



# Creative Coding

Sound + Interactivity + Visualization

COD 207 - Week 09 Class →



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## Loading Sound

Loading sound is same as loading image or a font file.

Check following example code → [link](#)

[P5JS Sound Reference](#)

# In-class Exercise

Replace the audio file and add buttons to play, stop, and pause the song.

```
1  var song; // Define variable
2
3  function preload() {
4      song = loadSound("RAW-all.mp3"); // load sound into
5  }
6
7  function setup() {
8      createCanvas(400, 400); // Canvas size
9
10     song.loop(); // enable loop for the sound.
11 }
12
13 function draw() {
14     background(220); // set background color
15 }
16
17 function keyPressed() {
18     if(key == 'p') {
19         song.play(); // play the song
20     }
21
22     else if(key == 's') {
```

A large, abstract graphic on the left side of the slide features several sets of thin, parallel lines forming complex, crisscrossing patterns. The colors transition from blue at the top left to purple in the middle, and then to teal and light blue towards the bottom right, all set against a solid black background.

# Audiovisual Composition

Enable microphone access on your browser  
when prompted.

[link](#)

14



# Audioreactive Game

Enable microphone access on your browser when prompted.

link  
[link](#)

Time to take a break

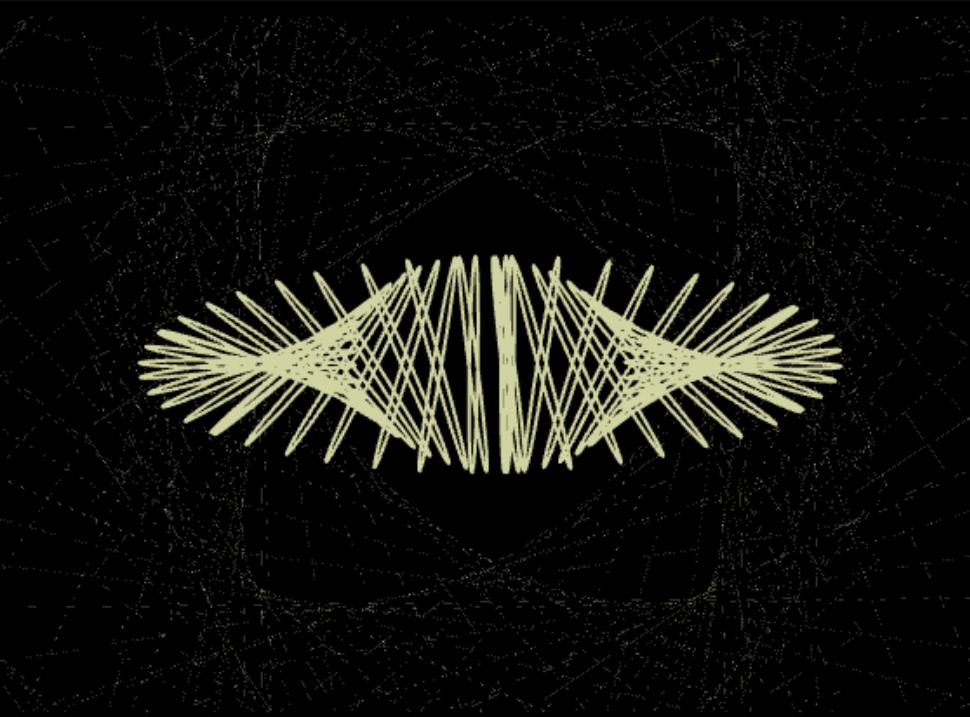


BREAK

10 mins.

# Tutorials

- 
- ∅ Audiovisual 01 The tutorial showcases how to use microphone input to modify the parameters of visuals on canvas.
- ∅ Audiovisual 02 Similar to the previous tutorial with different cyclic motion.



## Example Implementation

- ∅ link
- ∅ Kick Drum

## Sound Museum

Step into a nostalgic journey with Sound Museum, where you can relive the iconic sounds of classic technological devices! Our interactive platform allows you to hear the unique audio signatures of devices that shaped our digital lives.



## In-class Practice

Save As Fork, and complete the code to make every image and sound interactive as the Floppy Disk image.

🔗 [Museums of Sound](#)

# Tutorial: Coding Train

🔗 link Coding Train website for sound related tutorials.

The screenshot shows a tutorial page for 'Loading and Playing' using p5.js. The title 'LOADING AND PLAYING' is prominently displayed in large blue letters. Below the title, it says 'audio input, playback, analysis and synthesis.' A video thumbnail on the left shows a man with glasses and a beard, wearing a purple t-shirt, standing behind a rainbow and a large 'C' and 'R'. The page includes navigation links for 'Languages p5.js' and 'Topics sound, mp3'. On the right, there's a 'TRACK STOPS' section with a red dot next to 'Loading and Playing' and a 'TIMESTAMPS' section with a list of topics: Play and Pause Button, Timing, Jumps, and Cues, Amplitude Analysis, Adding Sound Effects, Sound Synthesis, ADSR Envelope, Microphone Input, and Sound Visualization: Graphing Amplitude. At the bottom right is a 'Next' button.

**Loading and Playing**

**p5.sound**

# LOADING AND PLAYING

audio input, playback, analysis and synthesis.

Contributed

Watch on [YouTube](#)

Languages p5.js  
Topics sound, mp3

TRACK STOPS	TIMESTAMPS
● Loading and Playing	
● Play and Pause Button	
● Timing, Jumps, and Cues	
● Amplitude Analysis	
● Adding Sound Effects	
● Sound Synthesis	
● ADSR Envelope	
● Microphone Input	
● Sound Visualization: Graphing Amplitude	

Next

Sound		
Add description ▾		
Collection by alptugan		
24 sketches		
Share ▾		Add Sketch
Name	Date Added▼	Owner
sound_01_playing	Nov 17, 2024, 8:27:09 PM	alptugan
NazBilge_sound_interactive_game	Nov 17, 2024, 8:27:47 PM	alptugan
2022_week09_SoundInteraction_interpolation_03_	Nov 17, 2024, 8:27:53 PM	alptugan
2022_week09_SoundInteraction_NUI _02	Nov 17, 2024, 8:28:00 PM	alptugan
2022_week09_SoundInteraction_NUI	Nov 17, 2024, 8:28:08 PM	alptugan
FFT on loaded sound	Nov 17, 2024, 8:28:17 PM	alptugan
week8_sound_FFT_Analyze_03B	Nov 17, 2024, 8:28:24 PM	alptugan
week8_sound_FFT_05	Nov 17, 2024, 8:28:34 PM	alptugan
week8_sound_FFT_04	Nov 17, 2024, 8:28:49 PM	alptugan
week8_sound_RMS_03	Nov 17, 2024, 8:28:56 PM	alptugan
week8_sound_loading_01	Nov 17, 2024, 8:29:02 PM	alptugan
week8_sound_RMS_02	Nov 17, 2024, 8:29:18 PM	alptugan
week5_alptugan_sound_02	Nov 17, 2024, 8:29:27 PM	alptugan
week5_alptugan_sound_03	Nov 17, 2024, 8:29:34 PM	alptugan

# Examples on p5JS site

Click on files to run the codes.

link

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# Assignments

1. Find at least three sound from 90s. Fork the in-class code from my account on openProcessing page. Or you can create a custom audiovisual app by modifying the example codes that I provided for you in this presentation.
2. Create an interface with different font and colors in design.   PTS
3. Analyze and write down your steps (Computational Thinking Framework).   PTS
4. You must add comments to your sketch.   PTS
5. Use buttons or image buttons   PTS
6. Add volume slider in your app   PTS
7. Tidy up the code   PTS
8.  Submit the openprocessing link.  PTS
9.  Submit the sketch source code as zip file as well.  PTS