WELCOME TO

TECHNOVATION

Week 6: October 29th

MICHIGAN STATE UNIVERSITY

Agenda

- Icebreaker
- Introducing Final Project
  - Overview
  - Example
- Review:
  - Kahoot!
- Coding Time
- Standup
- Temperature Check

IceBreaker - Digital Art

Sand Art

Draw Art

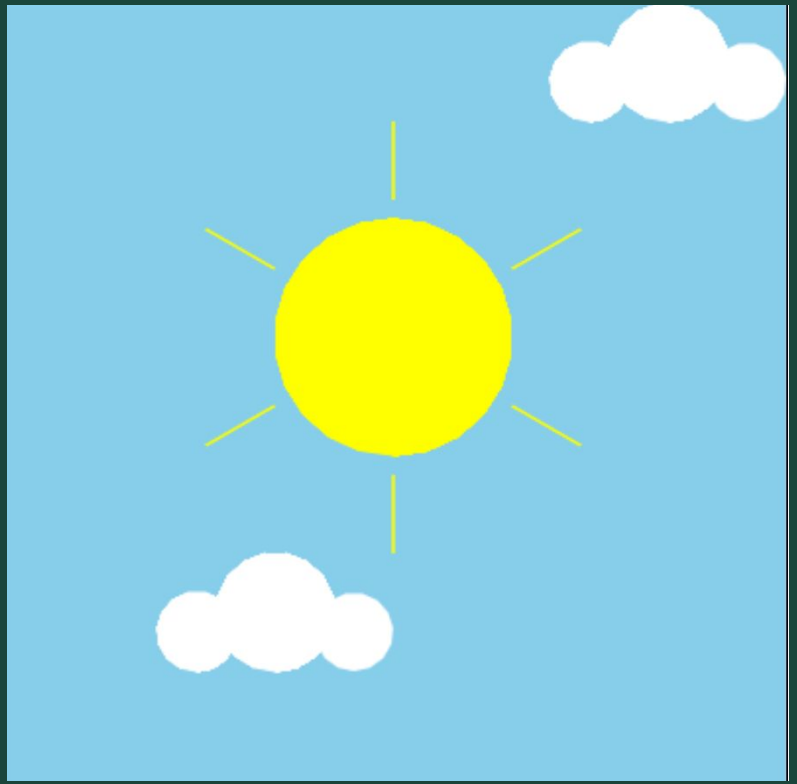
Fluid Simulation

Final Project: Overview

- The next three weeks:
  - Week 7: Brainstorm, Plan and Design. Submit our Final Project Outlines at the end of the meeting
  - Week 8: Code, Code, Code!
  - Week 9: Present our Final Projects
- Project requirements:
  - Must have so many shapes/colours, but this is a chance for you to have creative freedom
  - If you would like you may choose to work with a partner
  - Make sure you can finish it in time! You can also work on it at home or during Bonus Hours. If you finish early you are welcome to make a second project
- Ask questions!
  - Don’t be afraid to code outside the box! If there is something you don’t know how to do, let us know and we will help you add it
- Save your work!
  - It’s a great habit to constantly click that ‘Save’ button. Because we aren’t submitting it each time, CodeHS will not automatically save your work

Final Project: Brainstorm

- Examples
  - Here is Katie's Final Project so far!
  - Check out the code here
  - Here are more examples!
- Some more ideas
  - What are you passionate about?
  - Favorite place or animal?
  - Food
  - Cool geometric shapes or patterns
  - Try spelling out words



Review: Kahoot!

- Kahoot to review everything from the past 5 weeks!
  - Drawing
  - Variables
  - Loops
  - Functions
  - Moving
  - Input
- This is just for fun! If you get stuck, take a look at the CodeHS Docs!

Coding Time

- Let’s use today to work on the exercises we haven’t been able to finish!
- Work at your own pace! Ask questions!
- If you are all caught up through (Unit 4 Section 2), feel free to get an early start on your final project!

Ready, Set, CODE!

Command	What does it do?
`name = value`	Saves the value in the variable
`input("prompt")`	Prints prompt and waits for user input
`int(...), float(...)`	Converts a value to a number (`int` or `float`)
`for i in range(number)`	Initialize a loop
`def function_name():`	Declares a function
`function_name()`	Calls a function

Command	What does it do?
`color("color name")`	Changes Tracy's trail color
`pensize(number)`	Changes Tracy's trail thickness
`begin_fill()`	Starts tracking closed shapes
`end_fill()`	Fills & stops tracking closed shapes
`setposition(x, y)`	Moves Tracy to the input coordinates
`speed(number)`	Sets how fast Tracy executes commands
`name = value`	Saves the value in the variable
`input("prompt")`	Prints prompt and waits for user input
`int(...), float(...)`	Converts a value to a number (`int` or `float`)

Command	What does it do?
`forward(distance)`	Moves Tracy forward a specified ***distance***
`circle(radius)`	Draws a circle with a specified ***radius***
`backward(distance)`	Moves Tracy backward a specified ***distance***
`penup()`	Stops Tracy from leaving a trail
`pendown()`	Has Tracy start drawing a trail
`left(num)`	Turns Tracy ***num*** degrees to the left
`right(num)`	Turns Tracy ***num*** degrees to the right

Standup

- Any final Project Ideas?

Temperature Check

- Temperature Check