A Formed Group

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Instructions:

Death Sound:

The death sound subpatch can be found in MonkeyBallMidterm.pd labeled “pd death_sound” just below the dsp toggle and input/output code, to the left of the pick up sound.

Parts used to control the subpatch are colored light blue and are next to comments describing their usage. There are sliders for overall pitch, volume, the length of time between switching the two alternating tones, the pitch difference between the tones, the frequency, amplitude, and intensity of the AM modulation, and the frequency of the FM modulation.

Background Music:

The background music subpatch is found below the death_sound subpatch inside MonkeyBallMidterm.pd and is marked “pd BGM”.

Sequencing is used to produce the sound patch, and the vline component is used to control the volume and the duration of each note that plays. The metro component is used to control the tempo and is set initially to “175”.

Collect Item Sound:

The collect item sound subpatch can be found in MonkeyBallMidterm.pd, labeled **pd collect_item_sound.pd**. The patch itself can be located underneath the open sound controller receiver object **r osctrig**.

The signal flow of the patch starts with a subpatch object to control pitch using an arpeggio of 3 notes. This control information flows into an sin oscillator object, which changes its pitch. The volume of the sin oscillator is controlled by a volume envelope, implemented as a **vline~** object, which is converted back to a control signal via a **snapshot~** object. After the entirety of pitch and volume control has been calculated, the signal splits into two parallel paths: one path enters the **dac~** immediately, while the other signal is delayed 100 milliseconds and reduced by 45% every time the signal is repeated.

To use the patch, simply click the big red button.

Bounce Back / Hit Wall Sound:

The subpatch of the sound can be found in MonkeyBallMidterm.pd. It’s under the toggle beneath the receiver of “oscwall”, named “pd bounce”. The sound is made when the ball hits a wall.

There are 5 components you can adjust to control the sound.The number component labeled “**decay**” is used to adjust how long it takes for the sound to cease, the higher the number the longer it lasts, “**pitch_scale**” is used to adjust the pitch of the sound, “**filter_scale**” is used to adjust the filter along with the level of noise, “**since_scale**” is used to control the frequency of the oscillator and the vslider component labeled “**sound level control**” is used to adjust the volume of the sound.