

Project Misfits Audio Bible

Audio Goals

- Capture the feeling of going on a grand adventure
- Create an uplifting, active atmosphere
- Avoid being jarring or distracting from gameplay

Table of Contents

Audio Goals	1
Table of Contents	1
Music Style and Mood	2
Music Inspirations/References.....	2
Music Instrumentation.....	2
Sound Effects Style and Mood	2
SFX Inspirations/References.....	3
Ambient Sounds.....	3
Beep Speech.....	3
Technology	4
Music.....	4
Editing.....	4
File Format.....	4
Naming Conventions.....	4
General.....	4
Music.....	4
SFX.....	5
Placeholder Assets.....	5
Music Pipeline.....	6
Writing Music.....	6
Finalizing Music.....	6
SFX Pipeline.....	6
Sourcing SFX Assets.....	6
Finalizing Assets.....	6
Asset Attribution	7
References	7

Music Style and Mood

What will the music sound or feel like during gameplay?

- The music will engage players without being jarring or distracting.
- It will capture the feeling of a little kid going on a grand adventure.
- Cozy, comforting, upbeat, exciting

Music Inspirations/References

We will use Lil Gator Game, Stardew Valley, and Celeste as main inspirations for music. Overall, we want to capture coziness and the feeling of going on a grand adventure. Certain tracks, like the main level or boss theme, we want to use minor keys to emphasize danger over coziness.

- The Great Hall
 - [Lil Gator Game Creek](#)
- The Cellar and Boss Encounter
 - Stardew Valley's [Marimba of Frozen Bones](#)
 - Celeste's [Resurrections](#)
 - [Lil Gator Game Forest](#)
- Main Theme
 - [Stardew Valley Overture](#)

Music Instrumentation

What kinds of instruments will we use?

- To start, no emphasis on very electric or synthesized sounds. Lean more into natural and acoustic sounding instruments.
- Our setting is more medieval, so any of the following instruments could work great
 - Harpsichord, Harp, Flute, Guitar, Piano, etc.
- Additionally, for music relating to the main level (which takes place in an icy cellar), we want to use airy, wispy, or icy sounds to add to the ambience
 - Glockenspiel, Music Box, Bells, Wind/Ice ambient textures
- For percussion, any standard drum kit works well.
- Finally, none of these are hard and fast rules. If something sounds really good, and still fits the vibe of the game, then that works

Sound Effects Style and Mood

What will sound effects sound or feel like during gameplay?

- SFX will support the needs of the game without feeling out of place or jarring
- SFX will NOT be crunchy or pixel-y. Sounds don't need to be perfectly realistic, but won't be overly cartoony either

SFX Inspirations/References

Lil Gator Game: SFX support gameplay and don't feel out of place.

Sample: [▶ Lil Gator Game FULL GAME WALKTHROUGH Gameplay HD \(PC\) | NO CO...](#)

Ambient Sounds

- [▶ How To Make a Seamless Ambience Loop](#)
- Limit the total number of ambient sounds so the player won't become overwhelmed.
- Try to have a mix of looping ambient sounds (that may fade in and out) and one-off ambient sounds that play at random times (such as a bird chirping)

Beep Speech

- We want a system to allow different "voices" for our three characters, with the ability to change frequency, pitch, audio clip, and dialogue speed.
- Beep speech should sound natural/cartoonish and represent each character accurately. (*Not* Undertale's synth beep speech)
- References
 - Lil Gator Game (see playthrough above)

Technology

Music

- For DAWs, ideally use Reaper and document which plugins you're using. If you prefer another DAW, that's fine, just document it.

Editing

- For editing, use whatever you see fit. We recommend using Audacity or editing directly in Reaper. Keep us in the loop on what you use.

File Format

- All sound files will be .ogg files. This applies to music and sound effects.

Naming Conventions

General

- All file names will have segments of information connected by dashes “ - ”
- Each segment will be capitalized (using PascalCase)
- Use underscores for time signatures or fractions (specified below)
- Capitalize prefixes (PH or FS)

Music

For dynamic music, download the individual music stems. For non-dynamic music, use a single loopable file.

- For music stems
 - Example: **Sailing**-**A**-**MelodyPiano**-**100bpm**-**3_4**-**4m**-**P1_4b**
 - **Song Name** - name of the music
 - **Section** - section of music (A, B, Bridge, etc.)
 - **Stem** - name of the stem (Melody, Chords, Beat, Harmony, Bass, etc.)
 - **bpm**
 - **Time Signature**
 - **Number of Measures**
 - **Preroll in Beats** - how many beats are there before the music stem begins (it might be 0, which would look like “P0b.” The example above, “P1_4b” describes a quarter of a beat)
- For single loopable tracks
 - Example: **Sailing**-**100bpm**-**3_4**-**P0b**-loop
 - **Song Name**
 - **bpm**
 - **Time Signature**

Music Pipeline

Writing Music

- Tracks must have a complete “OST” version *and* a loopable version to use in game
- Composing must be an *iterative process*. Produce some music, receive feedback, and iterate. Work for completion, not perfection.
 - From other MQP members, peers, or Prof Duplessis

Finalizing Music

- Tracks will be somewhere between 1.5 - 3 minutes
 - The goal is for tracks to be able to be looped without becoming repetitive or boring. If music is longer or shorter, but is not repetitive, that’s okay.
- Music must have a short fade-in and fade-out to avoid speakers popping
- Music normalized to -6dB and imported into Godot
 - Into “Assets/Audio/Music” folder
- Complete editing either in Reaper or Audacity *and save the project files*

SFX Pipeline

Sourcing SFX Assets

Audio assets can come from recorded or found audio (we’ll probably want to avoid synthesizing audio assets, since that generally leads to crunchy/pixel-y sounds)

- Recording:
 - Use a Zoom microphones from the ATC (or an equivalent if you have your own)
 - Use proper field recording practices! Use the windsock and pop filter as needed.
- Finding Audio:
 - MUST be properly attributed. Make sure to document the asset’s license
 - Go for Creative Commons licenses generally
 - We will want to be able to use, edit, and remix the audio files how we see fit

Finalizing Assets

- Music must have a short fade-in and fade-out to avoid speakers popping
- SFX and Beep Speech normalized to -6dB, Ambience normalized to -12dB
- Imported into Godot in the appropriate folder for SFX, Ambience, or Beep Speech
 - If it’s a general SFX (such as a player hit sound), place it in a specific folder (such as the player folder)
- Complete editing either in Reaper or Audacity *and save the project files*
 - Do not put project files in the github!

Asset Attribution

Appropriately credit any and all assets used in the Audio section of the “Asset Attribution” tab of the [☰ Game Credits / Asset Attribution](#) document.

References

<https://zq-sfx.com/audiodesigndoc>