

SPRING 2017

PROTOTYPE STUDIO

**WHY DO WE
PROTOTYPE?**

PROTOTYPING...

- ▶ Allows you to try riskier, more experimental ideas without overcommitting
- ▶ Is a good way to convince yourself that the game you're working on is real
- ▶ About 80% of your ideas aren't worth pursuing, even if you're the best designer in the world.

WHY WE RUN THIS CLASS

- ▶ Students are typically **way** too slow at getting to a first playable to see if their ideas are good
- ▶ Students are often married to their existing ideas in their notebook, and benefit from being forced to start fresh - particularly in weeks when they don't have ideas right away.
- ▶ Students often operate too much within their design wheelhouse and don't venture outside and take risks
- ▶ The ideas you come up with in this class can be fruitfully developed outside of this class or in other classes

- 1) START WITH A CONCEPT. ANYTHING WILL DO, IT'S NOT REALLY GOING TO MATTER. THE STANDARD FORM OF "JUST LIKE X EXCEPT WITH Y" IS PERFECTLY FINE.
- 2) BELIEVE THAT IT'S A REAL GAME. IT ALREADY EXISTS, IN A SENSE; GAMES ARE MATHEMATICAL OBJECTS, THEY HAVE INDEPENDENT EXISTENCE IN THE PLATONIC WORLD OF FORMS. OR SOMETHING. WHATEVER IT TAKES TO CONVINCE YOU THAT IT WILL WORK.
- 3) START WITH THE SMALLEST THING THAT THE PLAYER DOES REGULARLY IN THE GAME. IF THEY'RE MOSTLY MOVING A CHARACTER AROUND, THEN THAT. THE CORE INTERACTION. CODE IT.
- 4) SPEND LOTS OF TIME ON GRAPHICS, AND ON GETTING THE FEEL OF THE CONTROLS RIGHT. THESE ARE REALLY IMPORTANT FOR BEING ABLE TO TRICK YOURSELF THAT THIS COULD PLAUSIBLY BE AN ACTUAL GAME.
- 5) PLAY WITH IT. LOTS. PRETEND THE REST OF THE GAME IS THERE. YAY, YOU MADE A GAME! (NOW YOU JUST NEED TO FINISH IT.)

**WHAT IS A
PROTOTYPE?**

A (SINGLE) PLAYABLE IDEA

- ▶ “White bullets are bad for you, black bullets are good for you, or vice versa”
- ▶ “Capture territory by extending a line around it”
- ▶ “No matter what I decide to wear, people make me feel bad about my body”
- ▶ “A person only wants to get to know you so he can steal your identity”

IDEA: THE RULES CHANGE EVERY 15 SECONDS

ARCADE RULES

BY DENVER COULSON

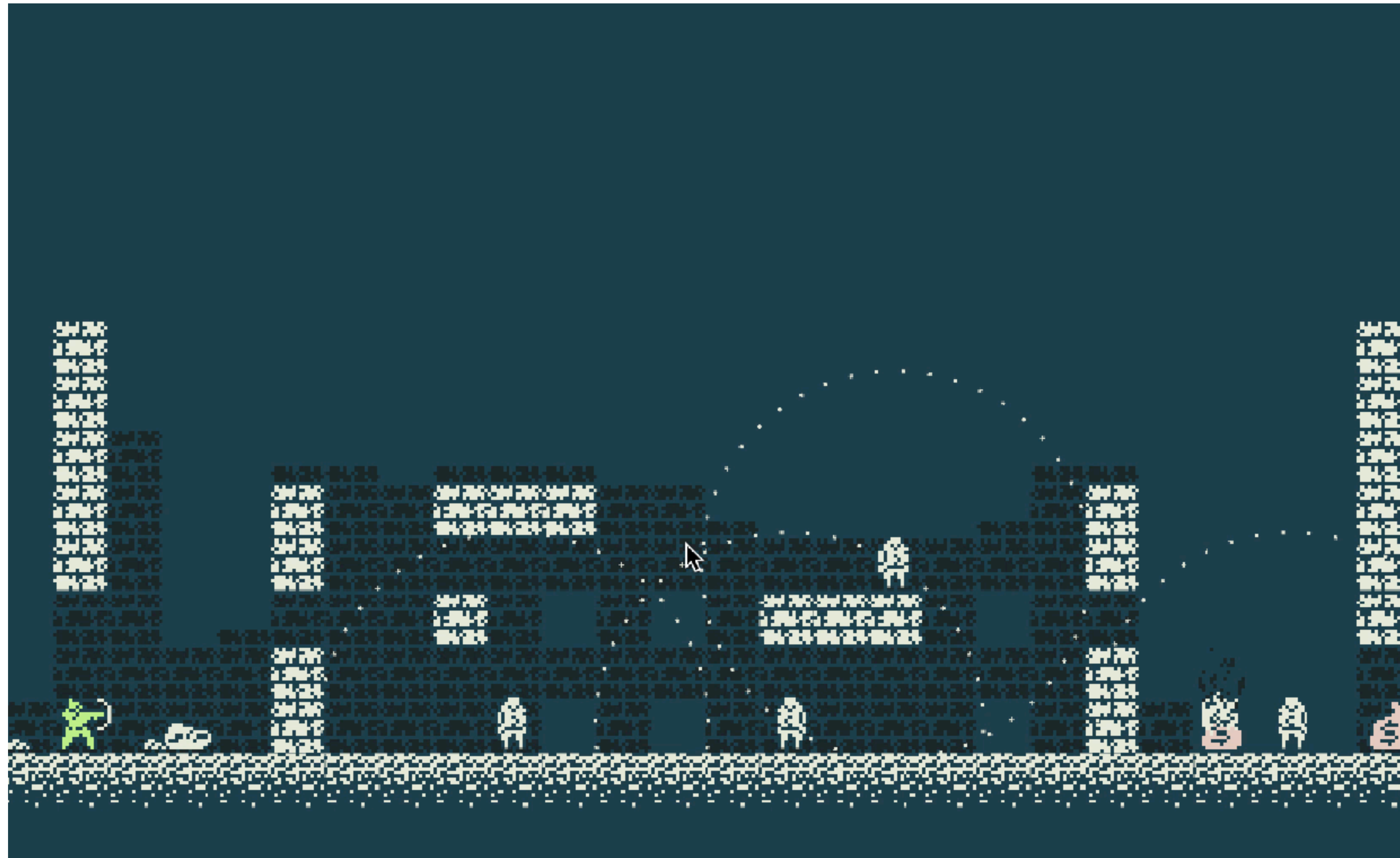
PLAYER 1: WASD KEYS
PLAYER 2: ARROW KEYS

PLAYER 1 RULES
PLAYER 2 RULES
EVERYONE'S RULES

IDEA: DO MY MAKEUP IN 10 SECONDS



IDEA: WHO PAYS FOR ROBIN HOOD'S ARROWS?



AN EXPERIMENT TO TEST A HYPOTHESIS

- ▶ “Maybe I can make a platformer which only has one button for input”
- ▶ “I wonder if people will obey if the game orders them to do something unethical”
- ▶ “Can I convey intentionality just by sticking expressive cartoon eyes on a circle?”
- ▶ “I can simplify match sprint cycling into a game that focuses entirely on the play-to-lose aspect”

HYPOTHESIS:

A PLAYER WILL LOSE THEIR BEARINGS IF THEY ARE UNDER PRESSURE



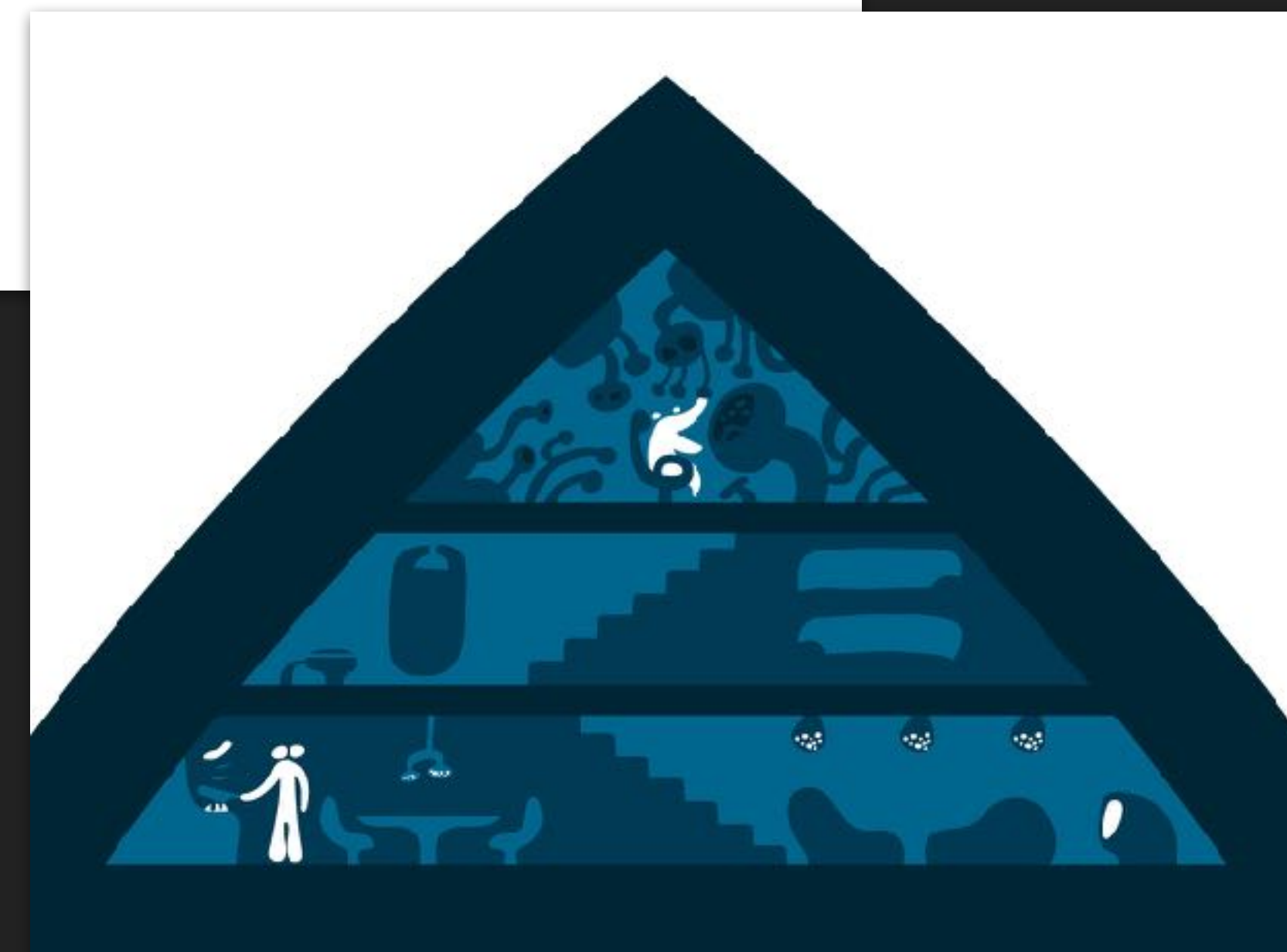
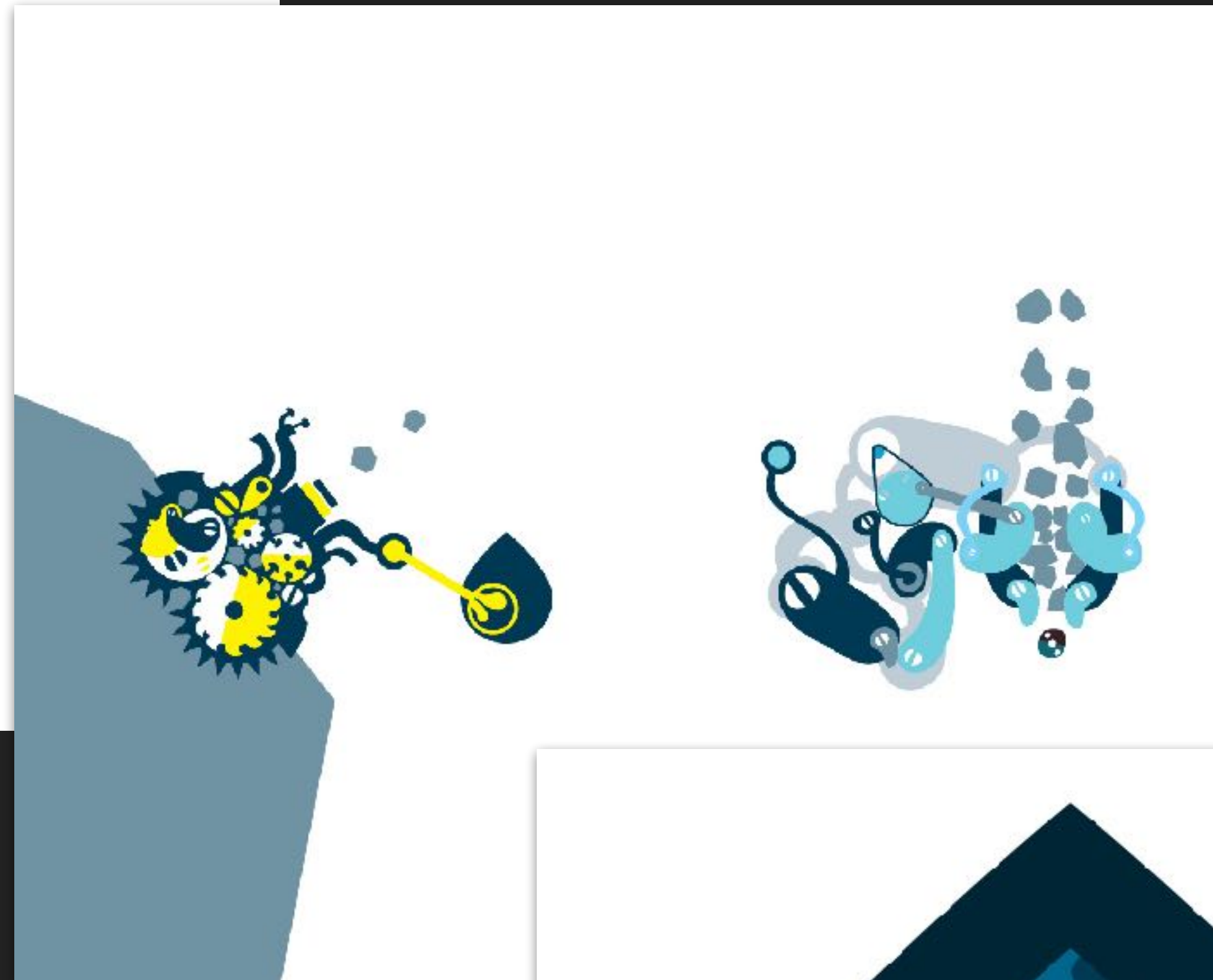
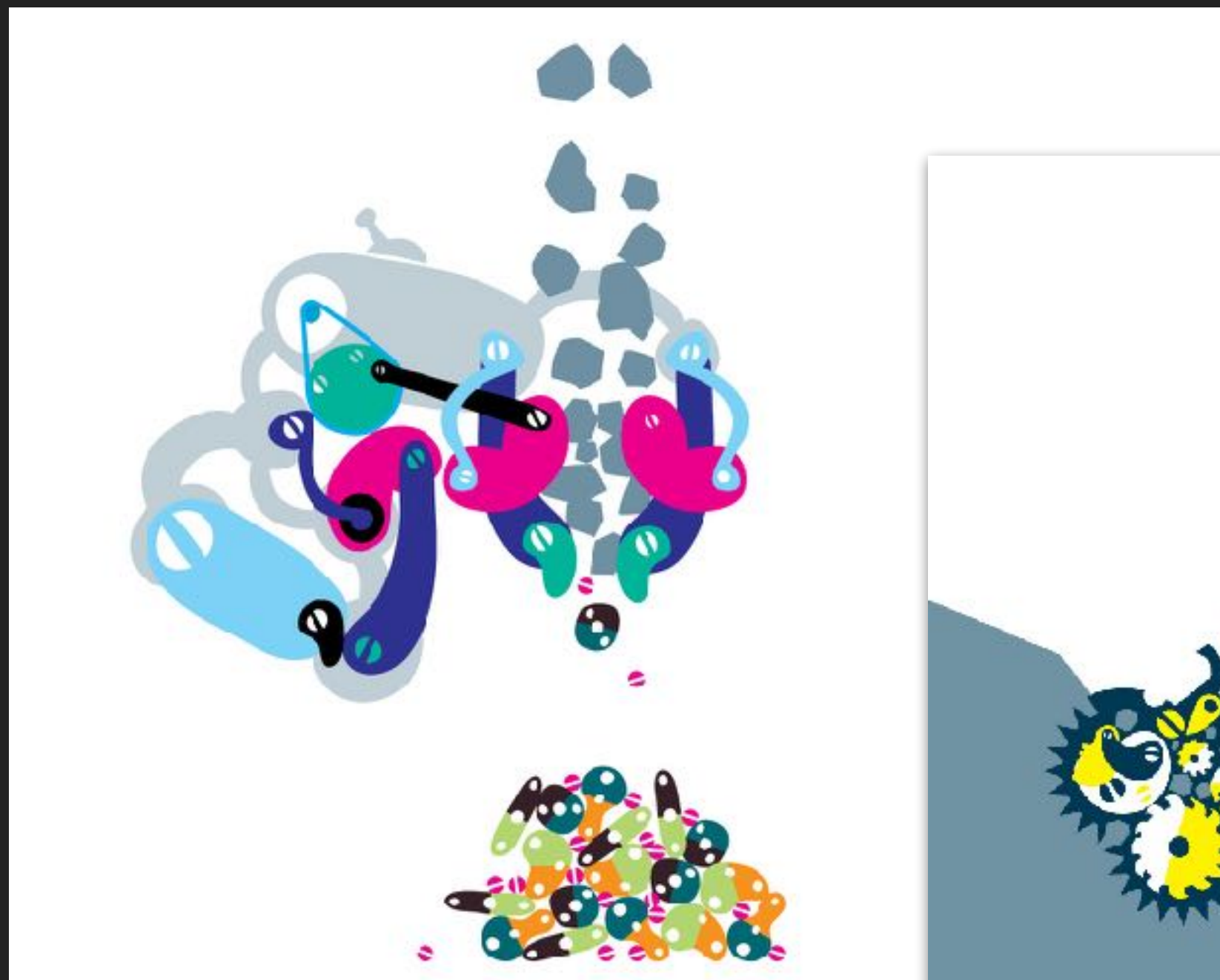
HYPOTHESIS:

I CAN GET THE PLAYER TO FEEL EMBODIED IN A CHARACTER JUST BY LISTENING TO THEM SPEAK AND CONTROLLING THEIR MOUSE.

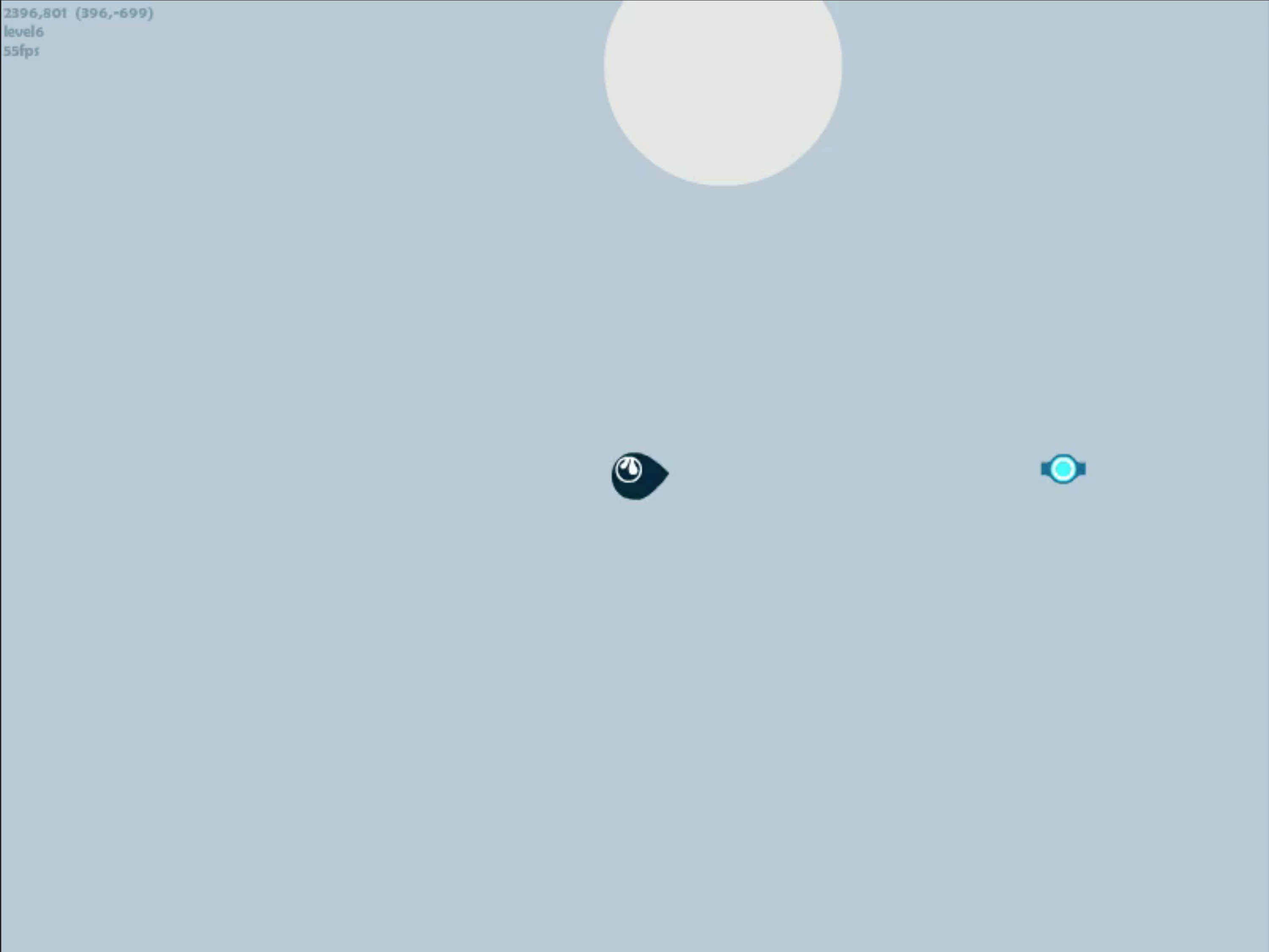




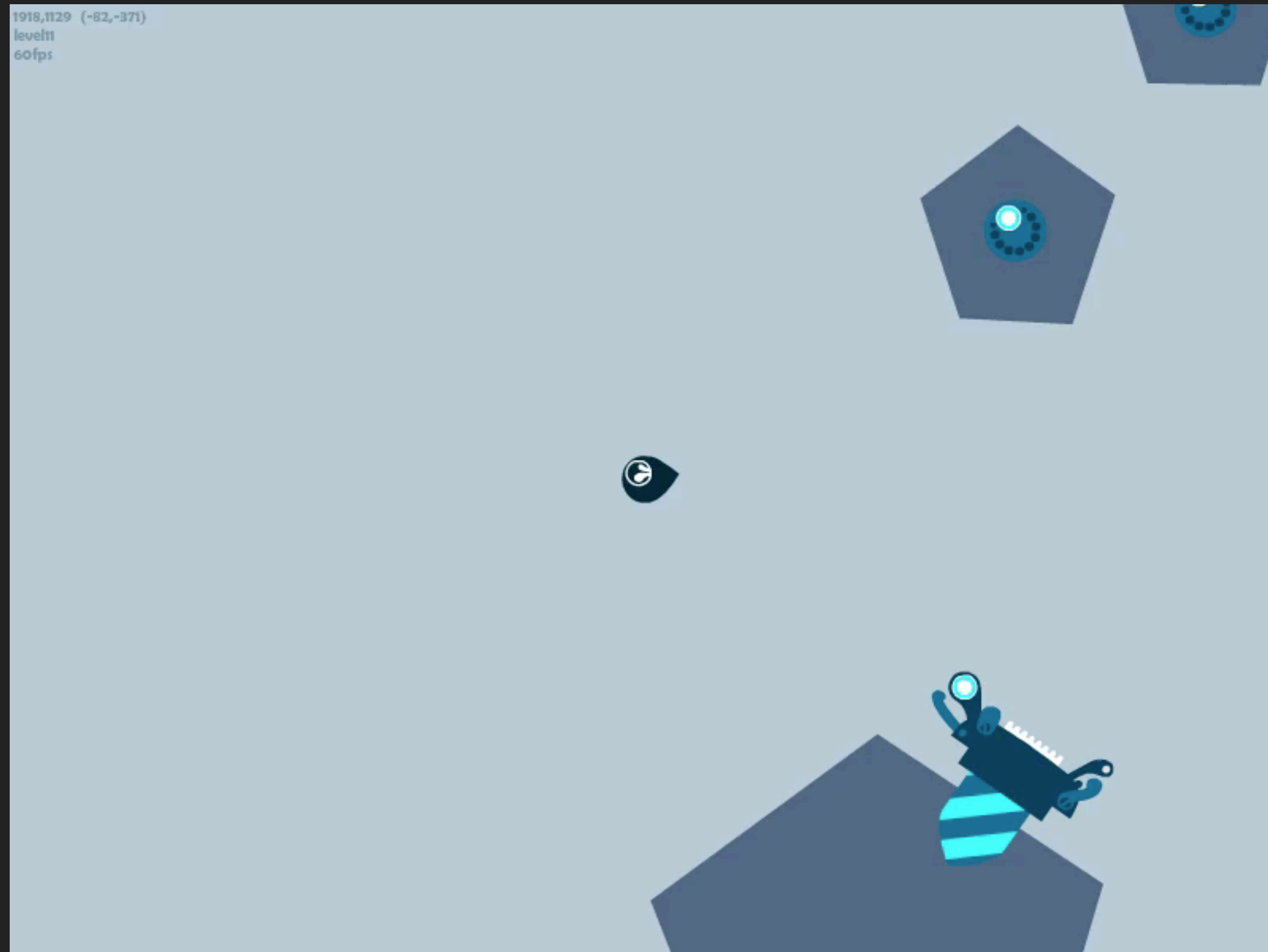
HOHOKUM DESIGN EVOLUTION - STARTS WITH STILL MOCKUPS



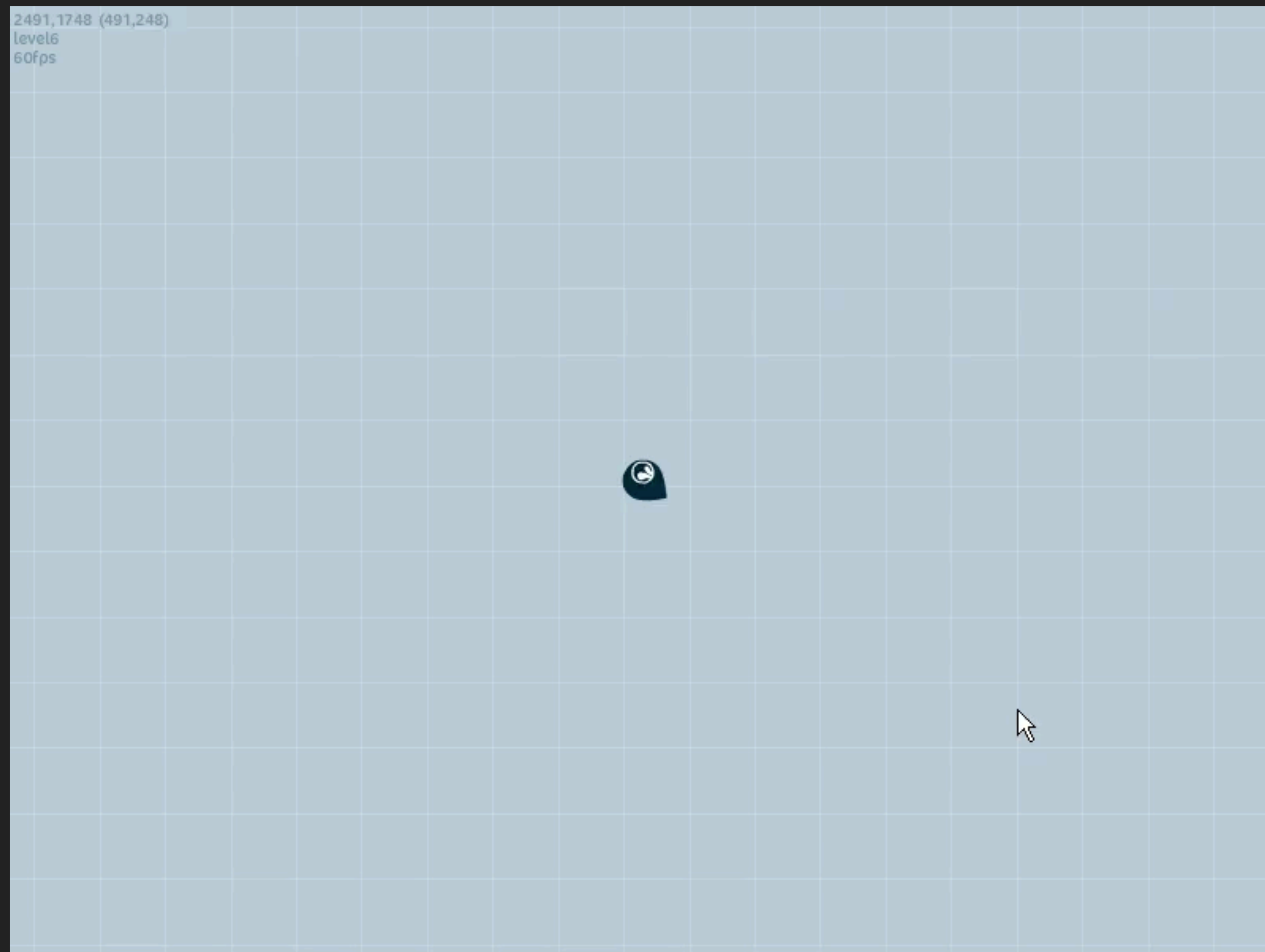
HOHOKUM DESIGN EVOLUTION - FIRST PLAYABLE



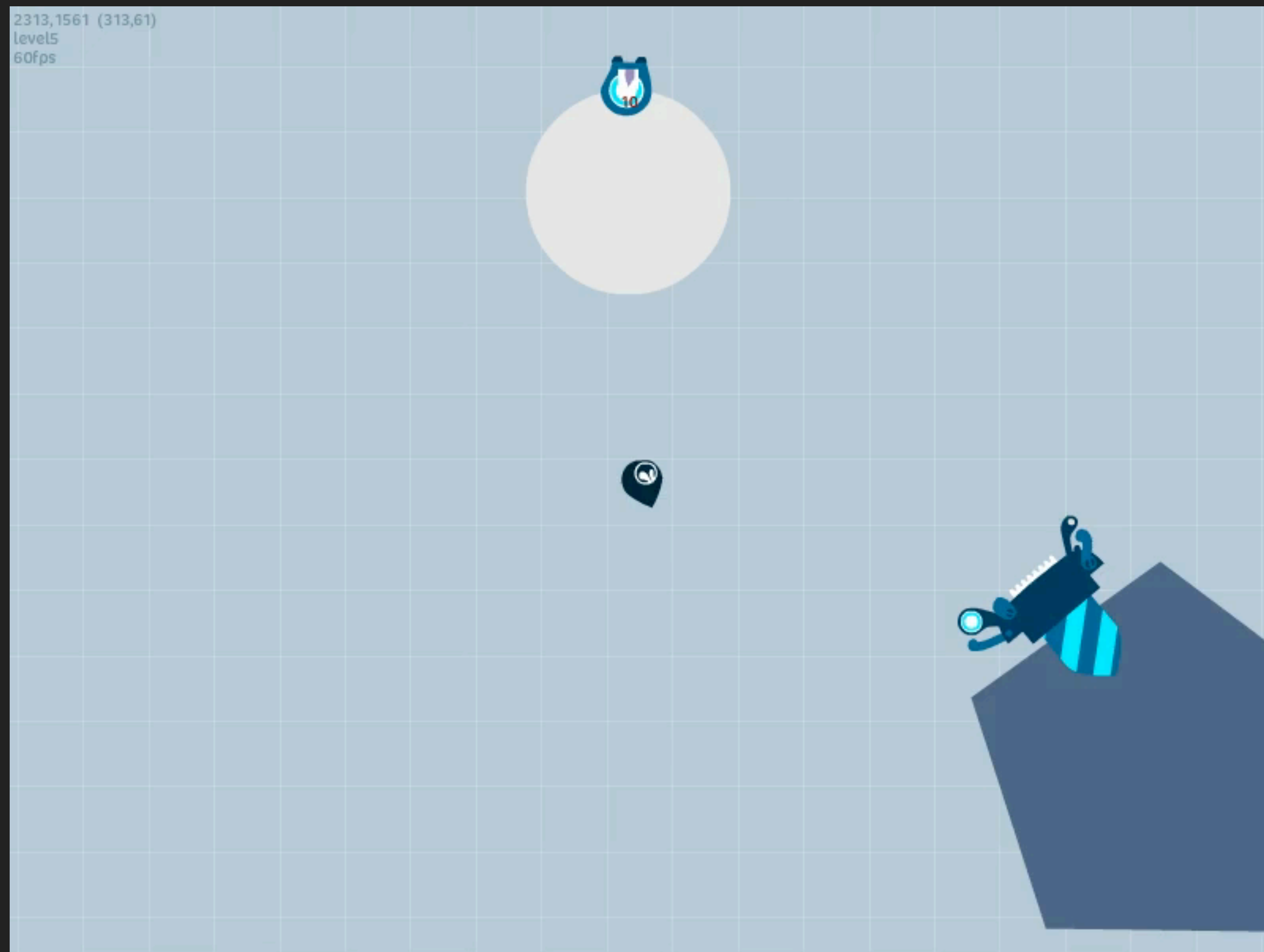
HOHOKUM DESIGN EVOLUTION - FIRST PLAYABLE



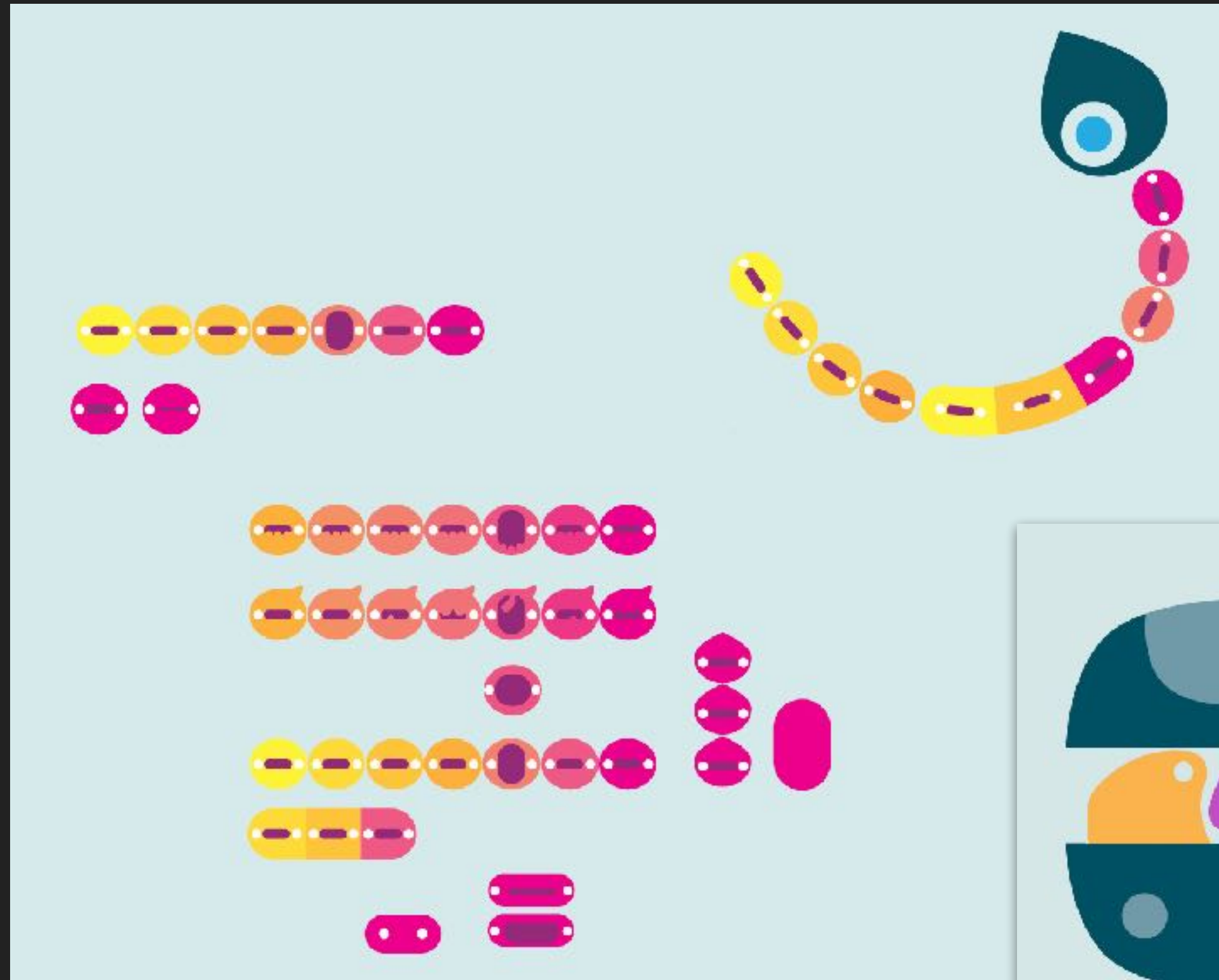
HOHOKUM DESIGN EVOLUTION - FIRST PLAYABLE



HOHOKUM DESIGN EVOLUTION - FIRST MUSIC IDEA



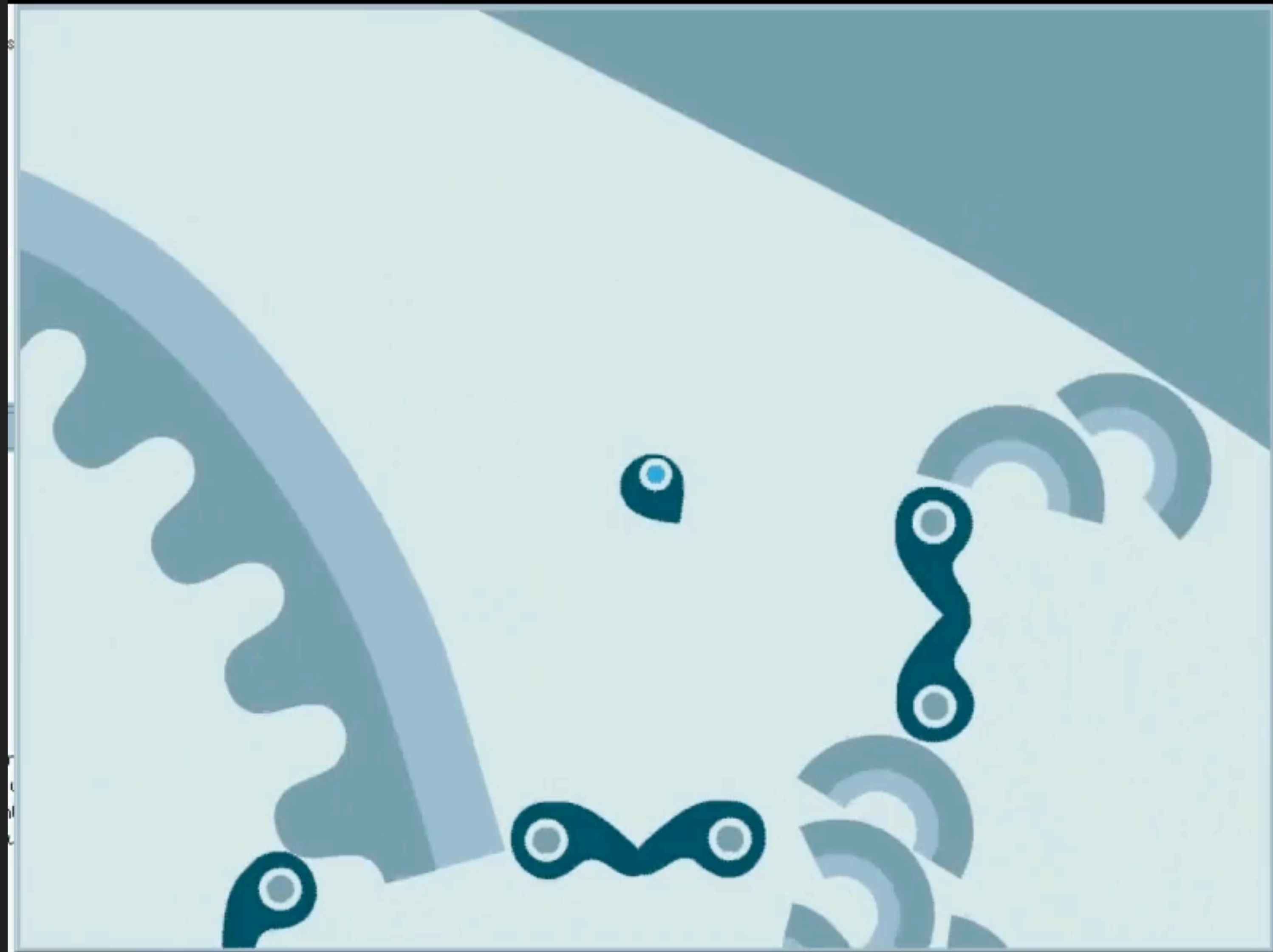
HOHOKUM DESIGN EVOLUTION - MUSICAL NOTES AND DOORS



MUSICAL NOTE IDEAS



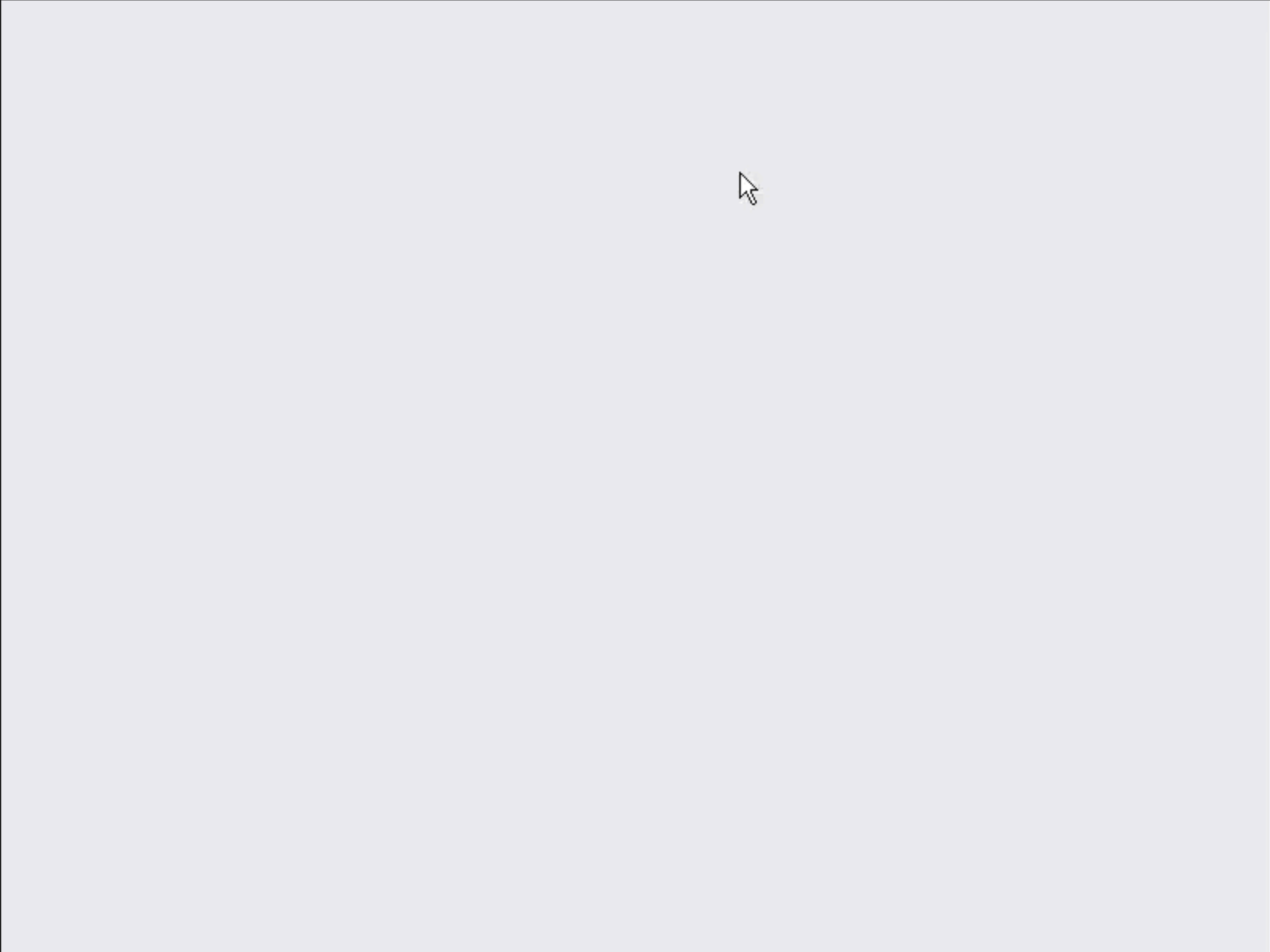
HOHOKUM DESIGN EVOLUTION



HOHOKUM DESIGN EVOLUTION - FIRST PLATFORMER PROTOTYPE



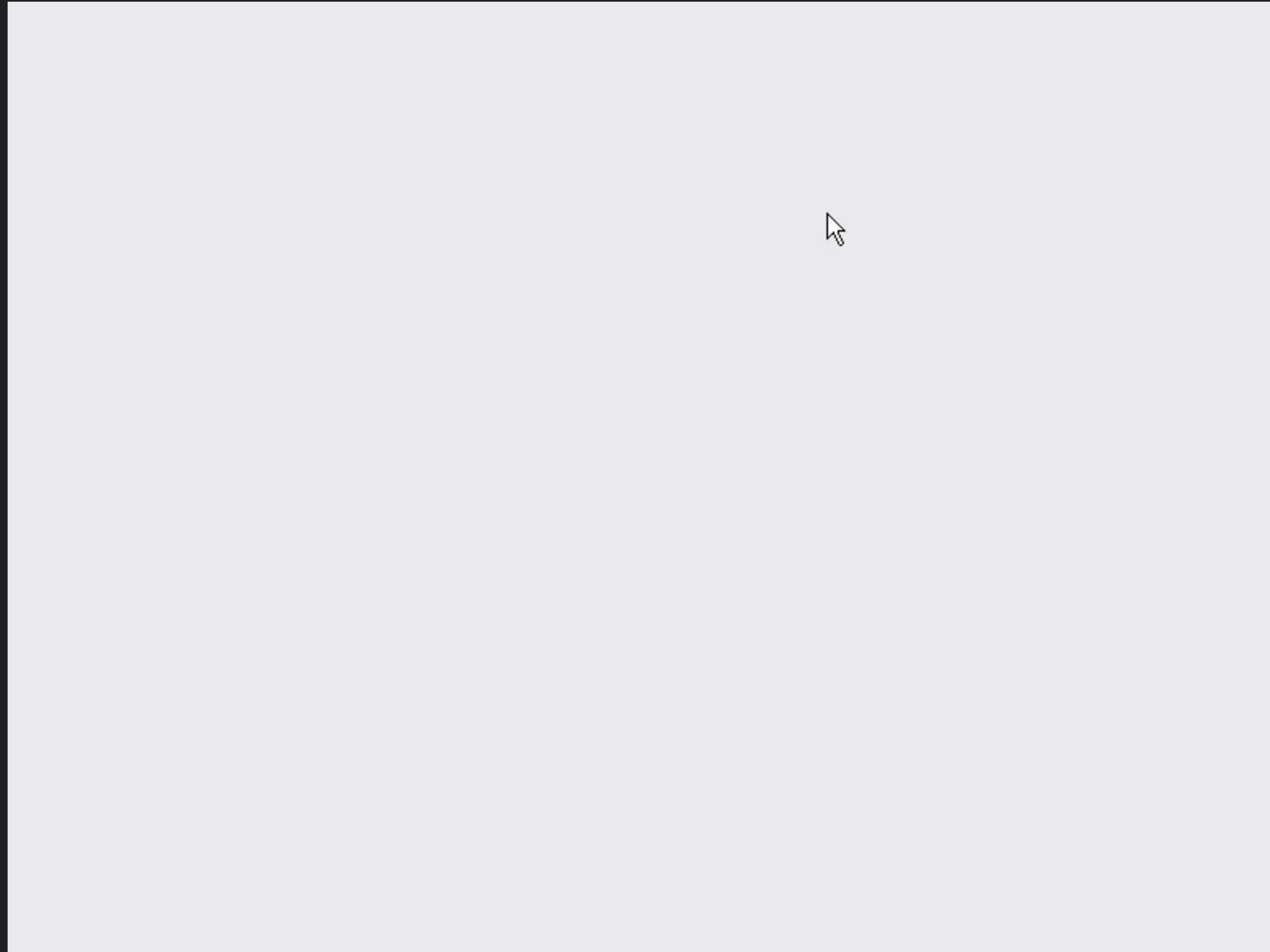




HOHOKUM DESIGN EVOLUTION - WALK ON NOTES



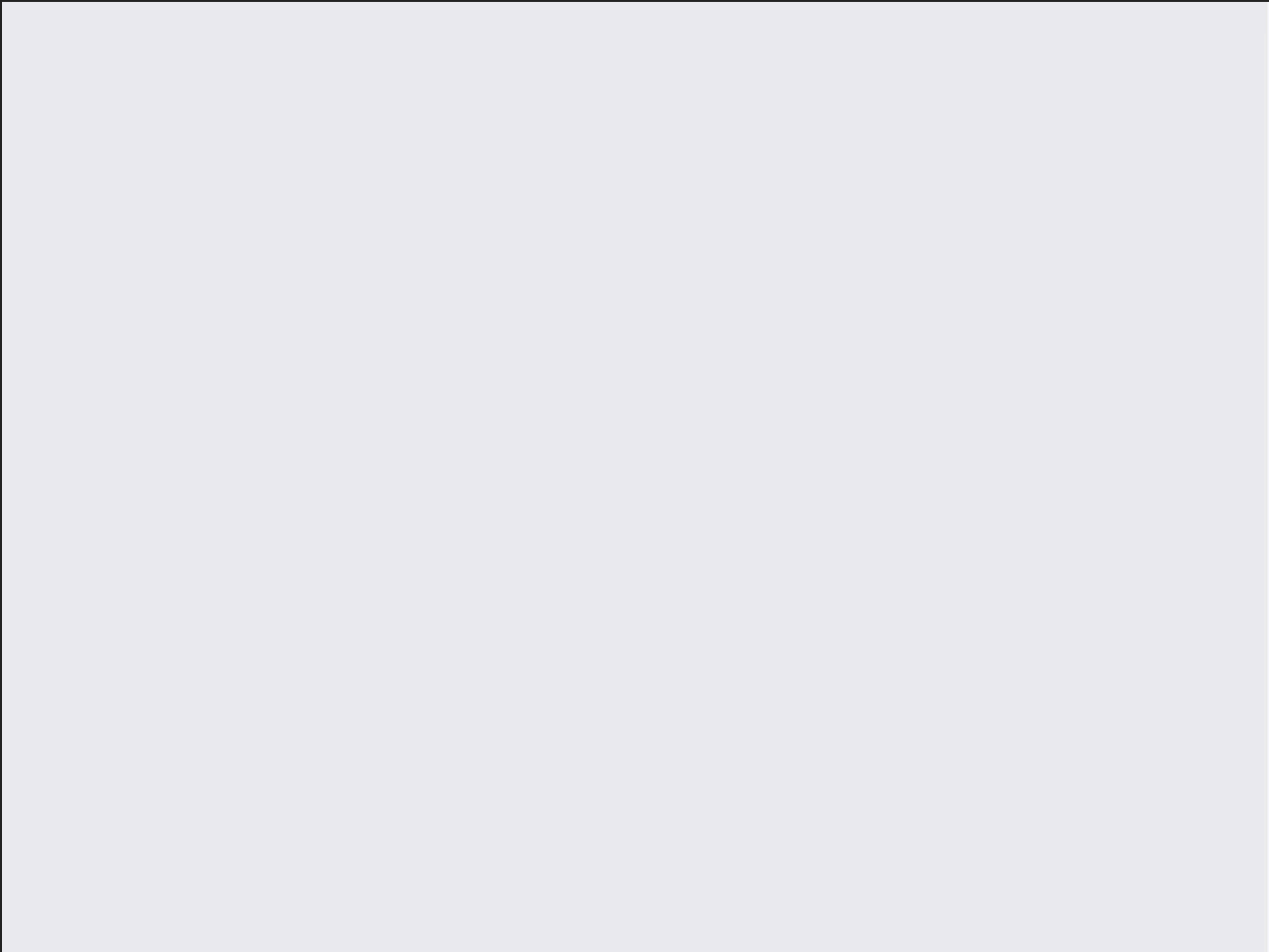
HOHOKUM DESIGN EVOLUTION - PHYSICS EXPERIMENT



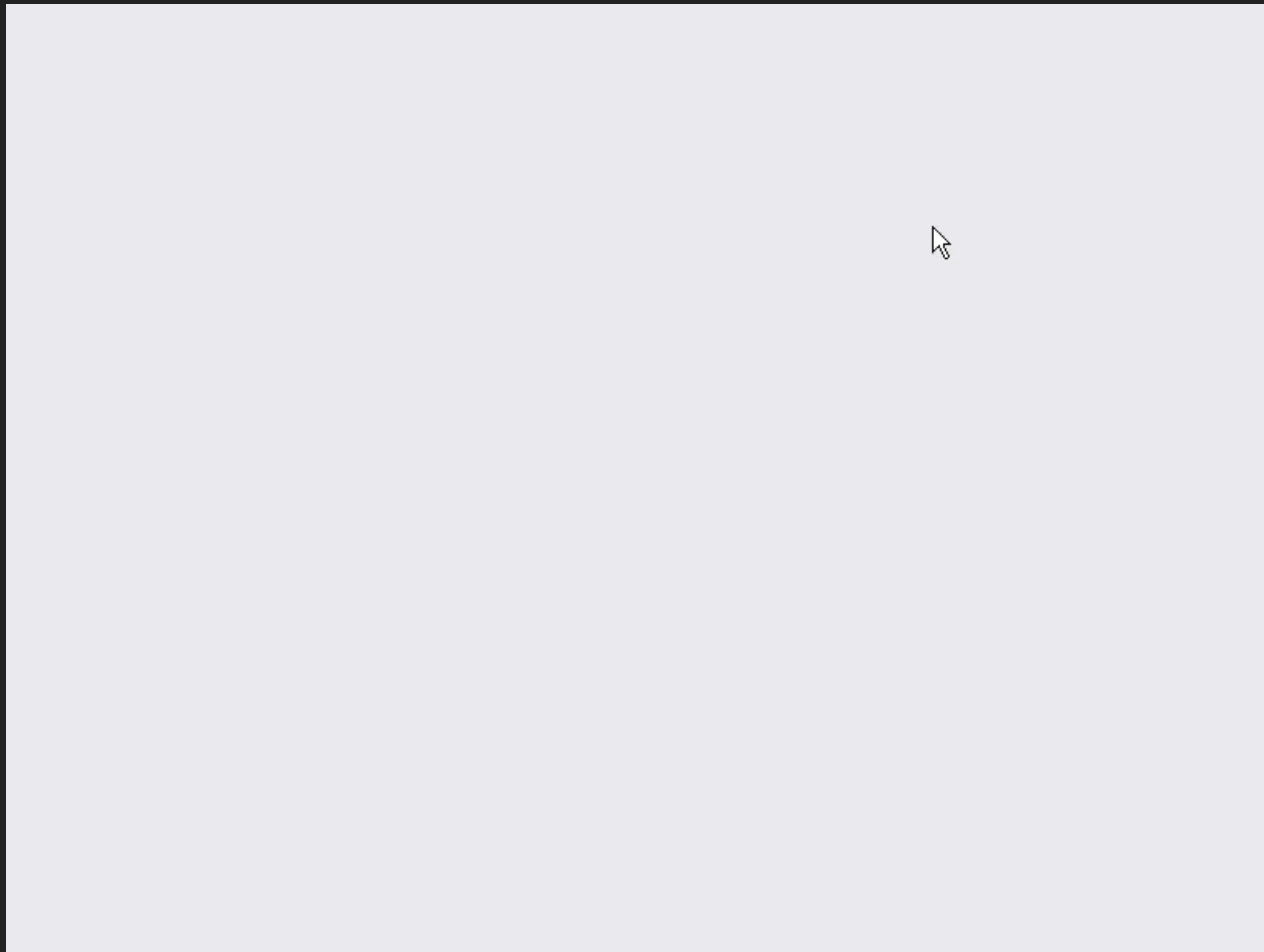
HOHOKUM DESIGN EVOLUTION - MUSIC TRACKS INSTEAD OF NOTES

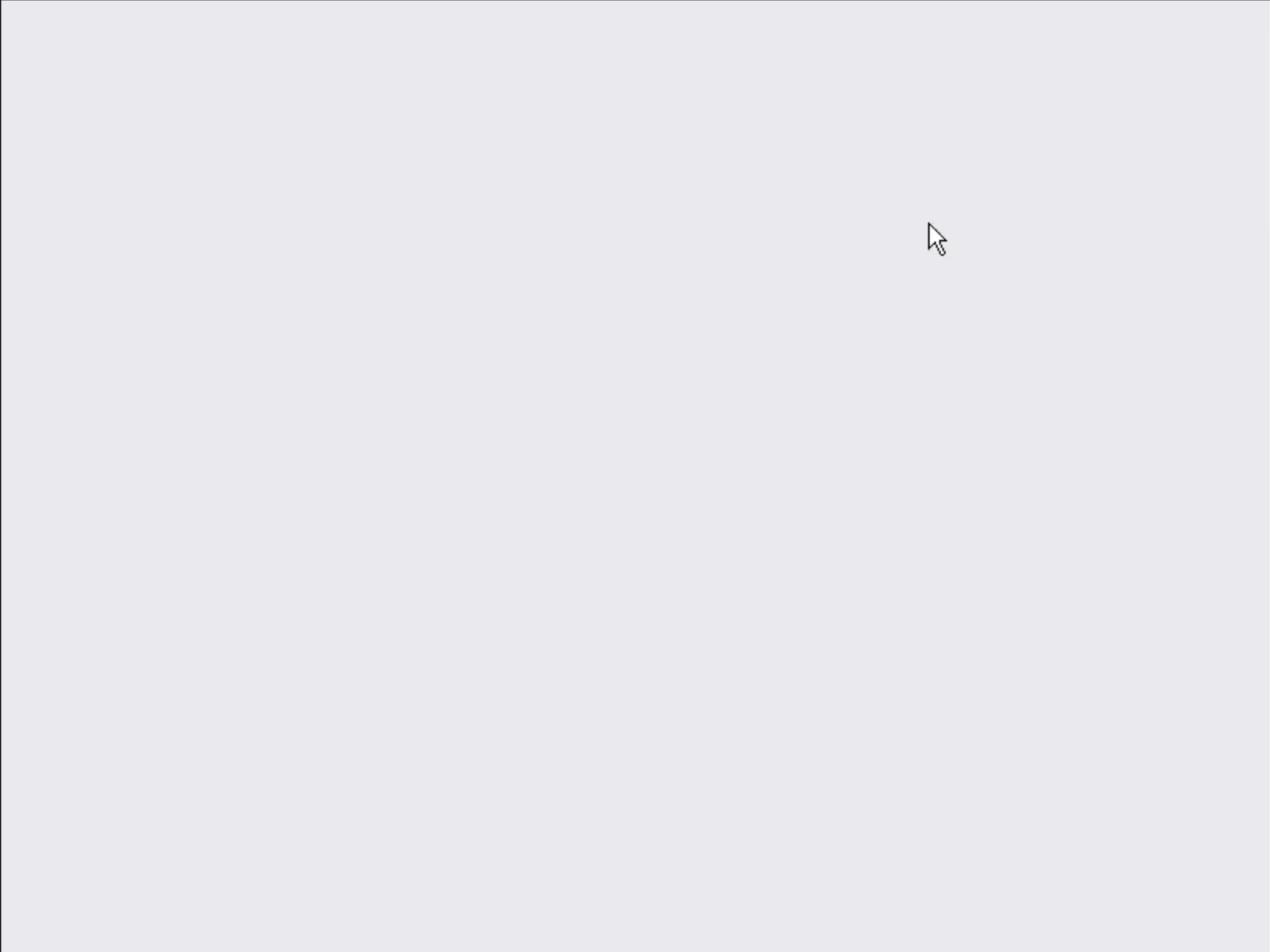




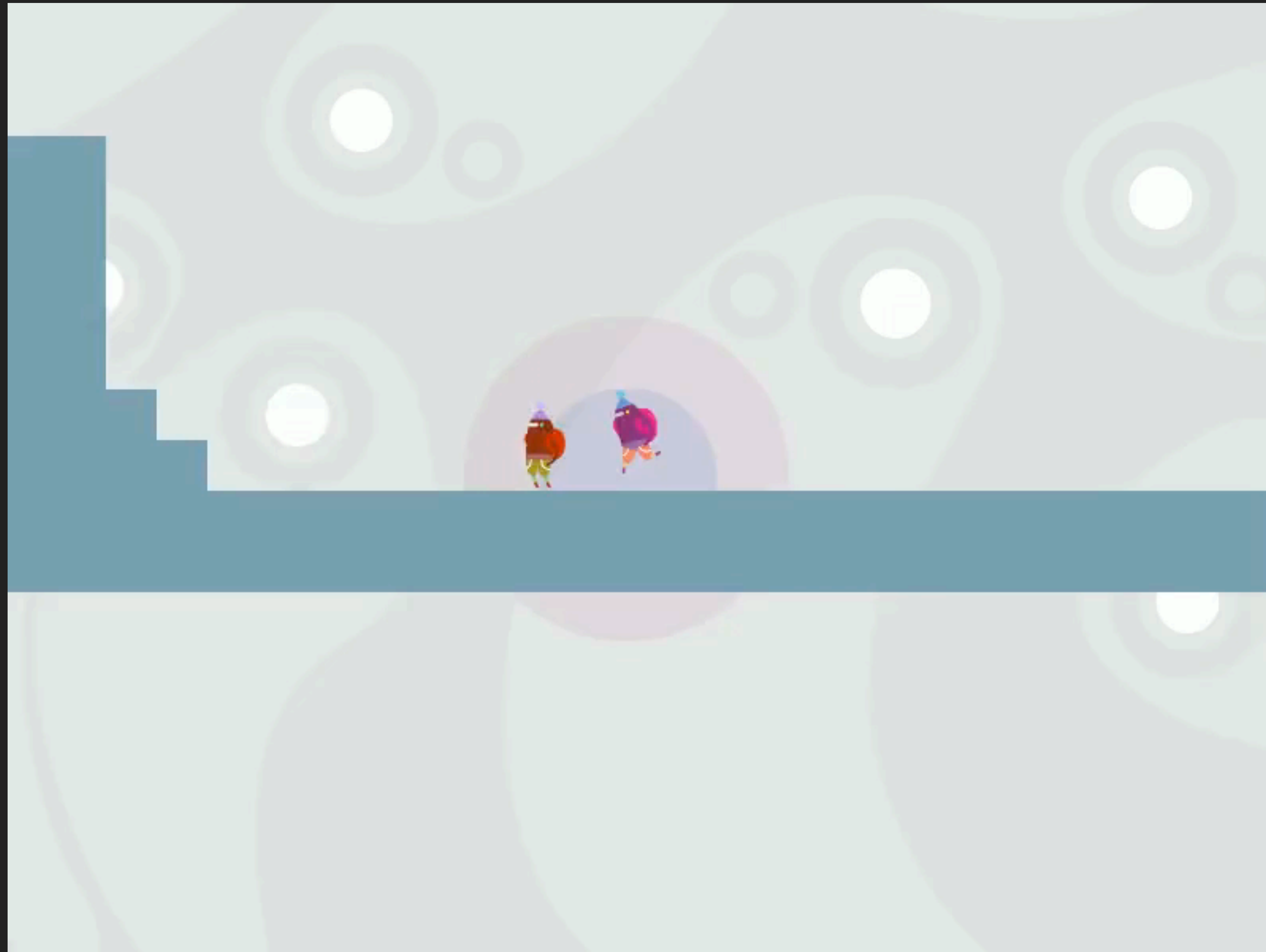


HOHOKUM DESIGN EVOLUTION - CITIZENS WALK ON LINE

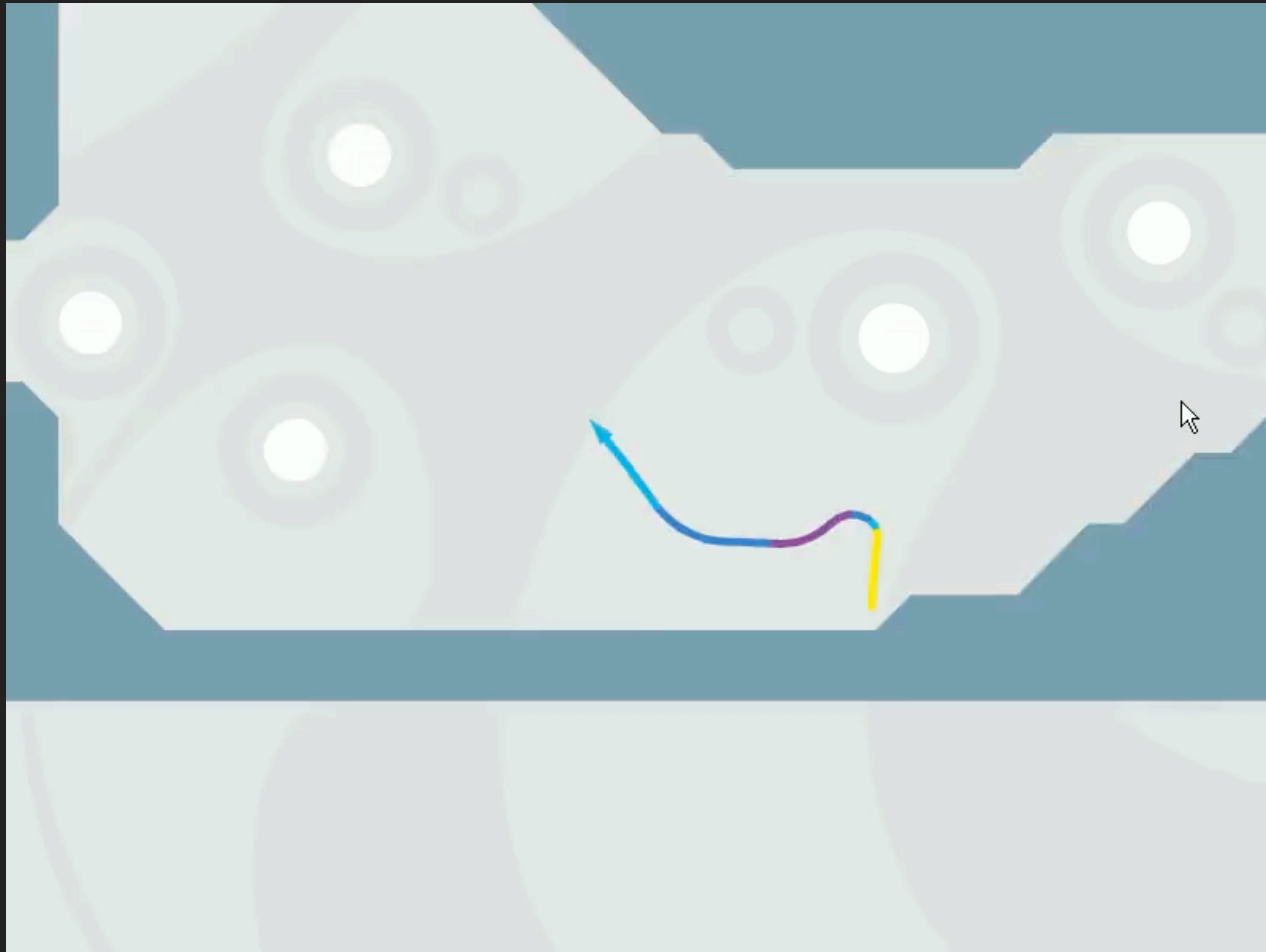




HOHOKUM DESIGN EVOLUTION - LINE MAKES MUSIC



HOHOKUM DESIGN EVOLUTION - JUST LINE





REQUIREMENTS

- ▶ Every week: submit something **playable** before class, **with a screenshot**. I want the binary (not the project files) or a link to a web build, in a zip.
- ▶ Name your file with your name at the start: (Bennett_Foddy_Week1.zip) and put it in the Dropbox. I will clone it at midnight on Sunday.
- ▶ Present your game in class. It's ok to update the build between submitting and presenting, but you get graded on what you submitted.
- ▶ Bring a notebook to class, to get feedback
- ▶ Give feedback to the other students every week

GRADING

- ▶ If you miss one prototype, nothing happens. After that, you lose a letter grade for each one you miss. Last year there were no misses.
- ▶ You get graded on (what I consider to be) your best 3 prototypes. This is to encourage free experimentation. Take risks!
- ▶ Don't ever ask if you can work on a prototype more than 1 week.
- ▶ Sometimes, your project won't work out well. You still have to present it! There's no penalty for submitting something bad.
- ▶ Other than that there is a component for participation and attendance, mainly: give feedback to each other!

WHAT COUNTS AS A GOOD PROTOTYPE?

- ▶ If the prototype expresses an idea: how original, interesting or cool is the idea?
- ▶ If the prototype tests a hypothesis, did it test that hypothesis successfully?
- ▶ Generally: does your prototype prove that you should do more work on it?
- ▶ In strict weeks: did your game match the constraint

SOME ADVICE

- ▶ 4 credits = about 8-10 hours on each prototype including ~4 hours of in-class time. Sometimes you'll spend less, sometimes more. Probably more for the first few weeks.
- ▶ Use whatever you're fastest in. People have had good results with Flash, Unity, Game Maker, Stencyl. I also recommend Pico-8, Puzzlescript.
- ▶ Most people don't do well with C++, Processing, etc. Don't take this as an opportunity to learn a new system.
- ▶ Develop a prototyping kit

PROTOTYPING KIT STRATEGIES

- ▶ Have one project for all your prototypes (messy but efficient)
- ▶ Start each new project by cloning your previous one
- ▶ Have a template project that has only the bare bones requirements in it
- ▶ Reuse code or art where possible! Feel free to reuse things between weeks. Settle on your favorite font, shader or easing function
- ▶ Share stuff with each other

MORE ADVICE

- ▶ Don't take this as an opportunity to implement your existing ideas or work on parts of your thesis. This is about getting fast and being flexible.
- ▶ Good programmers find this harder than bad programmers, on average. Be prepared to build things the wrong way.
- ▶ On the other hand, you won't get significant code help in this class, and 'I couldn't fix a bug' is not a valid excuse for a bad or missing prototype. If you get stuck on a technical hurdle, change your design - can you get the same effect a different way?
- ▶ Always put a restart button in your prototype as one of the first things! It'll help you develop faster and it helps a lot for playtest.

MORE ADVICE

- ▶ Copyright: these games are not for release, generally speaking, so if it helps to use copyrighted sounds or images then feel free. Plagiarism in this class means stealing ideas.
- ▶ The class will not be library quiet or silent all the time. If that's a problem for you bring headphones or earplugs.
- ▶ Consolidate what you learned each week in written notes, in case you come back to finish a prototype later.

TIMETABLE

- ▶ No lecture class on Presidents' Day (February 20) but you still get a theme and have to make a game that week.
- ▶ No classes at all GDC week (February 27), the project is due the following Sunday night
- ▶ No lab in final week of term, final class is May 8th
- ▶ Total 13 assignments

THEMES AND CONSTRAINTS

- ▶ There is one main constraint every week: **you have to make a playable game.** 'Game' is broadly defined.
- ▶ Two types of weekly theme: Strict and loose
- ▶ Loose weeks are more like prompts, an idea to get you going. If your process takes you somewhere else that's ok.
- ▶ Strict weeks are more like constraints, a rule to confine your process and force you outside your wheelhouse. You won't get a good grade if you break the constraint.
- ▶ First one this year will be loose.

**READY FOR YOUR
FIRST THEME?**

НЕ ВЕ
СЪГЛАСЕ

