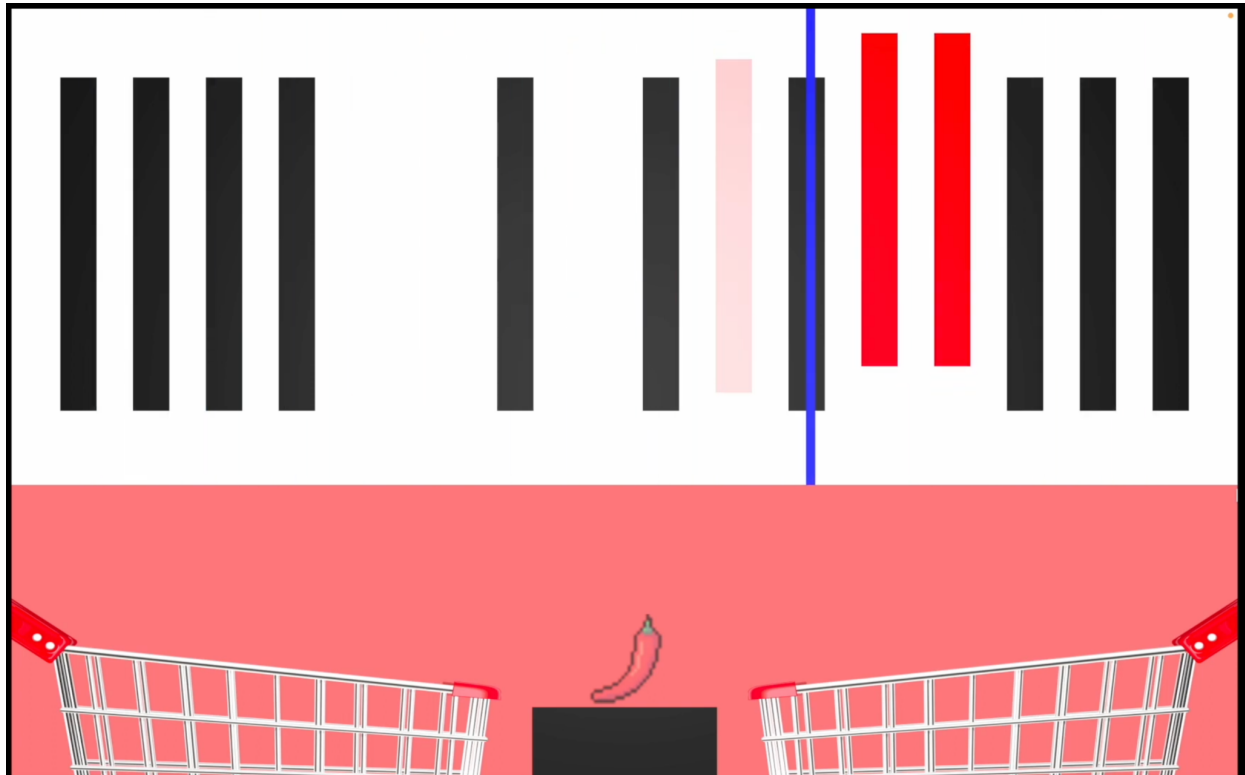


https://ccrma.stanford.edu/~neharaj/476A/Final_project/Final_Project.html

-
- Seyi: The sound design is so unique and interesting here. I guess I'm wondering what it represents with this strange ball just floating through space hearing the sounds of people. So the sounds are supposed to represent elements of nature and society? I wonder what the end goal for the game would be then, or if you want it to just be an explorative space. I'm thinking of an alien traveler inspecting the elements of nature and society on Earth.
- Wesley: Very visually intriguing. I want to see the ball bounce/jump! What if I'm playing this ball in a musical platformer and when I hit the pads underneath they change visually and make a sound? Or maybe I can hit another button and phase through them gaining some kind of property like a trail of water or fire, going with your elements theme.
- Tristan: The interaction is much more elucidated! I like the feeling of vastness and emptiness of space with the single-line melody.
- Andrew: like the hexagonal tiling and ambient particles. As soon as you get the audio triggers working properly I bet this will feel all the more dynamic
- Josh: It's like hexagons full of little memories! After your explanation, it sounds almost like a musical tool for teaching alien children about what humans are!
- Logan: Cool mechanic. I like the general idea. Its a little hard for me to tell at first how far away from the ball you were/where it is over top. Maybe it casts a shadow or reflection downwards somehow that's 2D so you can see where you are?
- Tae Kyu: unsettling.... Is this like a sequencer thing too? I like the atmosphere.
- Amy: looks soooooo cool!
- Rochelle: like the design + environment you created. Looking forward to where you bring this with the sound.

- Gray: Ohh I like how the color of the ball indicates which space you're in so you don't have to like guess or constantly look down and figure it out. The sounds that you chose are very interesting too—they feel like ASMR type noises
- Ethan: love the aesthetic and environment, I'm having a bit of trouble following the narrative, but it's really intriguing nonetheless. The narrative that ur describing is so cool, but it seems potentially hard to distill this into a readable presentation. I wonder if there's a way you can simplify it? Either way tho, I think it will be super interesting both visually and sonically, so I don't think it necessarily needs to read extremely well.
- Elisse: Felt a little demonic ngl at the beginning. But also like wind whooshing? So the ball changes color over the tile it's on? How does this change things sonically? The hexagons look really lovely!
- Senyuan:
- Richard: Awesome spacelike feel it this. What does the UI do?
- Sneha: It's really pretty! Don't completely understand but it sounds and looks like yo have a great setup to work with
- Ryan Wixen: The game board makes more sense now with the equally spaced hexagons. The mechanics of the different samples playing based on location also make sense thanks to the color of the ball changing to match the floor.
- Julia: Wow the setting has expanded so much from the last milestone!!! I just want to drift with the particles and the landscape. I also love how the sounds are abstract as they accompany the main melody / theme you have playing. Utilizing the different elements as a theme is really cool!
- Soohyun: Space
- Ivan: This is a pretty cool aesthetic out in space! The hexagons are giving future.
- Chengyi: I love the idea of the ball changes the color from the ground's color. Also great sound!
- Matan: Very pretty and spacey. I dont understand whats happening but it looks very cool.
- Emily: Ooo I like the idea of changing the sphere color based on the hexagon underneath. I love the elements of nature in your idea description. Maybe you could add sounds that correspond to fire, earth rocks, etc. when the colors change?
- Raghav: Very ethereal and almost seems like a cosmic experience

Wesley Larlarb



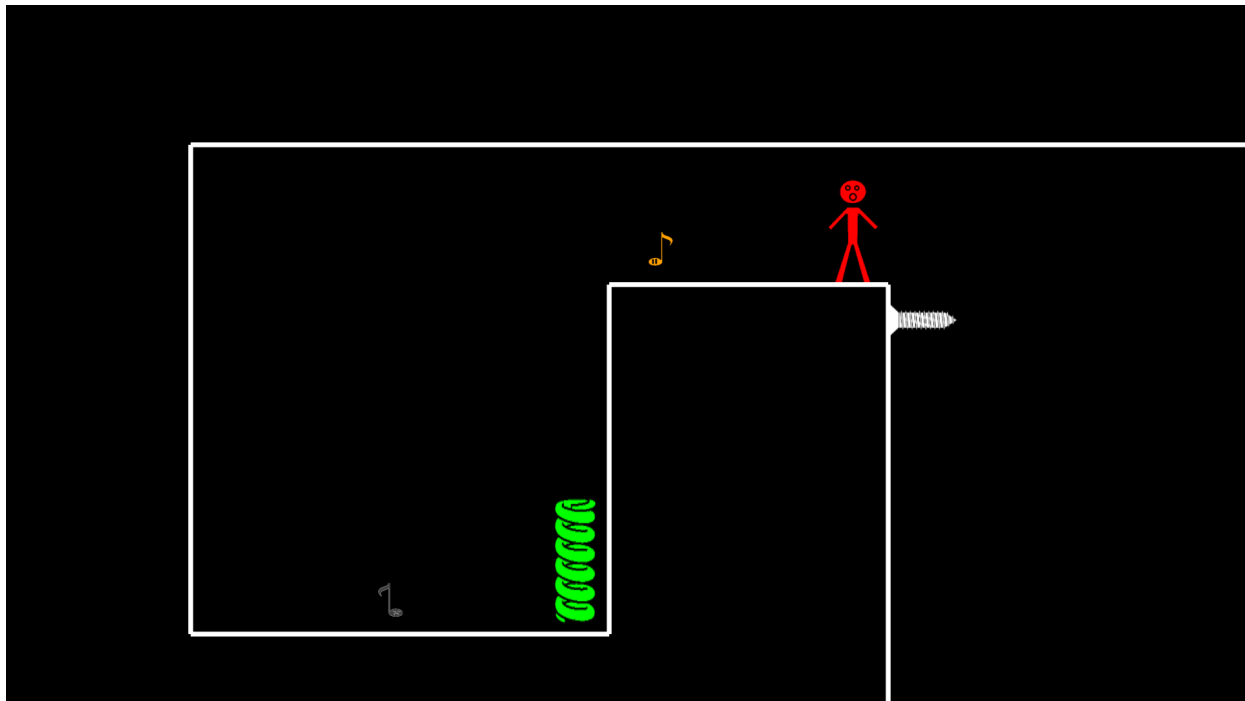
<https://ccrma.stanford.edu/~wlarlarb/256a/final/>

- Tristan: I love the shopping cart visualization! It makes it so much clearer whose turn it is, win/loss, etc! The rules are pretty interesting, but it would be good to have a scoreboard. Would also love to see the cart fill up as well.
- Seyi: The added competitive element is a fun addition. I think perhaps the scores should be tallied somewhere to add to that element, maybe with the new GText that wouldn't be hard. It'd be nice to see the food pile up in the carts, with perhaps the game ending when a certain amount is reached. I wonder if there could be some additional sounds for the sequencer part as well; though I suppose the rhythmic part is most important
- Logan:
- Tae Kyu: Love the pacing of the game and the animations. Again, a themed scoring system like building a food (burger, burrito, pizza, etc.) would be awesome. What if there was another mode where instead of 4 beats, each person gets to dictate 8 beats? Then it would get a lot more challenging. Or have 3/4 time meters? It would add a lot of spice!
- Matan: The shopping carts and food are so nice. This game seems really fun and I would love to play ot.
- Andrew: haha so it's musical horse. Like the cosmetics you've added with the groceries.
- Rochelle:
- Amy: I love the food!!!
- Josh: I love that it's 2 player and the new food-in-the-cart visuals!
- Gray: The added produce and grocery store ification of it is really really such a nice touch! I would love to see all the food pile up. I wonder if there would be like an "end" to the game?

- Ethan: nice chili pepper. Super smooth animations and really like the interface. Would be cool to see the groceries pile up in the cart or some sort of scoreboard.
- Elisse: The fight over groceries omy. It's so clean, I absolutely love. I'd love to see the foods actually pile up in the cart if that's possible, though I know collision will be a bit funky. It feels like an endless Mary Poppins back for the cart since we can't see a history of how much food a player has "won". Like a lot of people have been saying, a scoreboard would be really nice!
- Neha: The groceries are extremely cute. I wonder if the battle is between which cart gets it and the blue tiles represent the right one. It would be fun to see it like the battle of the carts and see how many are in the cart. Very excited to see being split into teams to cheer for the carts!!! Maybe that can be a presentation idea
- Ryan Wixen: I like how you combined the barcode aesthetic with the the motivation to score foods. I like how you made the player repeat their pattern to score the point. The backing track is nice, as well as the color of the play head to indicate whose turn. What if there was another level that was a cutting board and you are cooking?
- Rochelle: cool concept! Would like to see a ending score board or some indicator for progress/see the food cart steadily pile up with food?
- Richard: This reminds me of the minigames in Warioware which I love so much. Love the game aspects of this! Cool game mechanics
- Logan: This concept turned out so good! It looks really fun to play. Fun sound design, I like the background environment sounds.
- Julia: Love the ominous sounds; and I'm VIBING with the grocery items being scanned YESSSSS!!!! Did you draw the items yourself? They're really cute and perfect for the scene! Sound choices for the ticking, etc are good; the edited sound reminds me of shopping carts crashing into each other, wondering if you want to add more to a chaotic shopping narrative?
- Sneha:
- Ivan: Loving the sequencer aspect of tishis. I
- Senyuan: We are competitive, need to know scores and winnnnnnn!
- Emily: I think it would help to pile up the groceries so that you can see visually who is winning! Also a scoreboard would be helpful, maybe the score could be the total cost of the groceries collected?
- Ge: People want a score board, food goes into a pizza which is its own sequencer, shopping battle sequels???

Oluseyi Ogundipe

[Spirit of Music Demo 2](#)



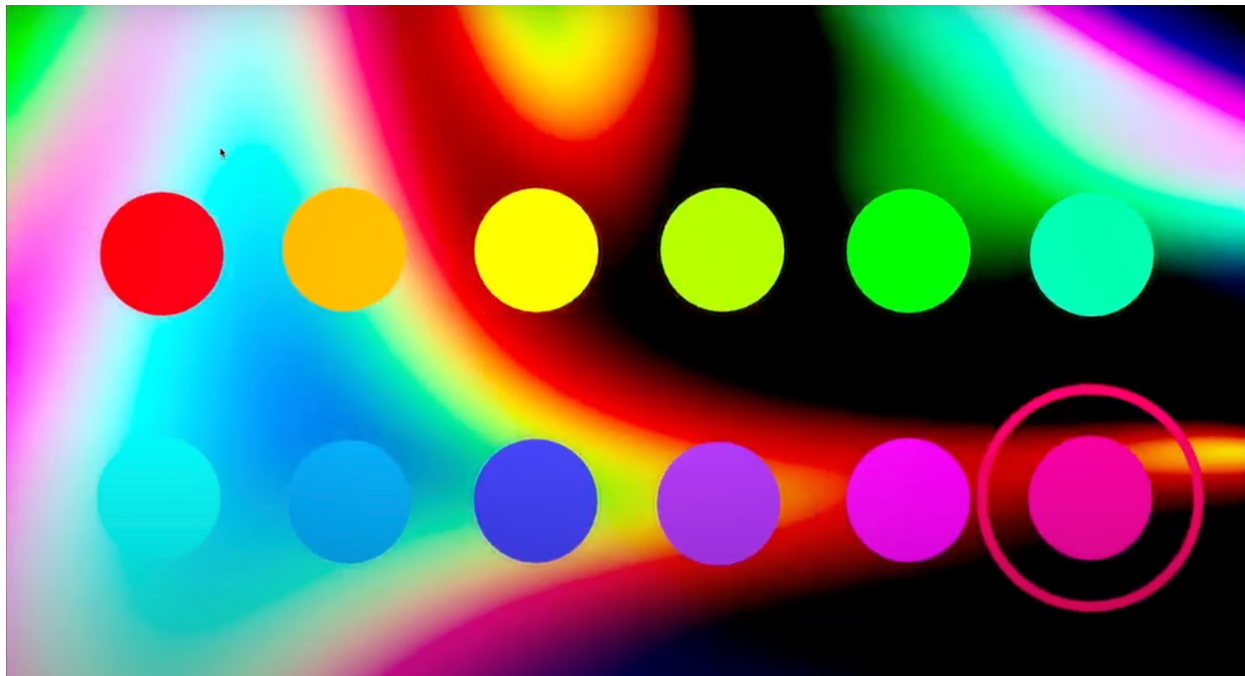
- Tae Kyu: Surreal and strange soundscape... love it. I would love distortion involved with the enemies! Make me scared of it.
- Josh: It's got a wonderful combination of a world having its own internal logic and that logic being entirely alien to us as the viewers; it feels super whimsical! Some slow change in the drone notes or a rhythm to the singing could help make it feel a lot less static.
- Tristan: I love the different timbres! It really differentiates the objects sonically! Even when they're off the screen, I can still hear them and they contribute to the overall sound.
- Andrew: singing stick figure is my hero. These are interesting mechanics, I wonder if some of the puzzling could be made musical too
- Matan: The singing guys are so funny I love it. I love this concept and can't wait to see more of where this goes.
- Logan: Its so fun you can become the elements in the scene. Is there a final goal?
- Gray: ahhh the person animation is very cute!! The mechanics of everything is so fun as well omg, I love how there's so many different ways to interact with everything in the level!
- Ryan Wixen: Collisions seem to be working and the different characters. I like how the music builds up over time. The puzzle elements you have designed are fun.
- Neha: Loved how the nail obstructs the note making it feel interactive. Would love to see stick men running around like running through a maze. Or the notes doing so to reach the humans. Looking forward to this one!
- Julia: I love the little man at the top! Interaction is reading much more clearly, and it looks really fun! OMG he sings!!! The music choices perfectly mesh with the visuals, very whimsical and fun indeed. Oooo having the people all sing / activate each "beam"

sounds fun. LOL just noticed the angry face on the evil notes, that's too cute, but rests as an enemy would also be nice.

- Ethan: oh my gosh these mechanics are incredible and this is such a complicated thought out game how did you have time to make all of this omg.
- Ivan: Yay the note made it!!! This is a really interesting concept, I definitely like where this is going.
- Amy: the spring is SOOO sick
- Elisse: The springing motion looks really nice! I love the build up for the screw length. The face on the guy omg. I wonder if you could fade out some of the elements as you get further away, but the general character of the game is so fun!
- Richard: love the singing guy so much. This is a whole platform game! Amazing!
- Senyuan: Being able to change the geometry of the game objects is very cool. The goal could be to get all singing persons to start singing in harmony!
- Emily: I love the design of this game!! Changing the color and length of each object according to musical elements is so fun.

Ivan Villa-Renteria

<https://ccrma.stanford.edu/~ivillar/256a/hw4/>



- Josh: Super cool! Questions: Can the circles be in a circle versus two lines? Can they have borders to separate themselves out from the background? Can the background have a different color scheme? Can the circles fade in/out with a gradient? That gradient fade in/out might help with polyphony... Other bad idea: can you set rules so that different audio (and corresponding visual) effects (i.e. like Ge suggested loop or echo decay times?) get applied when a different chroma is detected?

- Gray: Ahhh it's so fun how they kind of jiggle in space like that! Your shader is seriously soooooo amazing. I know you mentioned you wanted the activated circles to interact with the fluid and it's kind of a shame that it's something currently beyond chugl atm, but it's still a very pretty scene that you laid out!
- Tae Kyu: Pretty animations – love the touch with the shrinking outer circles. I'm curious how the background fluid is interacting with the foreground. Could the colors in the back respond to the foreground?
- Logan: Its such a pretty visualizer! The background is cool. The circles shrinking is a nice touch.
- Amy: visuals are soooo cool!
- Andrew: Is the plan to have the chroma drive the background shader? Would look cool if so!
- Seyi: I see it's become a lot more trippy since the last milestone. The wobbling circles really mess with me. Are the background colors related to the sounds playing in some way? I wonder if you could make it more of an experience by messing with the circles even more perhaps in relation to some other aspect of the sound. If you're looking for more interaction maybe you could add something to do with the mouse? I second adding some play and record functionality.
- Rochelle: cool! Liked that the circles are also wobbling around. Maybe you can experiment with adding other sfx like reverb/delay to change up the sound design side. +1 on the past circle staying/fading out slowly
- Elisse: This is so trippy. I can't tell if the circles are actually moving a little, but it really is doing some wacky things to my brain. If you continually play a certain note will the fluid react to that? It's so incredibly reactive and I'm in awe!
- Wesley: Wowwww. I knew you were cooking something with the fluid simulation and milestone 2 and this definitely delivers! The chroma detection is much clearer and the fluid sim feels so dynamic. Right now the circles and background do feel a little disconnected... what if the circles were blurred so the edge into the background is continuous? Or maybe the circles create little pulses of fluid in the simulation... not sure how hard that would be but it's already so potsmoking!
- Tristan: s h a d e r s. The intensity representing the radius of the circle (?) is really good. The shader is awesome! I love how the circles also wobbling a bit, it really brings them to life and makes the whole scene feel much more alive. I wonder what would happen if you played polyphonic music? I think it would be so cool if you ended on a climax with all the colors popping out of the scene.
- Neha: Its so cool to see how the harmonic frequencies are also being picked up by the tuner. Maybe the background and the circles can blend a little more with the background moving. But really excited to hear a musical piece.
- Ethan: are the colors influencing the fluid simulation?? It's somewhat hard to tell, and if it is the case it might read better if it was a more drastic change, but the fluid is incredible and so smooth. I wonder how you can make it a little more musical.
- Ryan Wixen: The wobbliness of the circles is quite pleasant. Very floaty. The background is also very cool. The chroma tracking seems to be working very well. What can you do with the the chroma information? Does it modify the background of the sound somehow?

- Richard: Return of fluid dynamics? Very vibrant. I wonder if you could connect dots to make the colors and sounds blend, which would make it more like a string instrument which the sound fits.
- Senyuan: The circles would look great with bloom! For the background, it looks too vibrant to me. Maybe tune the alpha down while making it interactive?
- Matan: I love the fluid in the background it looks so cool. Does the fluid change colors based on the sounds? So smooth it looks amazing.
- Julia: Oooo I love the background!!! Bruh they look pretty fluid to me. And I LOVE that the circles drift to make everything more fluid. Animations are so smooth. Right now is this a type of instrument? Fluid, rainbow guitar? How are you inputting which notes to play? I am excited to see whatever narrative you choose to go with in your project, so many directions you can take this!
- Emily: The pitch mapping accuracy has improved so much! I wonder how it would look when you play more than one note at once. What happens when you play chords on your guitar? The fluid colors in the back look really cool too. I wonder if you can make it correspond to the activated colors. As someone who doesn't have synesthesia, it's a little hard for me to remember which pitch corresponds to which color even after looking at this for a while. I wonder if you could gamify the pitch detection algorithm and make it so that the goal of the player is to "find" the sounds that correspond to each color. Maybe when you play chords the summed color of the colors in the chord could appear.

Amy:



<https://amyflo.medium.com/cs476a-final-project-milestone-3-of-4-minimal-essential-system-a209a5604343>

- Seyi: Good luck on Chunreal! I like the idea of it reacting to people screaming as well. Are you controlling the background with the gui? It might be interesting to have the background warp and distort in response to some other quality of the sound other than just the loudness and amplitude.
- Ethan: Well this feels like the only natural progression from the previous milestone. I think having a really glitched/distorted pingu animation could help the curse level (or like really strange low effort animation that doesn't make any sense and is a little horrifying).
- Ryan Wixen: The sounds are appropriately disturbing, with the weird clicks and beeps and hum. The framerate helps as well.
- Gray: this is kind of what it feels like to be awake at 2am working on the final project ngl. Thank you pingu for your service! I'm kind of excited about what a fps pingu game would

look like... I wonder what other sounds could be added for it to scream back at the viewer?

- Logan: Such a fun visual. How are the sounds related?
- Tae Kyu: pink pingu... i think i should be terrified. Is this what it looks like when you die. The beeping gives hospital noises. Idea: What if the noises cut off at some point, so it's unsettling. Then pingu glitches out and jumpscare you.
- Senyuan: Love that YouTube recommending screaming face thumbnail videos after your milestone. Would love to see a 'mouse closed' version in the final project too!
- Wesley (before watching): I have a feeling this didn't get more hinged
 - Tae Kyu: +1
- Wesley (after watching): I think my feeling was validated? I see you cooking on the GUI. I really want to see the audience interaction. Not sure about switching to chunreal... is that necessary to make this feel good (cursed)?
- Rochelle: noot >.< the zooming in can be more smooth (not sure if the choppy movement is part of the cursed aesthetic though xD).
- Elisse: behold the noot. These fog colors give interesting effects, I wonder if we could see a noot rave? Holy shit chunreal? o.o
- Soohyun: Showing a video of you screaming?
- Josh: "Imagine this, but with screaming" sums it up super well. More cursed suggestions on the audio end: reverb, a combination of super clean sine waves with dirtier gnarly timbres, super high pitches combined with super low pitches, or maybe something inharmonic and FM-y?
- Neha: OMG! Can't believe you moved it to Chunreal with such less time! That's incredibly impressive. I wonder what each interactive element does. Maybe pingu can say something that he usually says in the cartoon with every movement. Very excited for PinguU!!!
- Tristan: This feels so ominous. Oh something that could be cool could be using formant synthesis to vocalize pingu. Yes it's very cursed. Good luck with chunreal, you got it!
- Richard: Wonder if this could be like a hide/seek whack a mole game, Like u have to ping the pingu before it like implodes or something. I love it as it is though. Good luck!
- Julia: It's grown so much!!! NOOOOOOOOT. Kinda reminds me of a ship or torpedo that is heading in my direction, a very ominous site (like the Titanic, but a noot). Also love seeing the snowflake textures appearing. To make it more cursed... maybe delay / reverb? It would make the boots keep coming nonstop, and hopefully get stuck in our heads.
- Matan: Oh my lord what is happening. Holy crap good luck with the chunreal switch up.
- Ivan: Thank you PINGU for blessing me today. Chunreal is CRAZY tho, godspeed!!!!
- Emily: Good luck on Chunreal! Excited to see more development with the Pingu :)

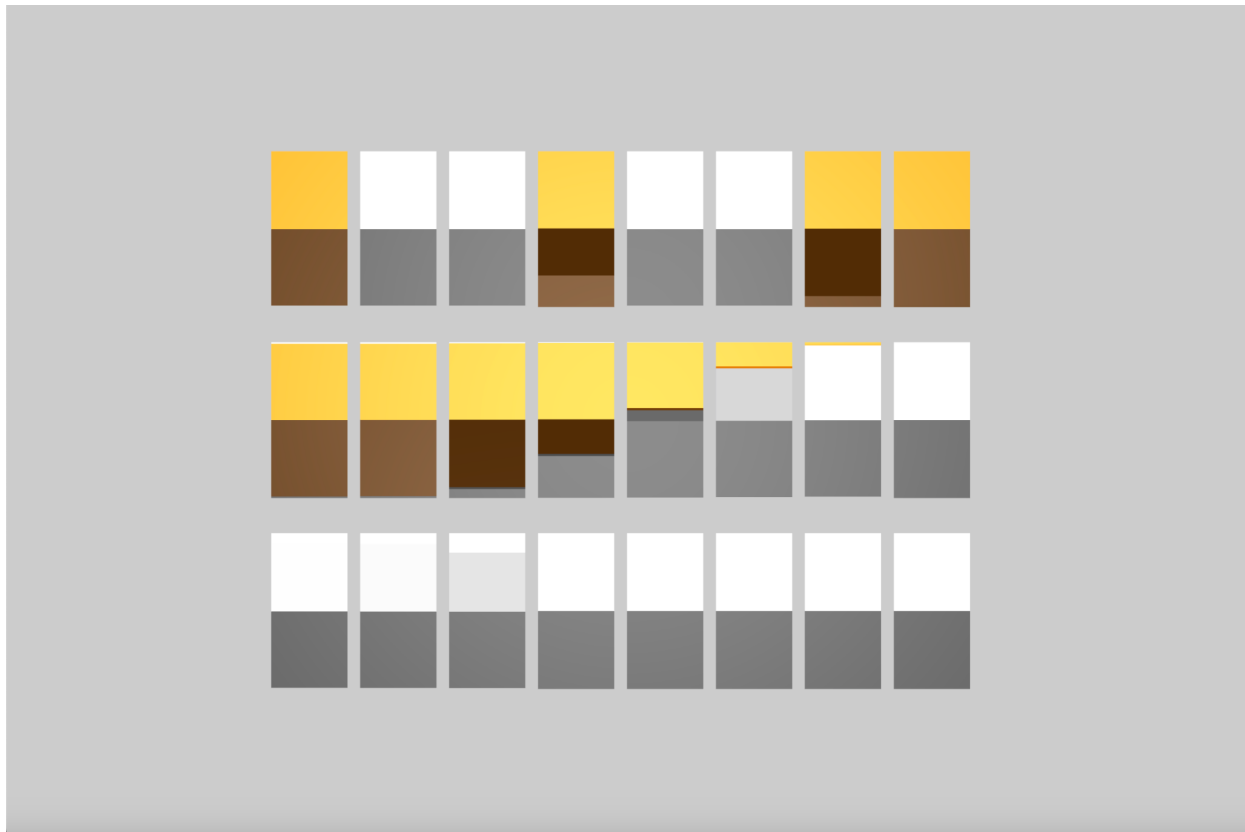
Raghav Ganesh

<https://ccrma.stanford.edu/~graghav/256a/hw4/>

- Josh: Some audio feedback from the enemies hitting you might be cool/ help the audience understand what's going on?

- Tristan: MOGUS. I think some colors could help differentiate the mogus from all of the skulls, but it's so much clearer than last time what the characters do. I'm just a little unclear on what the GCubes in the background do.
- Seyi: Are you planning to add some way to the side with some different aspect of the music? Right now the background doesn't seem to interact in the game in any way and is a little confusing, so I think integrating the squares in the background in some way would add a lot and use more of the screen.
- Amy: amogus, i want to see lots of colors and lots of random things flying around
- Ivan: These little fellas be looking mighty SUS. They be looking AMOGUS SUS my guyy. Fuck here's so many of them lmao.
- Matan: I feel like there needs to be a way to go sideways? The rotating skulls are hilarious.
- Gray: ummm..... amongus, The mechanics are very interesting, and it's such a neat concept!
- Elisse: the return of the amongus. Are those trash bags or skulls? Oh my he's getting overtaken.
- Tae Kyu: this is CCRMA. Confused but cool
- Soohyun:
- Neha: OMG! The fluidity on those skull characters are incredible. I wonder what the mechanics are.
- Rochelle: cool that the audio input is controlling the height of the among us character. Would be cool if the skulls can be more randomly spaced on the screen
- Richard: I don't get it but I like it! Looks like a fun game. Really fun! Love the among us thing.
- Wesley: Love the concept, I know using voice input as control can be really hard to tune! Would love to see the skulls move in a more dynamic way as AIs... can you make them flock together or move randomly in a new direction every so often? Something to help the player exploit and dodge them more easily.
- Ryan Wixen: The aesthetic choices you've made add character. This looks like the point is to lose. Why are there lines on only one side of the screen? What if you could move from side to side?
- Logan: Its cool how your character reacts to audio. Cool assets.
- Julia: Ooooo I'm loving the assets you've imported; and the blocks reacting to your input seem to be a lot more specific and responsive (pitch and volume?).
- Ethan: I have no idea what's happening but I think I like it better that way??
- Emily: I think it would help to design the narrative so that it is clear what the mechanics of the game are!

Nathan Sariowan



- Senyuan: Both the visuals and sounds are aesthetically pleasing.
- Josh: This is beautiful! Can we get the option to see it from an angle other than straight-on? Ge suggested pieces falling off, but what if they peacefully flew away?
- Elisse: beautiful. holy shit. I want this. I was a little worried about how these would sound altogether, but you've beautifully crafted this whole thing together and I love it so incredibly much. I think the monochrome v the color when in interaction is just wonderful.
- Seyi: The sound design is really beautiful and I want to just close my eyes and immerse myself in the created soundscape. I second adding some way to change the colors, but is there also some way to change the speed of the flipping on an object and that changes the sound in some way? I also think a trippy rule breaking moment would be good; such as a camera change or some other weird change to everything.
- Tae Kyu: beautiful sounds!!! I also want to change the colors! Can there be a feature to do a "wave" through the panels, both sonically and visually and with colors? That would be another type of beauty.
- Tristan: Woah what a calming timbre! It feels so timeless. The highlighting is so vibrant and it pops out against the others so well! It would be so cool to see an alternate angle of this! The soundscape is wonderful!
- Neha: Musically extremely pleasing and serene. Would love to see a lot more tiles that replicate the design in GSB. with different shiny colors. Very very excited

- Rochelle: cool sound design/choice!! Very pretty. The animations + coloring are smooth and works well with your concept. Something to add potentially – zooming out into a bigger picture of many many panels that create a picture
- Ethan: sound is super awesome and satisfying. Super calming and fun to look at. I wonder how you could play more with the visuals (more colors or drawing). I feel like it's really soothing but I want there to be more context and purpose behind the visuals
- Matan: Love the sounds. What keeps one notepad thing going? The sounds are truly wonderful and so calming.
- Gray: Ahhhh this is so cool!!! The sounds along with the animation really give it such a serene vibe. I wonder if it would be possible to add other colors to kind of mimic the GSB art piece?
- Andrew: beautiful and musical. Would be cool if we saw numbers flying by as the pages flipped, emphasizing passage of time
- Richard: omg what if this was a calendar? Passage of time vibes. Or some building simulator and those are lights turning off in an office. Idk, has a beautifully ambient and existential feel.
- Wesley: This is really pretty! I want to see a way to quickly control many of the flippers at once, maybe to highlight a whole row, or one column, or a whole square? Or what if you could draw a pattern and watch it propagate across the board?
- Logan: Wowwwwww so prettyyyyy I love the choice of sounds. Would love to see more colors.
- Ryan Wixen: I am happy to see multiple of them and how they interact with your mouse. Do you make them continuously spin when you click? I really want to see more colors as the pads spin. It sounds good. The sounds fit the visuals.
- Julia: Whoa having multiple flipping components is really cool! This is also very zen, and I love it! Wonder if making each row a different color may add some variety to your visuals? Animation is so smooth. Honestly, could probably have this running before I go to bed at night to help me peacefully drift into sleep.
- Sooohyun: More colors? And revealing the shape/drawing in the end by flipping everything??
- Ivan: This sounds so nice, great sound design here. This is really soothing to hear and pleasant to watch. I wonder what it would be like if the different tabs were of different colors.
- Emily: Love the calming music that you can make with this! I would love to see other colors being shown on the images. Still think that if can show animation through flipping images that would be cool.
- Amy: looks exactly like the gsb thing woww