



Sound Maestro: The Dynamic Soundscape Builder

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Soundscape – “A sound or combination of sounds that forms or arises from an immersive environment.”

Background

- There are many audio programs that cover many fields
 - Many are too complex or expensive
 - Others are too simplistic and lack customization
- Sound Maestro aims to fill that gap
- No web-driven components, can simply be a desktop application
 - Can work offline
 - Manage user file structures
- Why Electron?
 - The benefits of a web driven app, without needing a website or servers
 - HTML5's Web Audio API well suited to project features
 - Familiar development concepts



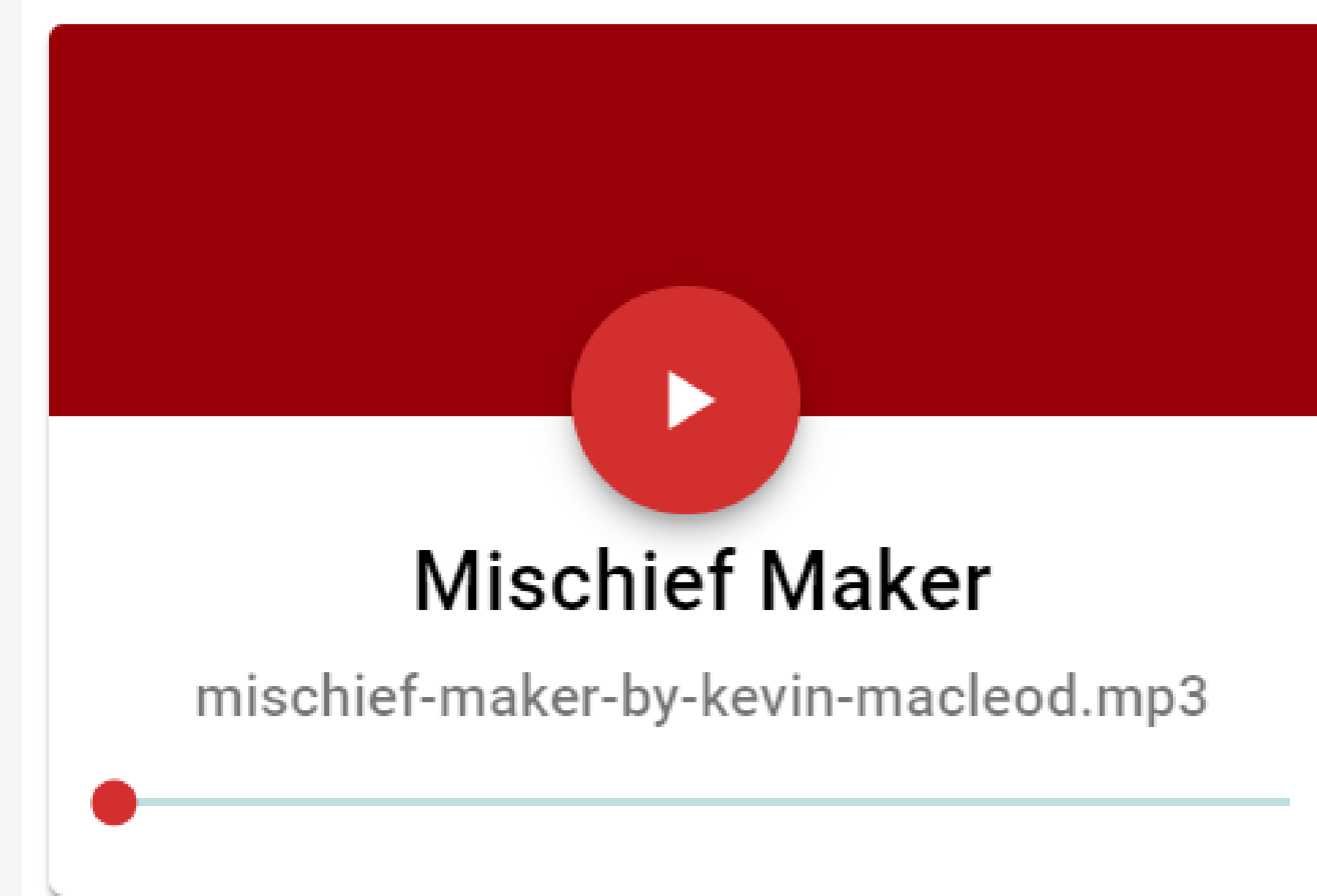
ELECTRON

Goals

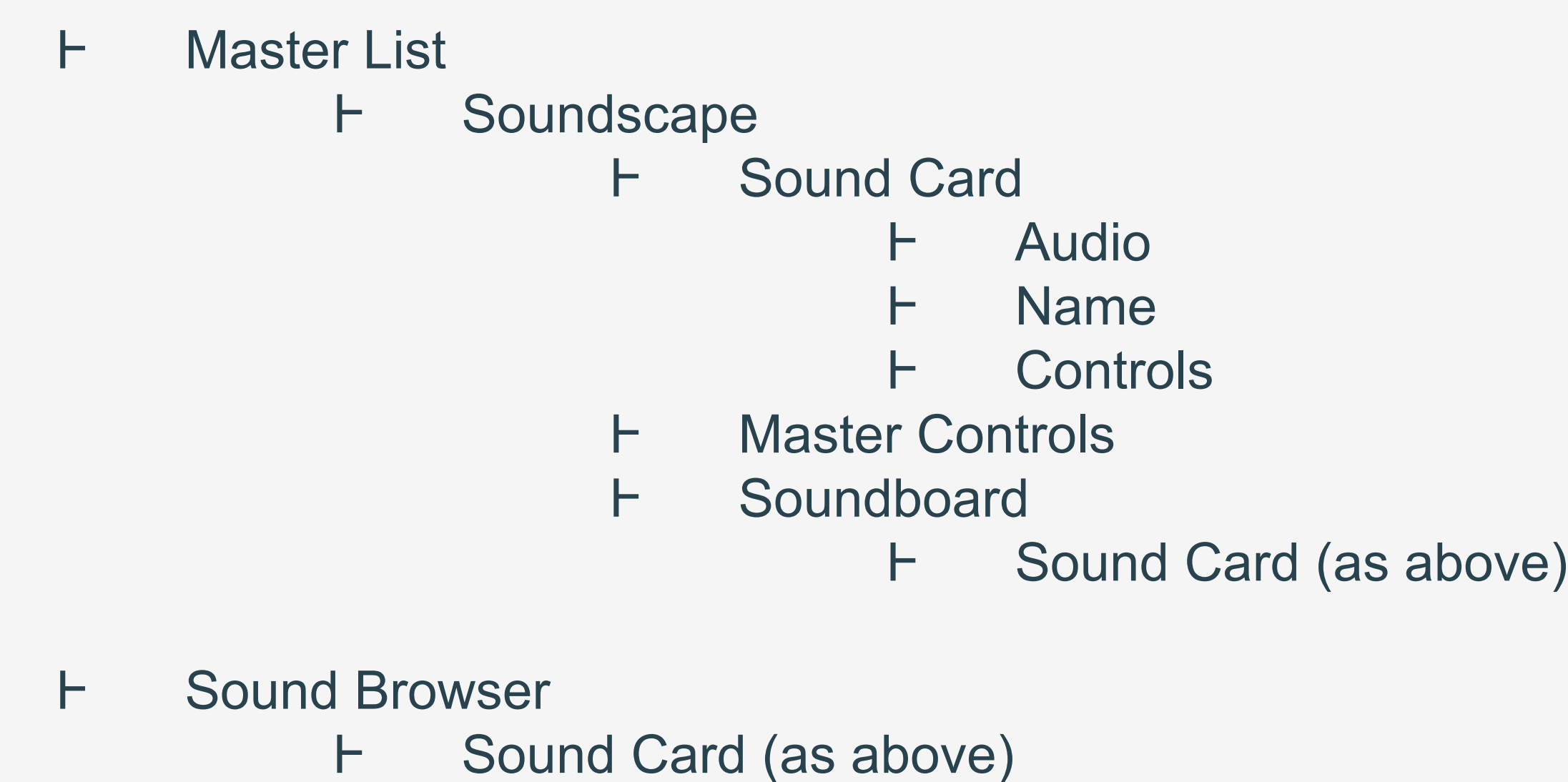
- Provide an easy and fast way for people to organize and play relevant sound files in real time with dynamic effect elements.
- Potential Users
 - RPG Game Masters
 - Live Performance Sound Technicians
 - Ambiance
- Research
 - An exercise in Full-stack development
 - User Design
 - API / Framework Integration
 - User Testing
 - Learn what I couldn't

Features

- Basic audio playback and controls
- Pre-made database of sounds
- Add “user friendly” name to sound files
- Add custom sound files
- Tag-based search function
- Multi-sound playback
- Dynamic timing
- Touch-Screen friendly



Component Hierarchy

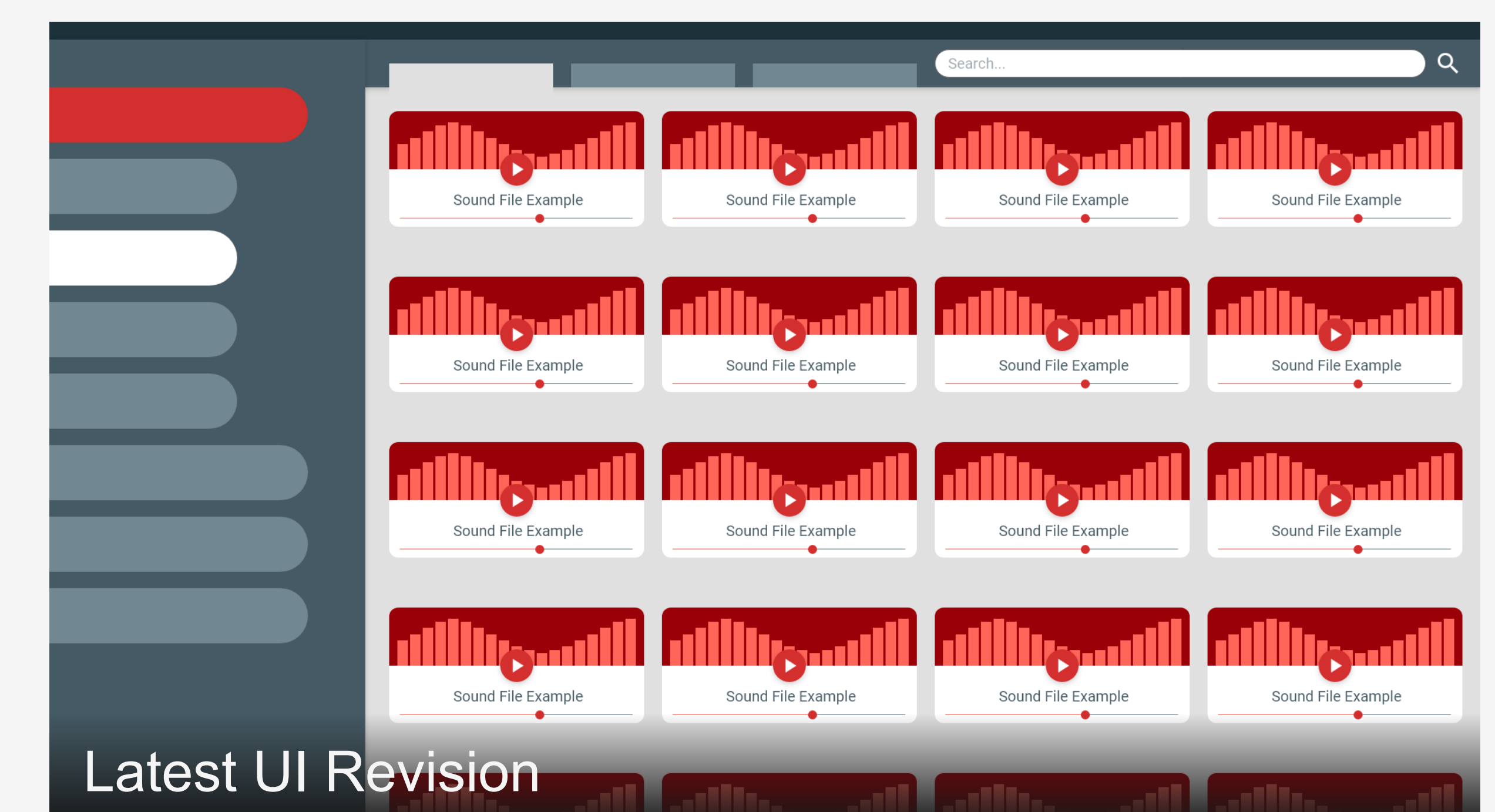
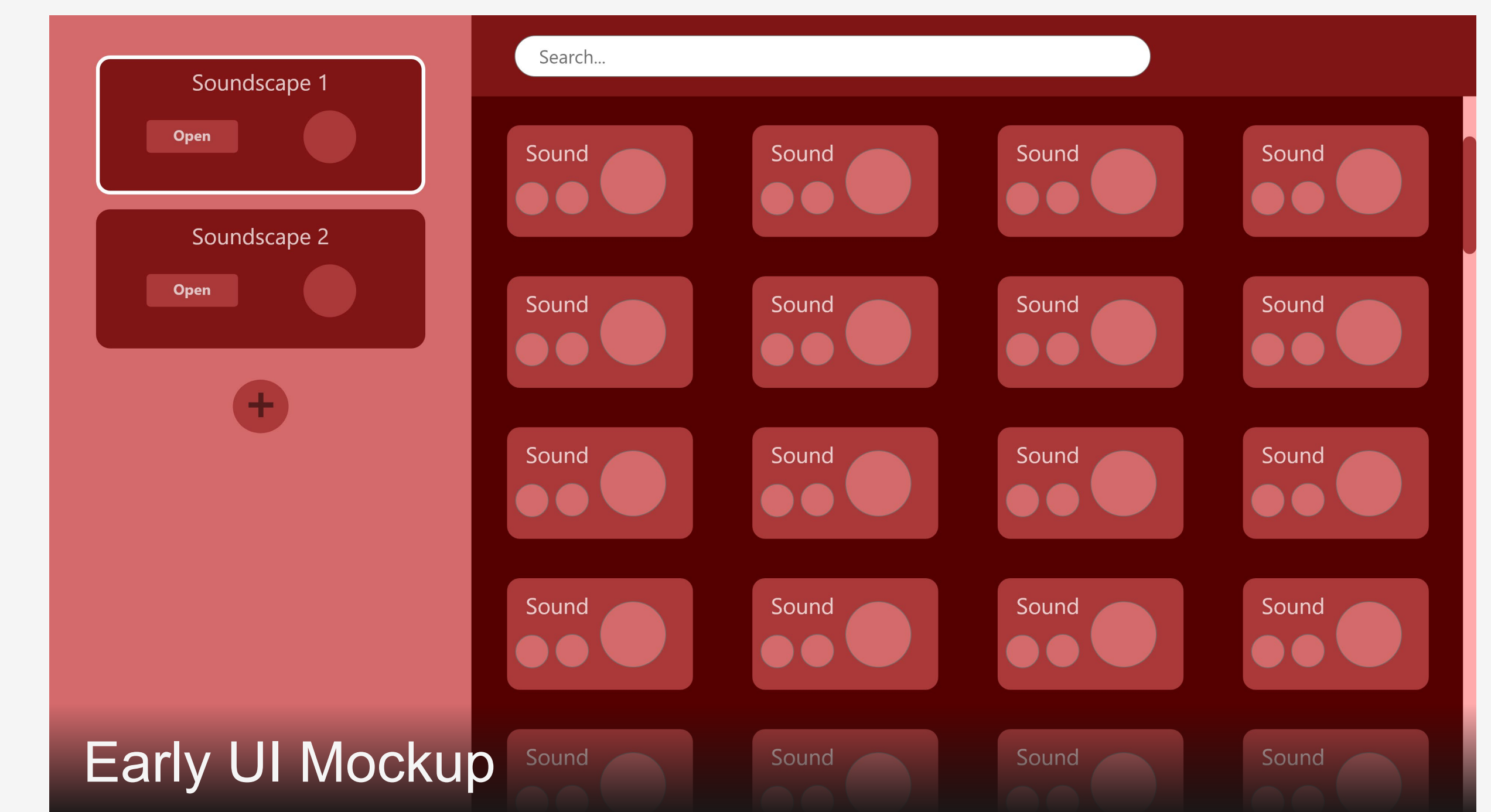
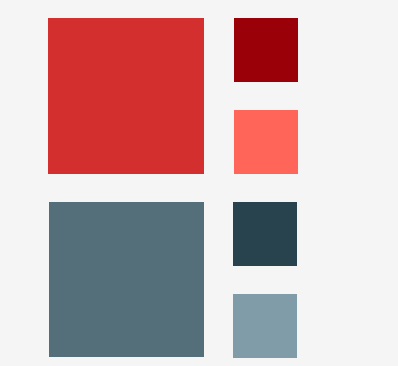


Technologies Used



User Design

- Google's Material Design Specifications
- User-Familiar concepts: cards, drawer, search bar
- User Testing
 - Goal-driven: give user a goal, they attempt to complete it
 - Hands-off: no operating instructions given to users
 - Hands-on: the user can ask questions and basic instructions can be given to the user



Future

- Multi-User streaming over the internet
- Music Library integration (Google Play Music, etc.)
- Sound synthetization – Web Audio API extensibility
- Library Exporting – Users can share soundscapes
- Timeline & Editor – More advanced visualization tool