

Green Sounds

The Green Sounds project was born from my interest in the junction between nature, technology, and music. My goal was to create an interactive and immersive experience where users could explore soundscapes inspired by plants. The idea came out of a desire to promote relaxation, mindfulness, and creativity while addressing the global decline in music education. Green Sounds connects nature and digital innovation through auditory and visual means, creating a deeper connection to the environment. This project was designed not only as a creative expression but also as an educational tool to engage users with the natural world through the power of music.

The creative process began with brainstorming and researching how plants could serve as a basis for sound generation. Drawing from gamification, I looked into how music and interactive learning tools such as Duolingo and Kahoot! engage their users. Studies on gamification, by MDPI, showed that the addition of interactive elements significantly enhances retention and engagement levels. Similarly, studies on music education showed that the cognitive benefits include enhanced memory retention and problem-solving skills. These insights shaped the project's foundation, merging education and creativity to offer a unique experience.

I wanted Green Sounds to allow users to explore the emotional and cultural resonance of plants through music. Each plant involved in the project was designed to reflect special musical characteristics: the Sunflower produces a cheerful ukulele sound, reflecting warmth and joy; the Cactus grounds the melody with a deep bassline, evoking stability and resilience; the Ivy contributes a delicate acoustic string pluck, symbolizing grace and subtlety; and the Oak resonates with powerful orchestral tones, representing strength and grandeur. By integrating these elements, this project allows users to experiment with harmonies, while encouraging creativity, it also communicates the interrelatedness of natural ecosystems.

Research and iteration lay at the heart of developing this project. I drew on sources that explored cognitive and emotional benefits of music education and also the decline in its global availability. It really proved my idea to add the educational feature in Green Sounds that enabled users to learn the cultural and ecological importance of each plant. At this time, I have not integrated the feature, it will be shown in the future iteration.

Technically, the making of Green Sounds was a combination of animation through Processing code and dynamic sound design using Adobe Premiere Pro. I made sure the transitions between soundscapes were smooth and natural. I also added sound layering to show the potential of combining plant sounds. For example, the Oak and Ivy create this dynamic duet of strength and elegance, while adding the Cactus creates a rich harmony.

Green Sounds is an apex point of my interests both creatively and technically, as a realisation of the potential interdisciplinary approaches carry within digital art. Changing plants into instruments opens new ways of experience towards nature, mindfulness, and creative exploration. The journey behind this work only strengthened my belief in art, education, and technology's power of combination to provide meaningful

experiences. Green Sounds is that first stepping stone into future works, and further exploration of synergy between nature, music, and interactive media.

Sources

[Benefits of Music Education: Social & Cognitive Development](#)

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[How Music Boosts Cognitive Development in Classrooms - TeacherToolkit](#)

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[The biological impact of listening to music in clinical and nonclinical settings: A systematic review - ScienceDirect](#)

[A level music in schools could ‘disappear’ in little more than a decade - Classic FM](#)

[The End of Botany: Trends in Plant Science](#)