mod()

an experimental game by maxi

theme

A theme I've explored both in my tattoo practice and in my mixed digital media projects is the deformation of the body. I think we give a very big amount of importance to the way we look, and to the way others perceive us.

There are multiple issues around our physical bodies that are talked about a lot. Fashion, tattoos, piercings, is something people put a lot of money into. Eating healthy, being vegan, not smoking cigarettes, doing sports, is beneficial but if you have any kind of issues, whether it is physical or not, it's easy to point at those things and say you did not do enough. Then there's this idea of beauty standards intertwined with cultural appropriation, fat-shaming, racism, and other forms of discrimination based on a person's features, age, ability, etc. Some other few things are relating to the LGBTQ+ community. In short, the list includes among other things body dysmorphia, unconventional expression of gender and non-binary identities such as gender fluidity, which can give a person the need to change their appearance with how they view their gender at different moments.

I guess what I'm trying to say is that there are a lot of contemporary issues linked to our bodies. It's something I relate to in many ways, and it's something other people will relate to in other ways, as we all have a body, and as I think most of us have some kind of problem with it.

I personally found I could get some very beneficial effects when taking authority over my own body through body modification (tattoos, fitness, nutrition, etc.). At the same time, representing 'imperfect' and diverse bodies in media is probably a better and inclusive way to take a jab at these issues since not everyone has the time, energy, money, and overall access to things like that.

I already have done some work and some thinking on this particular theme. It's something I only recently have bee trying to put into words, but that has been in my personal life and in my creative work for a while, maybe forever. I don't know if this is clear enough, but it's a theme that I always go back to, one that is very personal, and I want to continue exploring it.

intention with creative coding

Past experiments with generative art

I've always been interested in generative art and data science. Before starting the semester, I started learning to code using Python on my own. It's a very useful language when it comes to handling data, and we can also script in Blender3d with it. I started using python scripts in Blender to make generative art out of random data and math, and then started importing data frames from the real world. I've made a mesh generator from the names of protein strands found in a cat's DNA. My journey with Python stopped there as the semester started but it was an inspiring first encounter with coding that leads me to the next point.

The idea of extending what generative art can be and can do is one I've had in mind for a while. Pretty visuals made with mathematics are very nice, but it feels a bit too disconnected from reality for me. I'd love to be able to give generative programs a nuanced and thoughtful voice, maybe by including data from biology or anthropology for example, but as well by mixing in some other concepts outside of data science. The notion of interactivity is one that I think would be able to add an interesting layer to generative art.

P5.js's strengths

JavaScript is an incredible language when it comes to making interactive programs, but I don't think it's the best when it comes to handling huge amounts of external data (correct me if I'm wrong, please, I'd love to learn about that specific subject). It handles user inputs very well with a diverse list of events like keyPressed(), keyReleased(), mouseDragged(), etc. It would honestly feel like a missed opportunity to glance over all these built-in functions.

It's also super easy to implements states in order to give a program a narrative and a sense of gameplay. In addition to states, the text function can take the form of a dialogue box, a title, a user interace, a thought or a hint.

project proposal

The plan is to make an interactive and generative program with the modification of a body (your own body?) as the main theme. I also want the program to have a sense of nebulousness, uncertainty, and existentiality, which relates heavily to the main theme as having a body can feel unusual sometimes.

Moreover, I have enjoyed making narrative games since the beginning of this class, and I think it's a way to talk about important issues that is fun and that still sparks reflection. This one will be more of a sandbox type of game, where there's many paths and reactions to explore and where there isn't a clear ending. The only goal is to explore and find some cool stuff to do!

You will be able to learn more about it in the next pages as I explain more in detail what I have planned. I'm still very open to experimentation and I am not set on very specific visual elements, but I do have an idea of the exact steps to take to get to the end in an effective way.

Interactivity:
Multiple user inputs.
User's name has value (possible to have letters be the start if an algorithm?).

Generativity:
User input starts complex algorithms. I think experimenting with different algorithms will be time consuming, but mostly fun! Also, you can't get the same exact result each time you start the program.

ideas of algorithms:
1- when the mouse is pressed near the face, creates 3 points at the eyes position, the points start to rotate and extend outwards, leaving a trail and stopping eventually.
2- when 'x' is pressed, choose one of the feet and make a random number of toes of that foot grow following a sin wave function.

Body:
I think finding a way to create this body so I can easily modify it through algorithms will be a big challenge, as it will the first thing to do and will affect the whole project.

The body will be formed of a Body superclass extended in various body parts subclasses. Each subclass will be constituted of an array of ellipses delimited by a custom polygon. The vertices of the shape that will connect with to other body parts will be fixed (2 pairs per body part), and the rest will be able to be modified by various generative and interactive functions.

Music/Sound:
What sound effects or music, or noises, makes you think of being human, relates to progressivity, change, organic, bodies, sense of self? Heartbeats, accoustic music, ambiant spacy electronic music, nature sounds?

Background story:
Ideas to incorporate into the story: questions around bodies (what is a body, why do I have this one, how does it relate to identity?), existential ideas (who am I? am I this body?), the separation of self into systems/ into groups/ into parts (body, mind, aura, look, health, name, connections).

«I'm here, I'm alive, and I'm not sure why. I don't know why this is me, I've always felt like this skin was separated from... me.» (WIP)

plan

a - intro

a.1 - story
a.2 - typing animation
video game like, one letter/word at a time
a.3 - lil stars
a.4 - ambient sound, soft guitar?

b – start menu

b.1 - information on commands
'press 'x' to… ???
'press 'spacebar' to …???
Tells you which keys, commands to use, but not what they do.
b.2 - name box
'enter your name:'
When you press 'enter', gives you this message; 'why does having a name even matter…?' Then after few seconds, go to next state.
Convert letters to ASCII code and use the sum to generate a different body each time (seed?).
b.3 - background image
an outline of a body, simple, and looks like it has a normal shape.
b.4 - same sound as last state? heartbeat?

c – game

c.1 - User Interace (ui)
Info on the player's name, this can be modified with a specific action.
Info on commands. Every time you do something, you 'discover' the actual info. Could look like this; "press 'x' to …???". Then after you pressed x for the first time; "press 'x' to change name". other ideas for function/commands [to wobble, to dance, to shift, to grow, to shrink, to expand, to see … etc.].
c.2 - Body object
this is the same as the background image from last state, but it can be modified with multiple commands. Probably better to have it as a shape then as an image.
c.3 – algorithms
c.4 - progressive background animation/effect
I want this to be lowkey, simple, but the more you play, the more it builds up (kind of like progressive techno music, starts simple and slowly gets more complex). Not the focus at first, but I want it to melt in the main body object at some point.
c.5 - ambient sound, soft guitar, heartbeat?

d – end game screen

d.1 - text
'I think there's still way more to discover'
d.2 - restart button
actual restart, reset every variable, clear arrays?
d.3 - soft acoustic music

Top-left panel:

visual representation of the body:
must be:
- modifiable (and have a min. of geometry/ complexity)
- look kind of organic (no jagged edges, no squares...)
- visualy simple (enough visual complexity from other elements/ algorithms)

maybe it 5 or 6 vertices shapes instead

can the circle morph somehow?. can be even ellipse...

depending on resolution, maybe 2 much geometry?

outline made from vertex groups stored in arrays to keep track of each body parts. 1st and last vertex are fixed so we dont loose the shapes completly
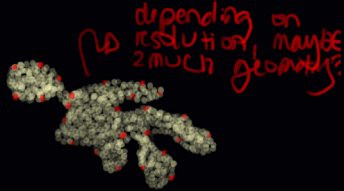
body is made from groups of shapes (circles?). how to position them?

body part groups are:
1- a shape that acts as a bounding perimeter
2- lots of circles

we can move the circles only by moving the shape perimeter

Top-right panel:

type your name

MAXI

blinking effect

input box

[enter]

button

background is a scrolling pattern (left - right)

Bottom-left panel:

feet, hand, head = 2 joints + ? modifiable verts

arms, leg = 4 joints + 5 mod verts

torso = 7 joints (mod verts needed?)

+ 2 mod verts

multiple classes?

Bottom-right panel:

the joint vertices are fixed in place

each body part has a polygonal outline, filled with circles.

* floating in space.

ui that gives you hints on what to do.

PRESS X to..
PRESS SPACE to..
DRAG to..