

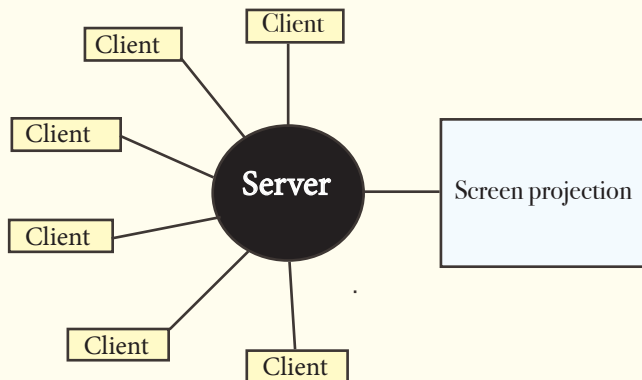
Generating Live Visuals during a Hindustani Classical Music Performance using an Audience Participation System

INTRODUCTION

- » Various artists over the years have implemented different ways of incorporating live visuals in accompaniment to their music during a performance as a way to enhance the experience.
- » We built a system that allows the audience to interact with a Graphical User Interface to generate live visuals during a Hindustani classical music (HCM) performance.
- » We attempted to define a visual aesthetic that would artistically cohere with the music, with different designs for different sections of a typical HCM performance.

METHOD

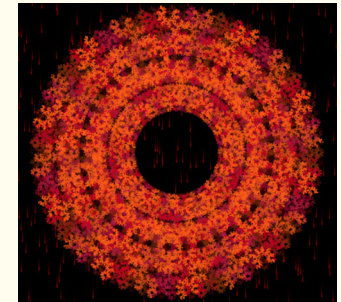
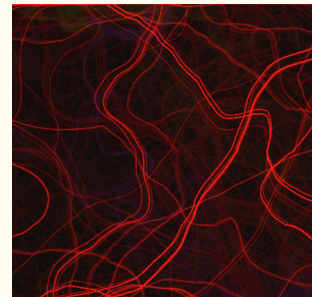
- » We developed a simple web application with a few functionalities such as an X-Y touchpad and buttons that we made accessible to the audience by scanning a QR code.
- » The visuals were coded in p5js and the audience was given control over certain variables.
- » A Node.js server was setup to establish connection between multiple users and the server ensuring bi-directional communication between them using Socket.io.



- » The choice of visual elements, their colors, nature of movement, etc was decided upon based on the *raga* being performed.

METHOD (CONT'D)

- » We attempted to work with the *raga Shree*, and considered only the *alaap* (introduction) section of a sitar performance consisting of two segments—a slow, unmetered segment and a rhythmic segment increasing in tempo over time.
- » Swirling patterns moving randomly on the canvas was used as the aesthetic for the first segment, and a rotating fractal figure changing form over time was used for the second.



DISCUSSION

- » Possibly questions the “classicalness” of HCM and if the purity of the artform is kept intact.
- » Future work could include using data from accelerometer and gyroscope sensors of smartphones to affect visual parameters.
- » An audio reactive system can be built that would generate visuals in correspondence to the audio signal of the sitar picked up from a microphone/pickup.

ACKNOWLEDGEMENT

We would like to thank Ashvala Vinay for his timely advice and help.

REFERENCES

- » Correia NN, Castro D and Tanaka A. (2017) The Role of Live Visuals in Audience Understanding of Electronic Music Performances
- » Svadhana. “Introduction to Indian Classical Music.” An Overview of Indian Classical Music - Raag Hindustani, raag-hindustani.com/Introduction.html.