Weekly Questions:

What are your goals for today's class? How do media artists generate ideas?

<u>What to do when you need help:</u>

Project Options:

Build Something with an Arduino

Code Your Own Music

Create Your Own Project

Design Your Own Interface (MaKey MaKey)

Everyday Object Drum Beat

Foley Project (Adding your own sounds, music, and dialogue to pre-recorded media)

Interactive Story

Original Piece of Music

Modular Synthesizer

Music Video Project

Pixel Art Project

Short Film

Speech Sampling Project

Stop Motion Movie

Take Apart and Rebuild Something

Tutorial Project

Video Game Project

Website Project

Build Something with an Arduino

- Start off by going through each project that the Arduino comes with (don't skip any as they get progressively harder)
 - Here is a playlist of someone walking you through each project
 - Call me over so I can disable the firewall on YouTube
 - Watch the video and pause after each step that is demonstrated
 - Let me know if I should create a tutorial to make it even easier to follow
- When looking at the code ask the following:
 - What could you change in the code or in what you built to make the Arduino function differently?
 - What do you want to create that you could use an Arduino for?
 - What else could you create using the parts in the arduino box?
 - How could you use the Arduino to make the world a better place?

Code Your Own Music

- Create your own music through live coding with Sonic Pi
 - Press "command" and "spacebar" (or click on the magnifying glass on the top right corner of the screen) then type in "Sonic" to find the program.
 - Read through the tutorials to learn how to use the program
- When creating your own music ask the following:
 - What style of music can you make through coding?
 - Can you make a drumbeat or melody that changes every time you hear it?
 - Will your music sound the same way every time it is played, or will it sound differently every time you run the code?
 - How do the audio effects change the way your music sounds?
 - What parameters can you use to shape the sounds you are coding?

Create Your Own Project

Talk with me about a project you are interested in creating

Design Your Own Interface (MaKey MaKey)

- Create and code an interface that allows you to do something in Scratch (e.g., musical instrument, video game controller, keyboard, etc.)
- Questions to ask:
 - What do you want the interface to do?
 - What don't you want your interface to do?
 - Are there interfaces similar to the one you are thinking of designing?
 - If so, what would you change about them to make your own?
 - If not, what ideas can you borrow from other interfaces?
 - What materials conduct electricity and how could you use them?
 - What materials don't conduct electricity and how could you use them?
 - Will you use JavaScript or Scratch to program your interface?

Everyday Object Drum Beat

- Record samples of everyday objects (e.g., items from your backpack, stuff in the room, etc.) to create a drum beat
- Questions to ask:
 - What software can you use to create this project?
 - Will you do audio only or will you include video?
 - If you use video, how will you show what is making the sound?
 - What objects can be used to make unique sounds?
 - How can those sounds be used in a beat?
 - Will this be a drum beat you've heard before, or will it be original?
 - When can you use a drum beat someone else already made?

Foley Project (Adding your own sounds, music, and dialogue to pre-recorded media)

- Add your own sounds, music, and dialogue to a movie scene, commercial, tv show, film clip, video game, etc.
- Questions to ask:
 - What pre-recorded media would be interesting to change the sound, music, and dialogue for?
 - What software will help you with this project?
 - When should you keep the original intent of the pre-recorded media?
 - When should you change it to mean something else?
 - What type of mood can make with the audio and video?

Can you make it funny, sad, happy, scary, exciting, boring, etc.?

Interactive Story

- Create an interactive story
- Questions to ask:
 - How could visuals enhance the story?
 - How could sounds enhance the story?
 - Who would be interested in the story?
 - How will people interact with your story?
 - Will it be a lot of interaction or a small amount?

Original Piece of Music

- Create an original piece of music using the software and hardware available in the lab
- Questions to ask:
 - How long does it need to be?
 - What music software do we have that can help you with this project?
 - What style of music could you create?
 - When is using someone else's musical ideas ok?
 - When isn't it ok?

Modular Synthesizer

- Design and perform with a modular synthesizer using the Little Bits synth kit
- Questions to ask:
 - How can you use a modular synthesizer to make music?
 - How does the order of the modules change the sound you can make?
 - How do the different modules change the sound you can make?
 - How does making music like this differ from making music with GarageBand or in your music class at school?

Music Video Project

- Create a music video
- Questions to ask:
 - What software do we have that could be used to make music for the video?
 - What software do we have that could be used to make the video?
 - When can you use someone else's music for a music video?
 - When can you use someone else's images for a music video?
 - How can the video line up with the music?

Pixel Art Project

- Create a piece of pixel art (8-bit art that uses only squares think of old video games)
- Questions to ask:
 - What imagery do you want to turn into pixel art?
 - What software on the computer or online can be used to create pixel art?
 - How do people make unique pixel art creations?
 - What makes pixel art unique?
 - Will the pixel art move or stay still?
 - How could you make it move?
 - Can you create this from coding?

Short Film

- Create a short film
- Questions to ask:
 - How can you create a short film with the hardware and software in the class?
 - What have others done in their short films that makes them unique?
 - How long does the short film have to be to answer the question?
 - What kinds of sounds/effects can you add to enhance the short film?
 - o Can you make this film by coding?

Speech Sampling Project

- Create an original piece of music using samples from a famous speech and the software and hardware available in the lab
- Questions to ask:
 - How can samples from famous speeches be used?
 - What music software do we have that can help you with this project?
 - What style of music could you create?
 - When is using someone else's sample ok?
 - When isn't it ok?

Stop Motion Movie

- Create a stop motion movie
- Questions to ask:
 - How can you create a stop motion movie with the hardware and software in the class?
 - What have others done in their stop motion movies that makes them unique?
 - What can you do in a stop motion movie that you cannot do in a regular movie?
 - How long does the stop motion movie have to be to answer the question?
 - What kinds of sounds/effects can you add to enhance the stop motion movie?

Take Apart and Rebuild Something

- Using the tools in the back area, take apart and rebuild something from the back cabinet
 - Note that you need to put back together whatever it was you took apart so others can work on the project on a following class
- Questions to ask:
 - How do you think each component/module/section of the technology contributes to its overall function? How does/n't the design take into consideration how the technology is used?
 - What would you do differently if you had the opportunity to create your of version of this piece of technology
 - What questions do you have about how it is constructed?
 - Where could you go to find out more information about how and why it was constructed the way it was?

Tutorial Project

- Create a tutorial that explains how media/technology
- Questions to ask:
 - What kinds of tutorials are there?
 - When is a tutorial helpful?
 - What makes a good tutorial?
 - How long should the tutorial be?
 - Is there a tutorial out there that already does what I was thinking of doing?
 - If so, what can I do to make an even better tutorial?
 - Who do you want to use the tutorial?

• Where will you distribute the tutorial?

Video Game Project

- Create your own video game
- Questions to ask:
 - What kinds of video games have been made using JavaScript?
 - How could other video games be used as a model for what you want to create?
 - What kinds of interaction do you want the user to have with the game?
 - What kinds of characters, objects, environments, or themes would work well for your game?
 - Will there be multiple levels/stages/environments, or will it be in one area?
 - What kinds of functions can you use to make it so you write less code?

Website Project

- Create your own website using html and CSS
- Questions to ask:
 - What makes a good website?
 - Why would someone want to visit your website?
 - Who would you want to visit your website?
 - o How does html and CSS allow you to design your website?
 - What do you want to do with your website that you are unsure if html or CSS can do?
 - How can you use JS with your website to make it even more interactive?

What to do when you need help:

- 1. Check the built-in help or resources
- 2. Ask a friend for help and use questions found on our website
- 3. Ask another friend for help
- 4. If I'm not working with someone, ask me for help.
 - a. If I'm working with someone, repeat steps 1-3