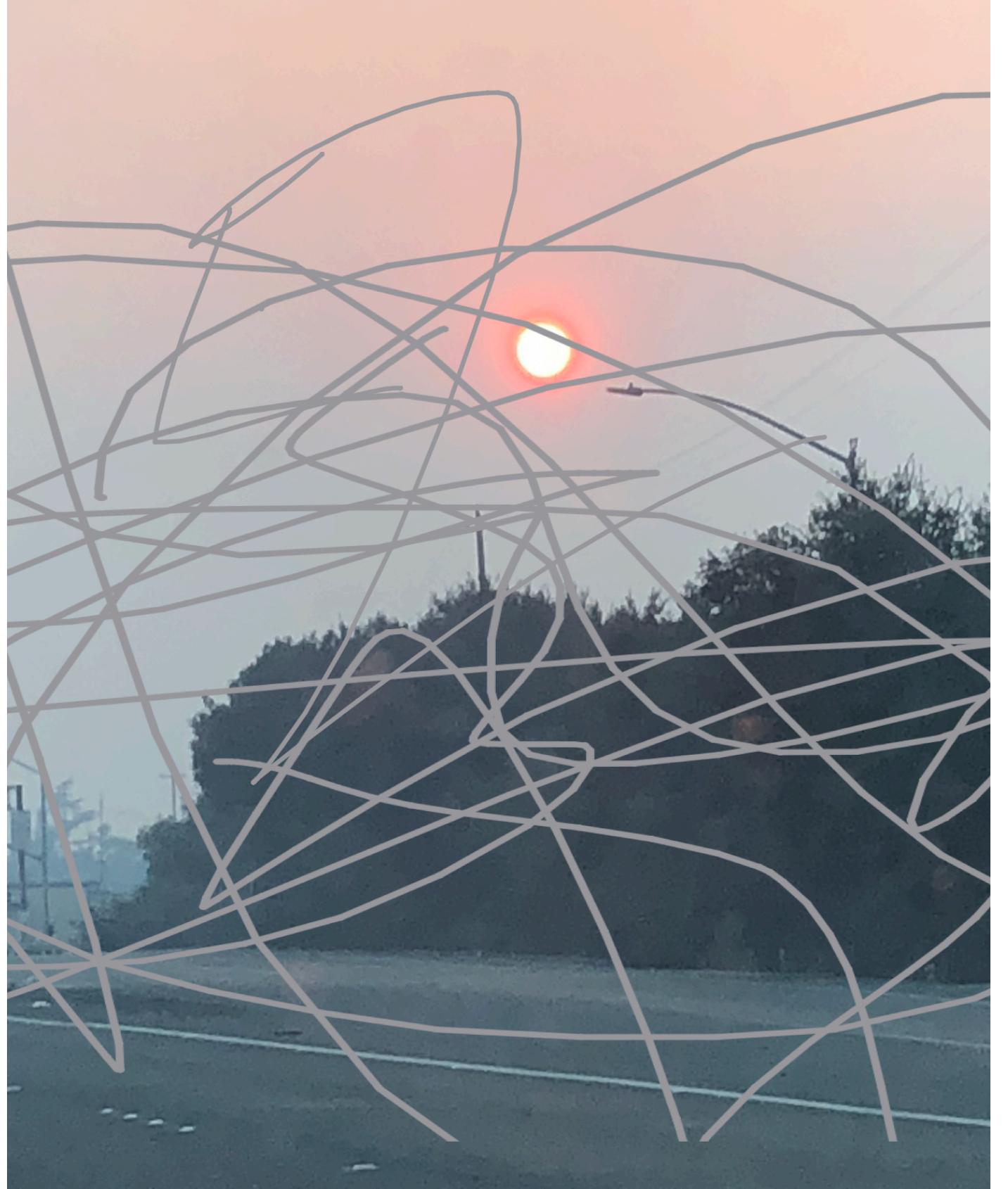


La Lune

Music Visualizer Coding Project by Yan To



New Feeling of Inspiration

- Wanted to create something that is expressive and serves almost like a personal diary for myself and my music.
- Music production has always been a passion project of mine. Finally able to bring it all together with code.
- Java and OOD principles were able to bring this project together.
- Project is inspired by Porter Robinson's Nurture project.

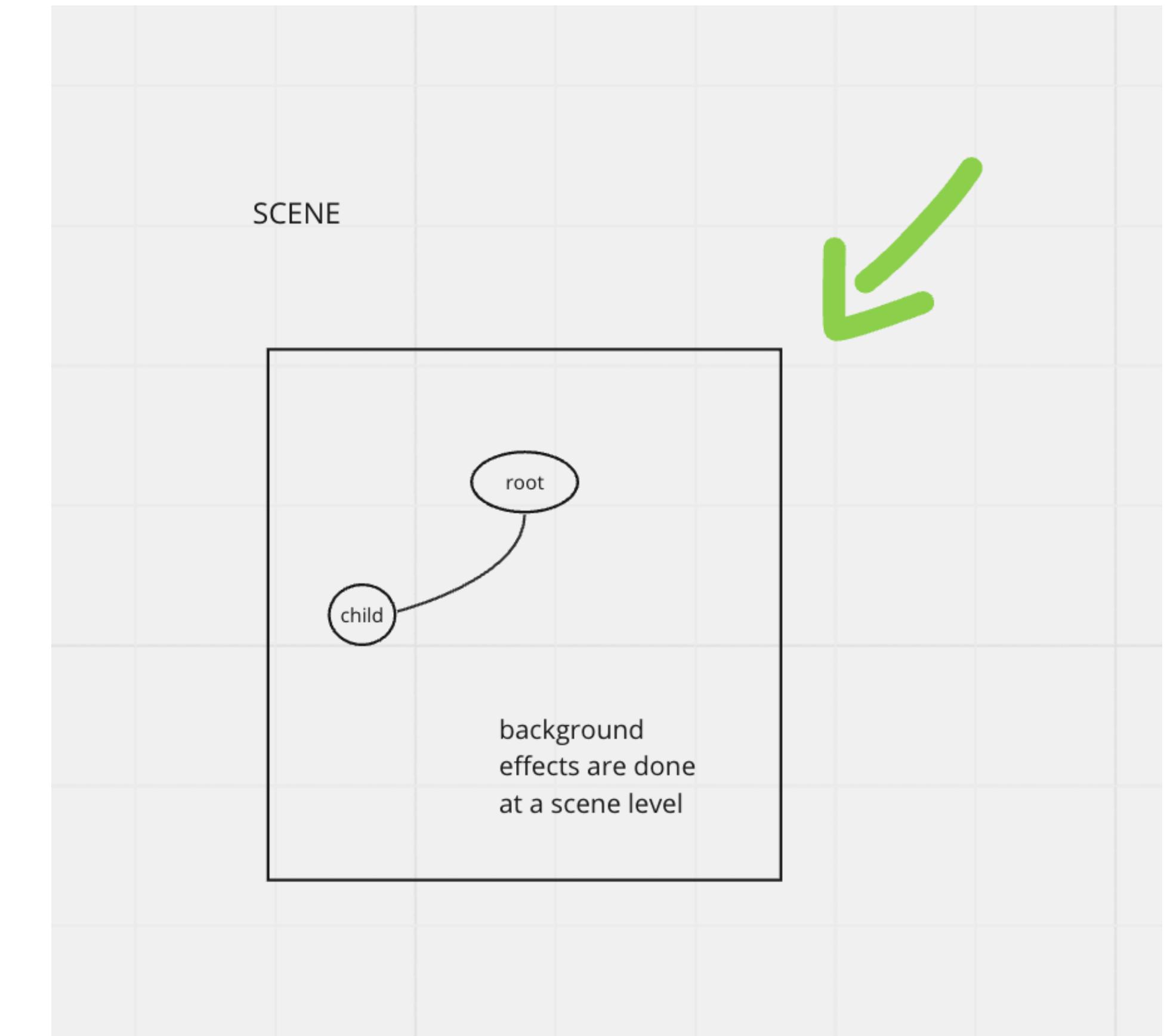
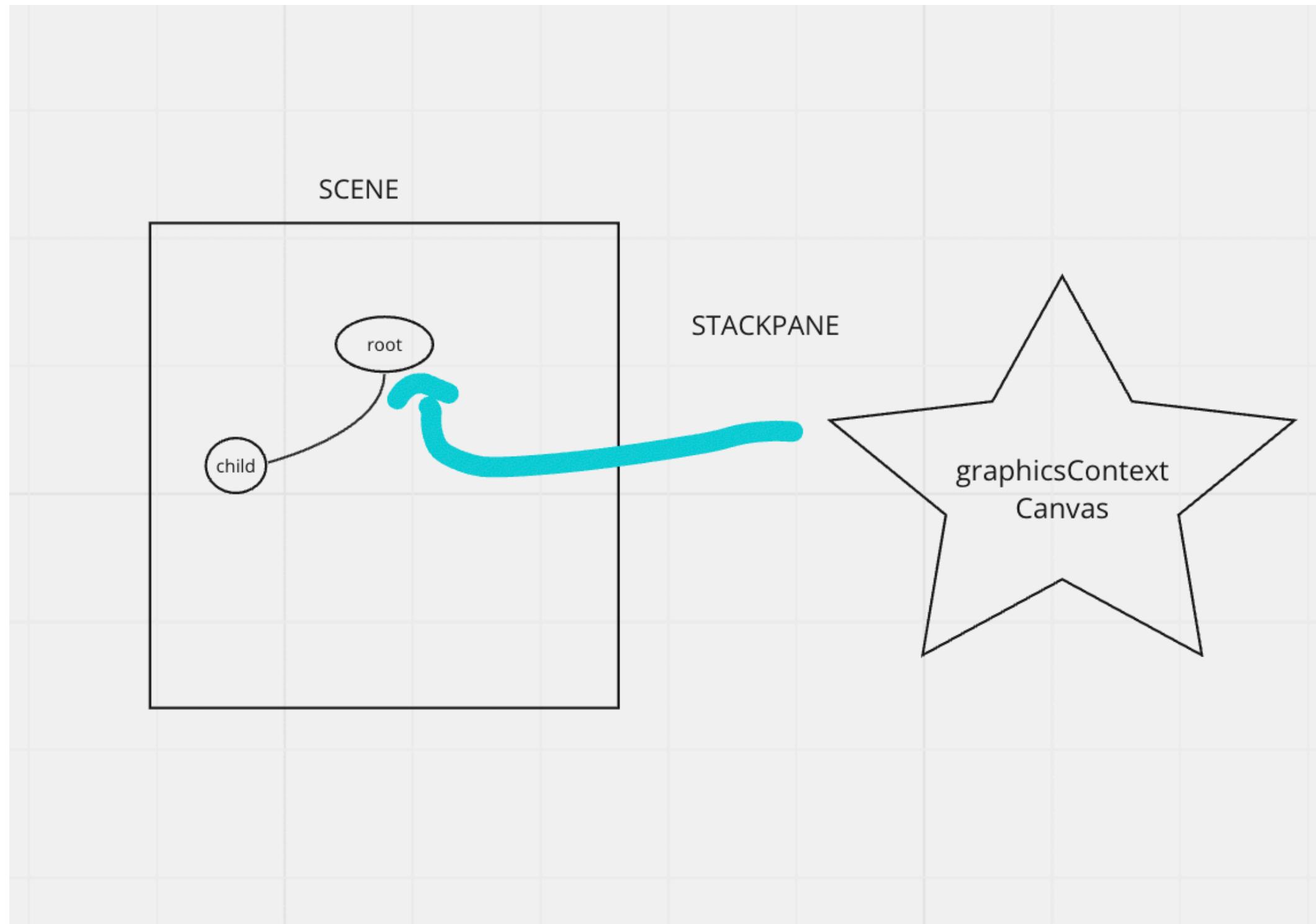


Creating La Lune ☽

- Built upon OOD principles such as abstraction and inheritance.
- Utilizes classes inside JavaFX toolkit such as animation, scene, canvas, and duration to create a GUI that generates scene animations based on the timing of the music.
- Also utilized Java Sound API to process and play audio while the GUI is playing the animations.
- Main visualizer itself is built on GraphicsContext which is a class associated with Java canvas. This tool serves similar functions to python turtle.



Project Structure

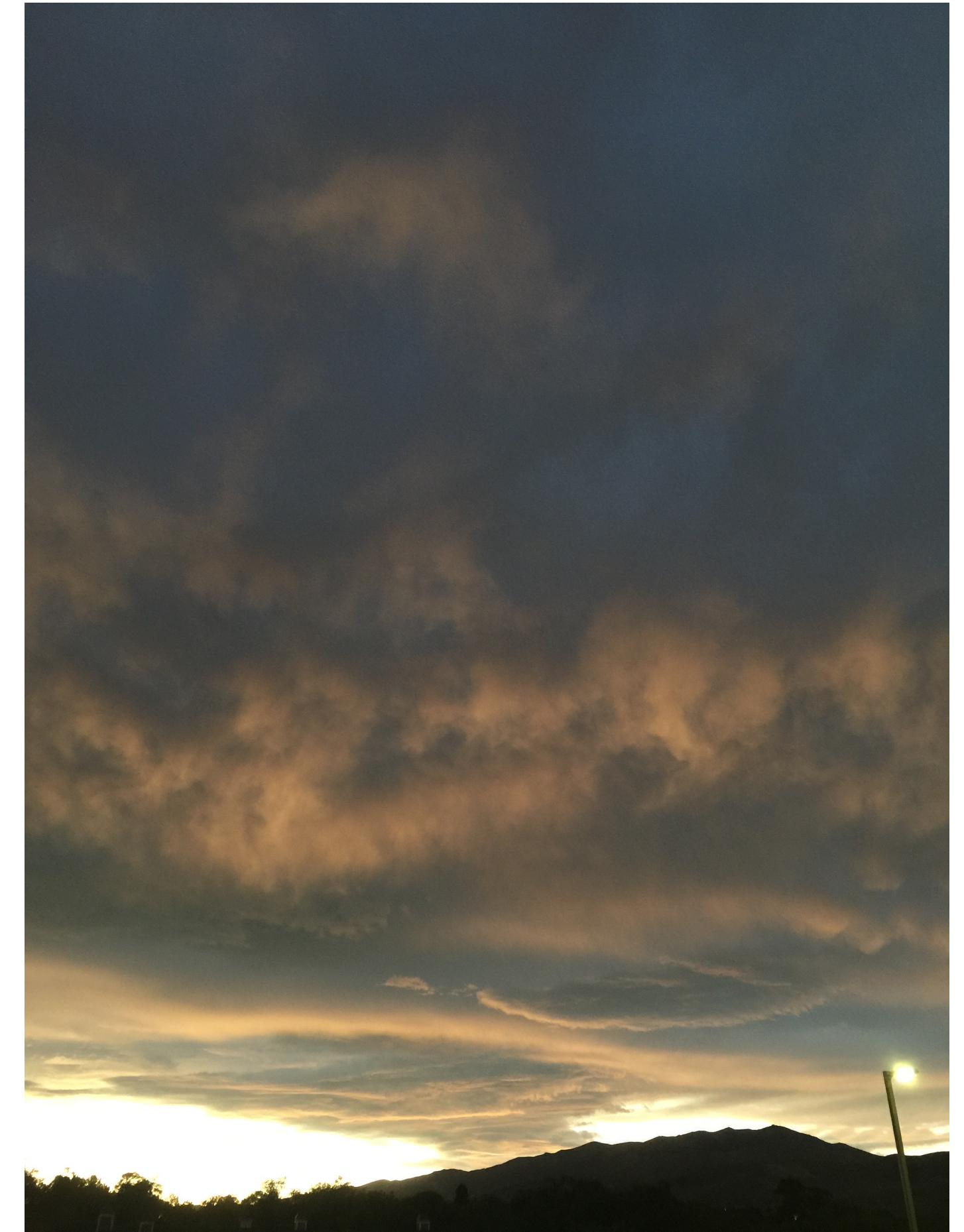




Code Highlights

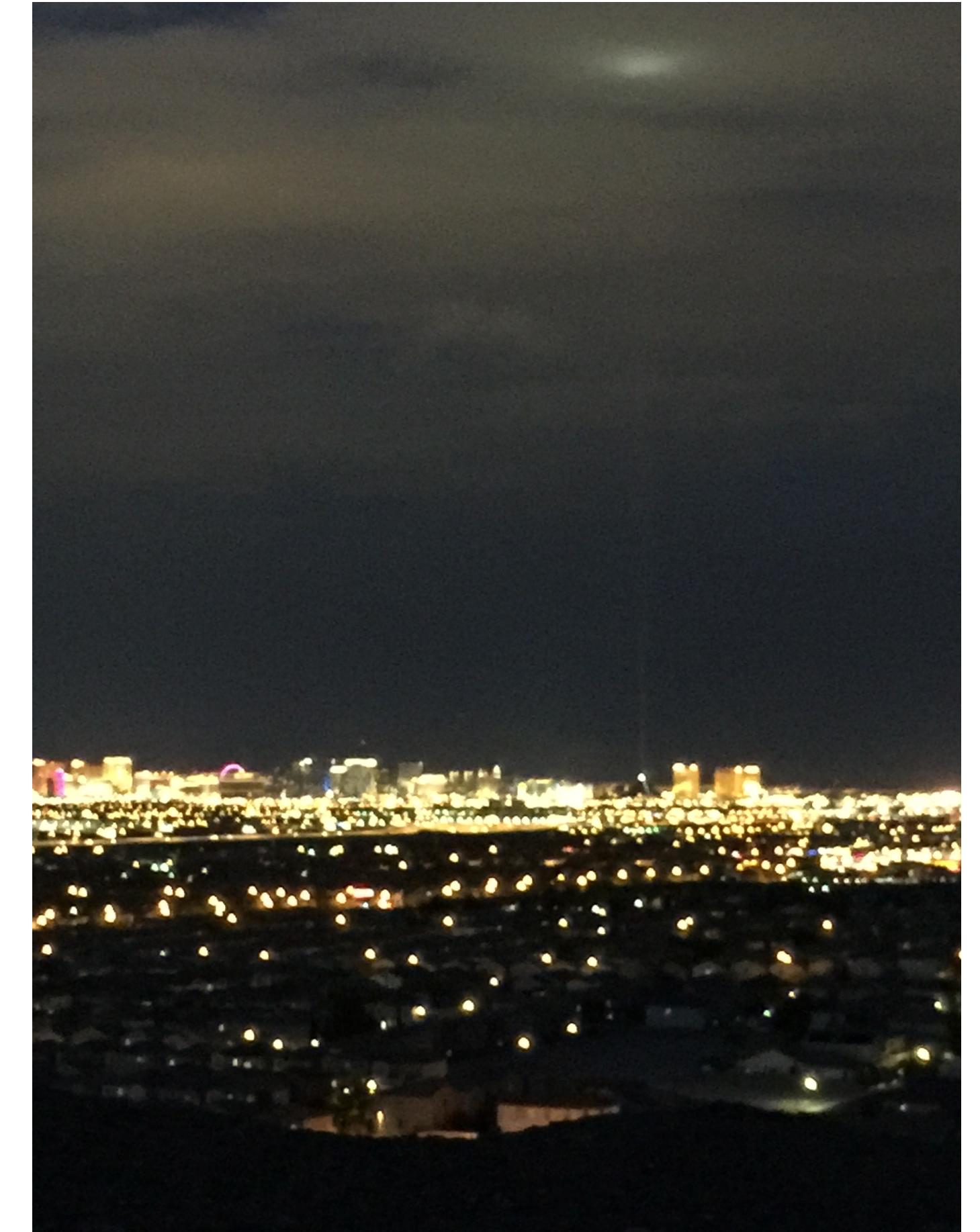
It Is Always Harder Than You Think

- There are too many classes inside JavaFX and took a lot of research finding exactly which ones to use
- Although a lot of redundant code was eliminated, it is very hard to eliminate that on the timeline class because it is all reactionary
- JavaFX media player does not work well! Had to learn how to use Java Sound API instead which only takes WAV files
- JavaFX Scene works like a graph. It has a root, nodes, and leaves. How can I get my visualizer to be the root of the “graph”?



Limit Testing

- Only draws 1 color and lines, no abstract shapes or anything else
- The drawing is just drawing at random. It is not technically “drawing to the music” as that was all done manually by the timeline class
- Drawing is also not dynamic. It simply at random generates coordinates and goes from source to destination
- Not using the full potential of JavaFX.scene. Everything is being played at the root level, limit on creativity.



It is not a normal visualizer you have on a background! It is a visual journey for this specific song so it is not universal

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