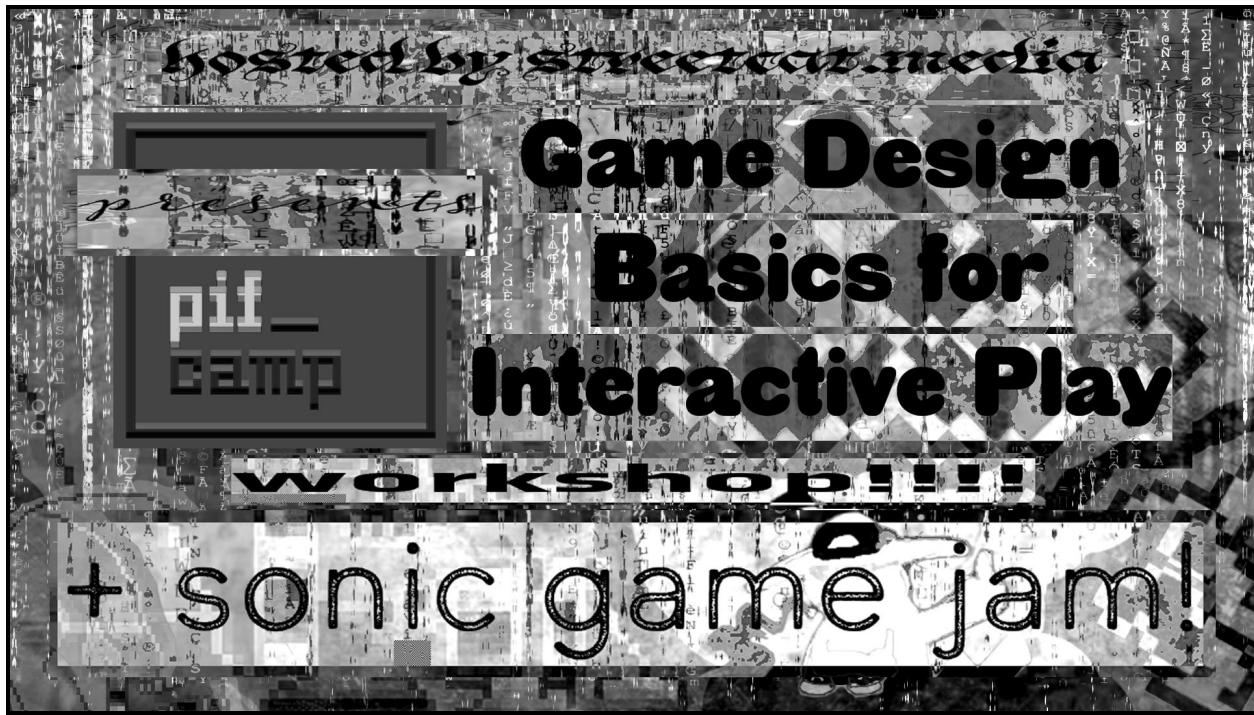




Game Design Basics for Interactive Play (+ Sonic Game Jam!)

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Workshop facilitated by: [Streetcat.media](https://streetcat.media) ++ [Lovrenc Kosenina](#)

Dates: Wednesday, Aug 5 at 5-7PM CEST (3-5PM UTC) + Thursday, Aug 6, 2020 at 7-9PM CEST (5-7PM UTC)

Access workshop via Moodle (PDF presentation)

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Learn the basic principles of narrative gameplay design for encouraging meaningful user interaction with your work!

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This workshop deconstructs game + storytelling (narrative) design principles into two days worth of learning that covers various methods you can use to craft an engaging story for your audience.

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Participate in the PIFcamp 2020 Sonic Game Jam

Email: hello@streetcat.media for more details

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DAY 1: Game + Narrative Principles and Praxis

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Interactive play... why games?

>>> *I'm a musician/sound artist, how does this creative strategy apply to me?*



Dodge the Faygo at the concert!

ex. Insane Clown Posse + the Juggalos

Concert experience & dodging Faygo not intended to be a game, but becomes one nonetheless – mostly for your personal safety.

Make live performance unique and unforgettable

ex. Bit Brigade

Metalheads who speedplay old video games and perform the soundtrack live.

Improving audience engagement

ex. Dan Deacon

Indie pop musician who created an app that the audience can install on their phone that enables participation in light + sound production of the show.

Hardcore AR live performance programming

ex. Cosmic Lab

XP design Japanese tech company that amplifies live and online performance with sick visuals and audience interactivity.

Presenting your work interactively online!*

ex. Move that Doh game

Atlanta-based rapper, Future, produced a video game for one of his hit songs, Move That Dope. **The game is so bad, but the song is bangin'!**

Immersing your live audience in a game world (virtual concert)

ex. Travis Scott ~ (12.3 million viewers!)

PANDEMIC-INFLUENCED! Travis Scott (rapper) teamed up with Fortnite to produce an in-game live concert for 12.3 MILLION players!

Online rave community (virtual concert)

ex. Smile.rip + 24 Hour Rave in Second Life

Founded by former rapper Kreayshawn, Smile.rip is an **online rave / DJ community** that hosts shows inside of Second Life + other alternate reality platforms.

Music video series that encourages interactive physical activity

ex. [Streetcat.media's yoga series](#)

PANDEMIC-INFLUENCED! I was supposed to build an installation at a museum for a yoga class series, but I made online yoga videos instead. *45 min full video that guides you through various pose sequences that features my remixed music + 90s video styling!*

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Basic game genres (they can be blended!):

>>> Ultimately, you'd like to maximize meaningful audience engagement with your creative work(s) in a "playful" way! Let's look at different types of "play".



Narrative (Adventure)*

Story-centered gameplay - The narrative in games consists of the plot, sounds, music, atmosphere, dialogues, player choices and, of course, gameplay. It creates the **overall impression of a game** and **allows the player to feel like part of a story**.

Theoretical consideration of **narratives in relation to new media platforms** - "In the late 1980s and early 1990s hypertext theoreticians claimed that interactive, computer based media would bring "a textual medium of a new order..., the fourth great technique of writing that will take its place beside the ancient papyrus roll, the medieval codex, and the printed book" (**Bolter, 1991**)."

Puzzle

A **puzzle** is a game, problem, or toy that tests a person's ingenuity or knowledge. In a puzzle, the solver is expected to put pieces together in a logical way, in order to arrive at the correct or fun solution of the puzzle.

Educational

Educational games are "are designed to help people learn about certain subjects, expand concepts, reinforce development, understand a historical event or culture, or assist them in learning a skill as they play."

Exploratory

Exploratory game design tends to throw the player into some situation, or a series of situations, and let them figure out what to do. This broad description manifests itself in all sorts of ways, but basically **the key factor is this: the player is very frequently able to choose what their next challenge is**. *Players*

have overall goals, and numerous other smaller goals that they can pursue, and they choose what they want to do.

Action (Combat)

Action games make up a video game genre that **emphasizes physical challenges**, including hand-eye coordination and reaction-time.

The main objective we have in mind when we design the **gameplay mechanics of an action combat system** is to **push the player to make clever choices** and use the right ability at the right time. We want the player to be able to anticipate the next action they'll perform and also to develop a tactical plan during the combat.

Strategy

A **strategy game or strategic game** is a game (e.g. a board game) in which **the players' uncoerced, and often autonomous, decision-making skills have a high significance in determining the outcome**. Almost all strategy games require internal **decision tree-style thinking**, and typically very high situational awareness.

Simulation

A **simulation game** attempts **to copy various activities from real life in the form of a game** for various purposes such as training, analysis, or prediction. Usually there are **no strictly defined goals in the game**, with the player instead allowed to control a character or environment freely.

EXAMPLES: war games, business games, and role play simulation

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Narrative* - Game Examples:



Myst

is a graphic adventure puzzle video game... In the game, players travel via a special book to the island of Myst. There, players solve puzzles and, by doing so, travel to four other worlds, known as Ages, which reveal the backstory of the game's characters. **It's very abstract in its gameplay design and was super confusing to play as a child.**

GAME GENRES: *puzzle, narrative*, exploration, strategy*

Dear Esther (indie)

is a first-person exploration and adventure video game... Featuring **minimalistic gameplay**, the player's only objective in the game is to explore an unnamed island in the Hebrides, Scotland, listening

to a troubled man read a series of letters to his deceased wife. Details of her mysterious death are revealed as the player moves throughout the island.

GAME GENRES: *narrative*, exploration*

Gone Home (indie)*

Gone Home is a **first-person exploration video game** ... (it) puts the player in the role of a young woman *returning from overseas to her rural Oregon family home to find her family currently absent and the house empty, leaving her to piece together recent events.*

Gone Home does not feature much interactivity, but instead has the **player explore the house at their own pace** and determine what has transpired by examining items, journals, and other items left around the various rooms. (The dev team wanted) to **craft an exploration game to engage the player** into uncovering the narration by non-linear progression in their searching of the house.

(T)he game (is) an example of video games as art... Gone Home's characters and story were praised for **addressing LGBT issues with which some players could identify.**

GAME GENRES: *puzzle, narrative*, exploration*

Resident Evil 7: Biohazard

is a **survival horror game** where the player controls Ethan Winters from a first-person perspective as he searches the Baker house for his missing wife. Although Ethan is a civilian with few combat skills, he is able to arm himself with a variety of weapons including handguns, shotguns, flamethrowers, explosives and chainsaws **against the Baker family...** He can block attacks to reduce damage.

Various sections of the game are spent being pursued by members of the Baker family, who, if engaged in combat, can only be temporarily incapacitated. However, these encounters are avoidable by means of stealth, or running away. **The gameplay emphasizes horror and exploration over action.**

GAME GENRES: *puzzle, narrative*, exploration, survival (sub-genre of action), strategy*

Five Nights at Freddy's (indie)

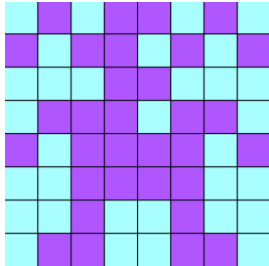
is a survival horror video game created by Scott Cawthon. In the game, the player **controls a nighttime security guard at Freddy Fazbear's Pizza**, who must utilize security cameras and other tools to survive against animatronic characters which become mobile and homicidal after hours.

GAME GENRES: *narrative*, survival (sub-genre of action), strategy*

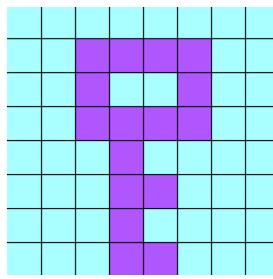
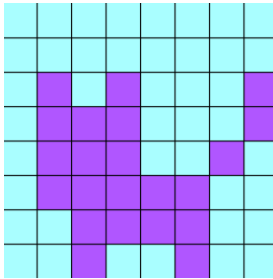
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Game Design - Basic Elements Formula:

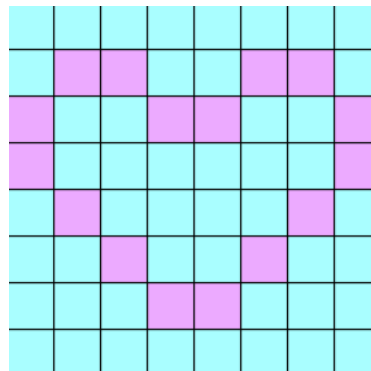
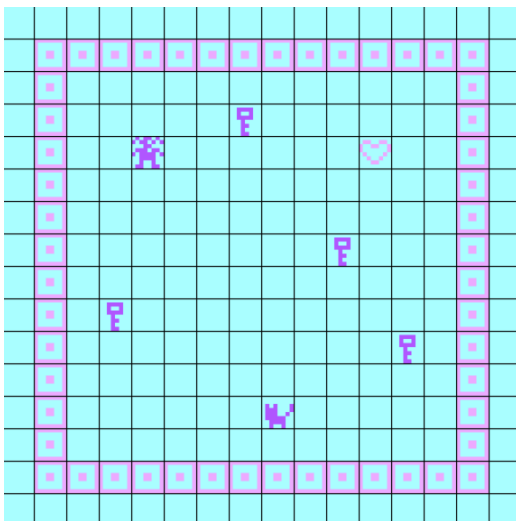
Establishing the interactive story (narrative*) by...



^^ Creating a player (avatar)



^^ Identifying other sprites (characters or objects) and items (objects)



^^ Rendering the rooms (environments) with tiles

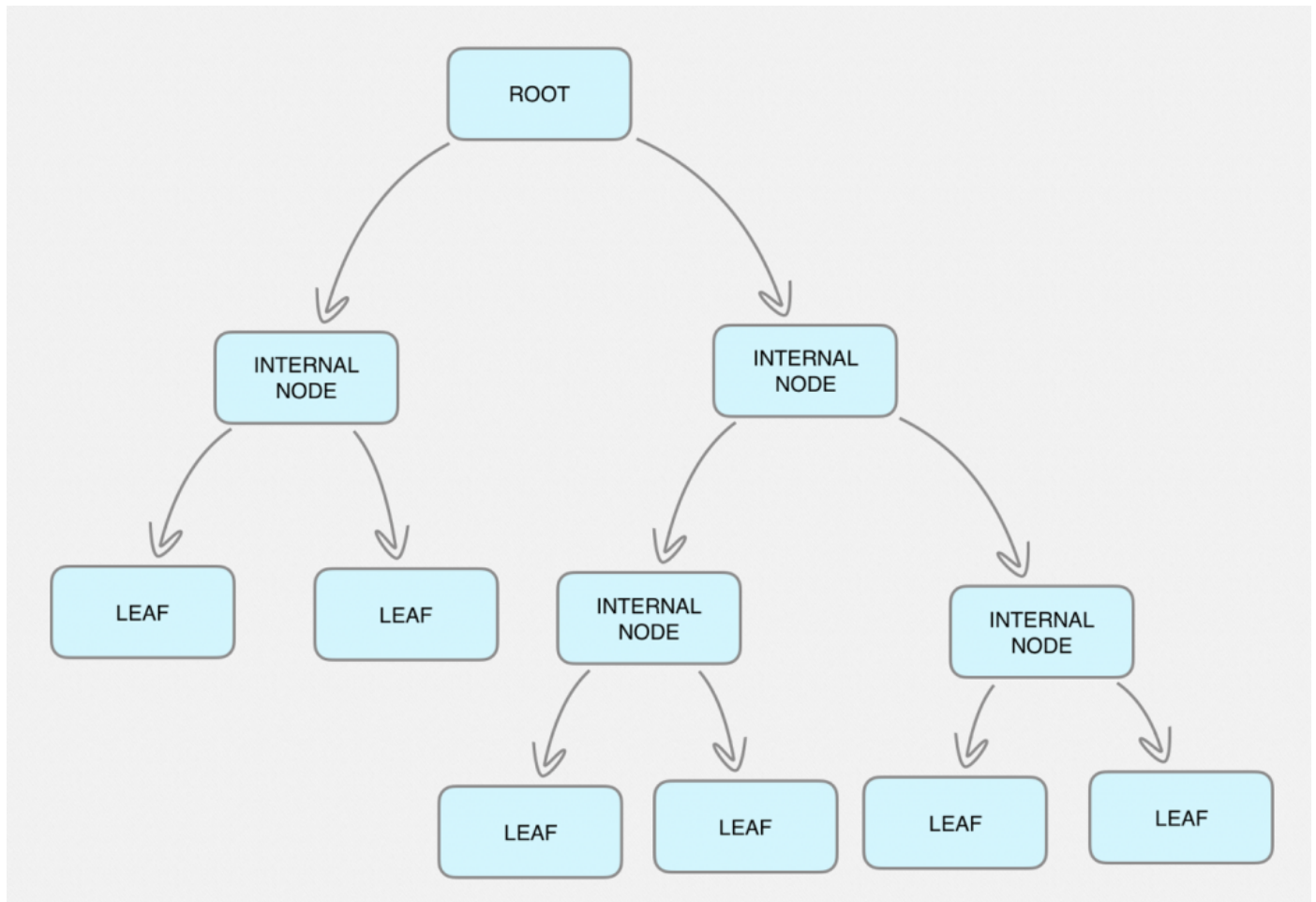


^^ Considering dialogue for player progress

+ Aesthetics come later! but you can still consider it

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Narrative Design - Basic Elements (story arc):



INTRO (root)

lays out pretext of story, introduce what's going on with the character in their environment

Consider -

How do you set the stage for your story? What is the **tone**?

What **game design elements** do you use to introduce the "goal(s)" for the player?

QUEST (Internal Node)

*crafting player outcomes in interactive stories / games based on calculated **decision trees**.*

GRAPH + GAME THEORY SHIT:

(rooted trees) + **(extensive form games)** + **(game trees)**

Consider –

How do you encourage meaningful player interaction within your interactive environment/game?

- a. Is there a repetitive action or dialogue that enhances the "feel" or experience of the game – immersing a player into a **flow state**?

How many stories can the player choose from?

Are your stories linear?

What **game design elements** do you need to immerse your player into a **flow state** that ensures they'll want to play and finish your project?

END (Leaf)

manifesting a resolution to conclude your narrative

Consider –

How does the player finish the game?

What **game design elements** conclude play?

RESOURCES FOR NARRATIVE DESIGN:

Emergent systems to improve interactive storytelling | **4-Layers, A Narrative Design Approach** | **Narrative Design. What is it? What does it take?** | **Game Design Narrative For Learning**

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Aesthetics!:

Discovering different video game visual styles...

- + Color schemes, textures, rendering
- + Realistic vs. stylized (8-bit + physics!)

...and level design aesthetics

- + 2D top-down / platformer + 3D open world

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Testing:

Testing matters!

- + After you decide on game + narrative design elements, you can "test" your game with paper prototyping methods and your imagination
- + Ask others for their input to see if your game/story is interesting - lead them through your prototyped idea + let them "play" your design idea

RESOURCES FOR PAPER + SOFTWARE PROTOTYPING:

[Gamasutra](#) | [Making Games: Paper Prototyping](#) | [Paper Prototype Play](#) | [Paper Prototyping and Iterative Design - Part 1](#) | [A Guide on Game Testing Methodology](#) | [Quality Quality Assurance: A Methodology for Wide-Spectrum Game Testing \(software\)](#)

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** PROJECT PROMPT PT. I **

At the end of **DAY ONE**, students will begin to define their **game** + **narrative story arc elements**!

HOMEWORK:

- + Create an info graphic, journal, or somehow get your **game** + **narrative story arc** elements out of your brain and into your notes!

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Game design options:

Create a **web-based interactive "sonic" story** that playfully illustrates your existing sound work {**in .mp3 format**}

or

captures / documents sensory elements {suggested - **audio/sound samples in .mp3 format**} of your current environment (Soca?) that encourages purposeful user exploration based on the narrative elements explored in the workshop.

DAY 2: Interactive Storytelling Platforms

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Open-source + free(ish) indie game development platforms:

Bitsy.io*

Game dev tool for beginners! open-source/hackable 8-bit narrative **game development tool** that downloads executable game files in HTML (w3schools)

Bitsy non-sonic example game:

<https://streetcatmedia.itch.io/good-meowning>

Publishing methods:

- **Itch.io** = an open marketplace for independent digital creators with a focus on independent video games.
 - It's a platform that enables anyone to sell the content they've created.
 - As a seller you're in charge of how it's done: you set the price, you run sales, and you design your pages.
- **Hosted on a website** = build a static HTML website (90s style) by uploading the HTML game file + media files in a folder to a web server + add server records to your domain!

Twine

Another great tool for beginners. Open-source tool for building interactive, non-linear stories

ex. [Black Mirror: Bandersnatch](#) | [Itch.io games made with Twine](#)
| [Learn Twine](#) | [Interactive Fiction Competition](#) | [Reddit](#)

Other platforms/methods

you can make a game on many platforms - including with just paper or some set of analog objects that people can play with

Unity | RPG Maker | HTML5 | CUSTOMIZED VR MUSIC PERFORMANCE

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Bitsy basics!

Introduce

<http://ledoux.io/bitsy/editor.html> + cover all UI (user interface) tools

- UI: {GAME TITLE}

1. Download = downloads your game file as an HTML file
2. Find Drawing = your asset library
3. Paint = tool for painting 8x8 pixel drawing of assets
4. Room = 16x16 square layout of a level
5. Exits + Endings = moving to the next level or ending the game
6. Dialog = conversation or information prompts
7. Colors = setting the color scheme for: background, avatar, items, sprites, + tiles
8. Settings = meta settings (game size on screen, etc.)
9. Inventory = *items*: set / view inventory of items | *variables*: write custom variables for added interactive features
10. Gamedata = matricized (coded) version of your game

- Getting started tutorials: <https://bitsy.fandom.com/wiki/Tutorials>

Custom scripting (JS)

Bitsy doesn't natively support sound in games :(so hacks are necessary
= <https://github.com/seleb/bitsy-hacks>

Luka's notes on sound scripting sfx:

<https://drive.google.com/file/d/1LYKfdRd-QH5hxx581UchgA3jCdYYzMrv/view?usp=sharing>

FREE HTML EDITOR = [Notepad++](#)

!IMPORTANT = you must add the scripts to your HTML file in between last `</script>` tag and the `</head>` tag **at the very bottom!** See image below.

```
9410 000000
9411 000000
9412 </script>
9413 </head>
9414
9415 <!-- DOCUMENT BODY -->
9416 <body onload='startExportedGame()'>
9417 <!-- GAME CANVAS -->
9418 <canvas id='game'></canvas>
9419 </body>
9420
9421 </html>
```



RESOURCES FOR JS SCRIPTING:

- Adding sound to a game: <https://itch.io/t/147202/adding-a-soundmusic-assets-to-a-bitsy-game>
- WTF are variables?: <https://ayolland.itch.io/trevor/devlog/29520/bitsy-variables-a-tutorial>
- More WTF are variables: <https://mogibear.itch.io/the-bazaar> + <https://itch.io/post/315475>

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Students present their {HOMEWORK} interactive story outlines:

I / other students will give feedback based on how interactive game + narrative elements align with BITSY *platform affordances*

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Questions????

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Future hardware hacking + presentation aesthetics with RetroPie

<https://retropie.org.uk/>

★★ PROJECT PROMPT PT. II ★★

Each student creates a very *simple* interactive game or experience that utilizes game + narrative design elements from their {**HOMEWORK**} outline using *Bitsy's game dev platform*.

Official game jam time: Thursday evening through Saturday (if you need more time to submit, it's not a problem, just email the files when you can in a **.zip or .rar format**).

Game jam mentors: there will be a few people available online on Friday to answer any questions related to your game's design or other technical questions.

All submitted games will be posted to a **PIFcamp 2020 Sonic Game Jam Itch.io page** :)

Finished projects should be emailed to
im@streetcat.media {send compressed files
in a **.zip or .rar format**}

Game design options:

Create a **web-based interactive "sonic" story** (*video game*) that playfully illustrates your existing sound work {**in .mp3 format**}

or

captures / documents *sensory elements* {suggested - **audio/sound samples in .mp3 format**} of your current environment (Soca?) that encourages *purposeful user exploration* based on the narrative elements explored in the workshop.