

# SXSW Music Hackathon 2016 Project Presentation

Joanne Bruno and Jeremy Cantu's Hack: "Etude"

# Motivations

- For musicians of all walks, collaboration is full of complications when factoring in distance
- Although the Internet has made it easier to transfer both ideas and information, very little has been addressed in terms of organization for music
- A remedy for this situation would involve ease-of-use in regards to creating, sharing, and tracking an idea's evolution over time



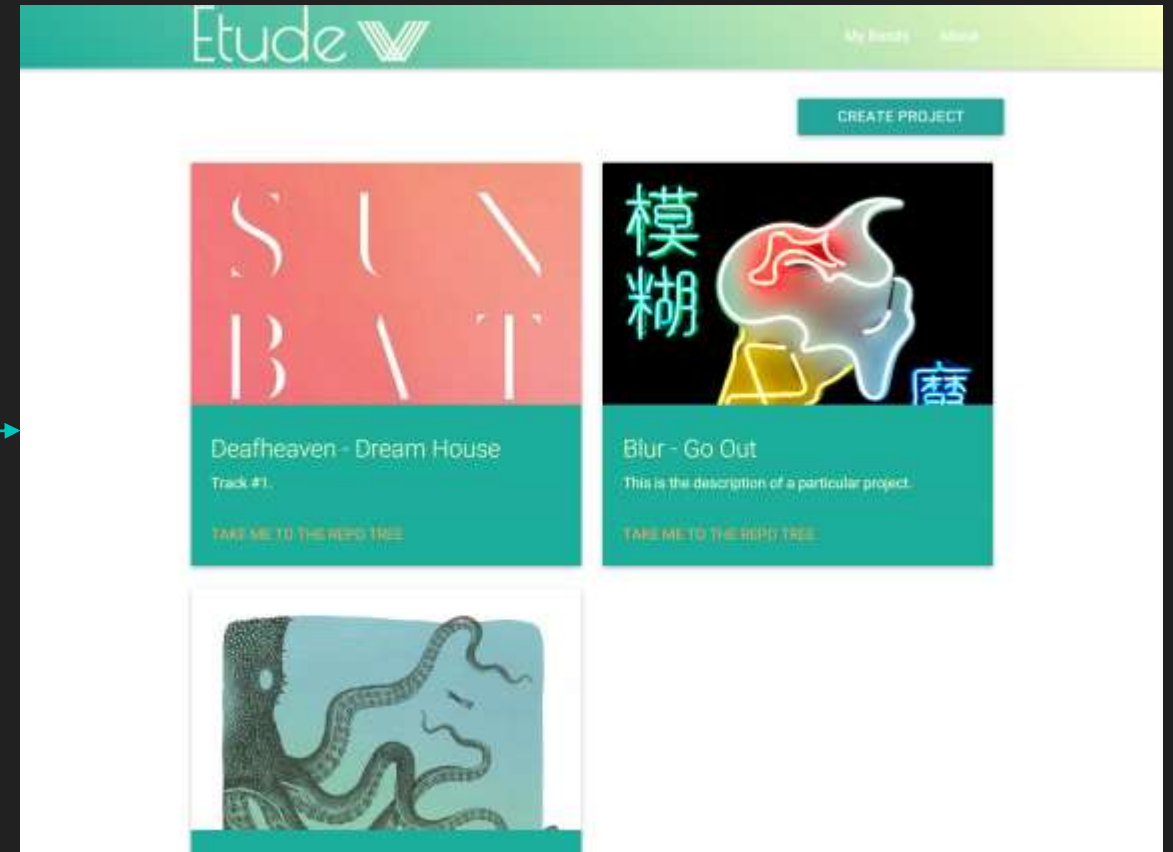
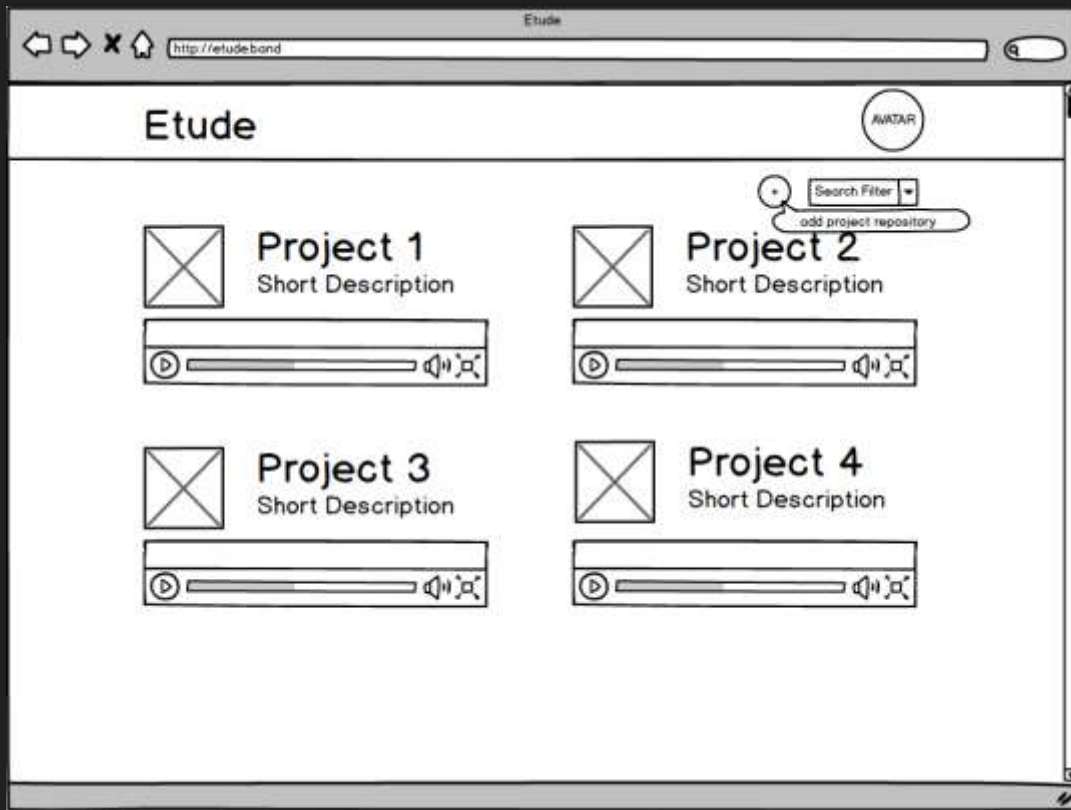
- **Solution:** a web-application that takes the ideals of software version control (GitHub, Team Foundation Server), and applies them to the music creation process
- Leverages a straightforward user-interface, alongside an intuitive visualization of a collaborated-upon project

# Technologies Utilized

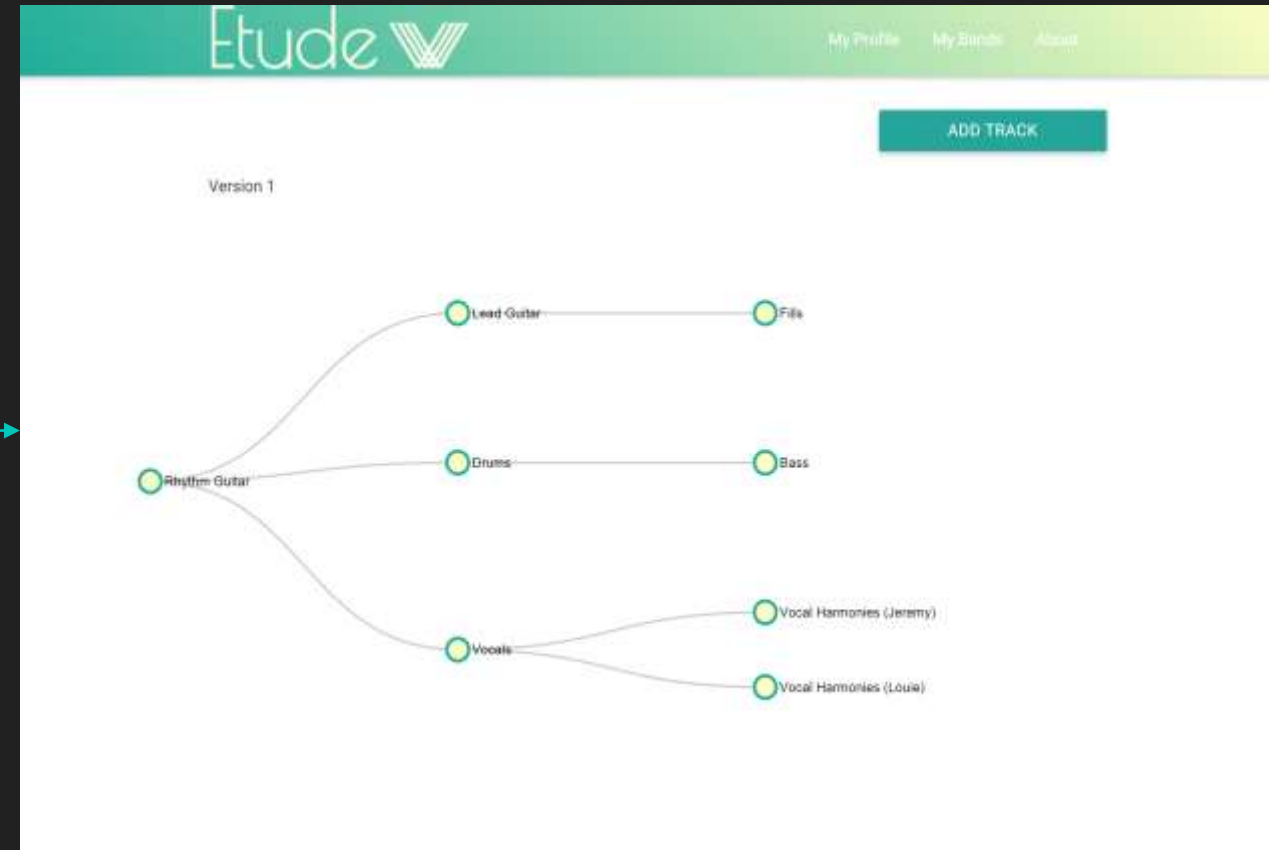
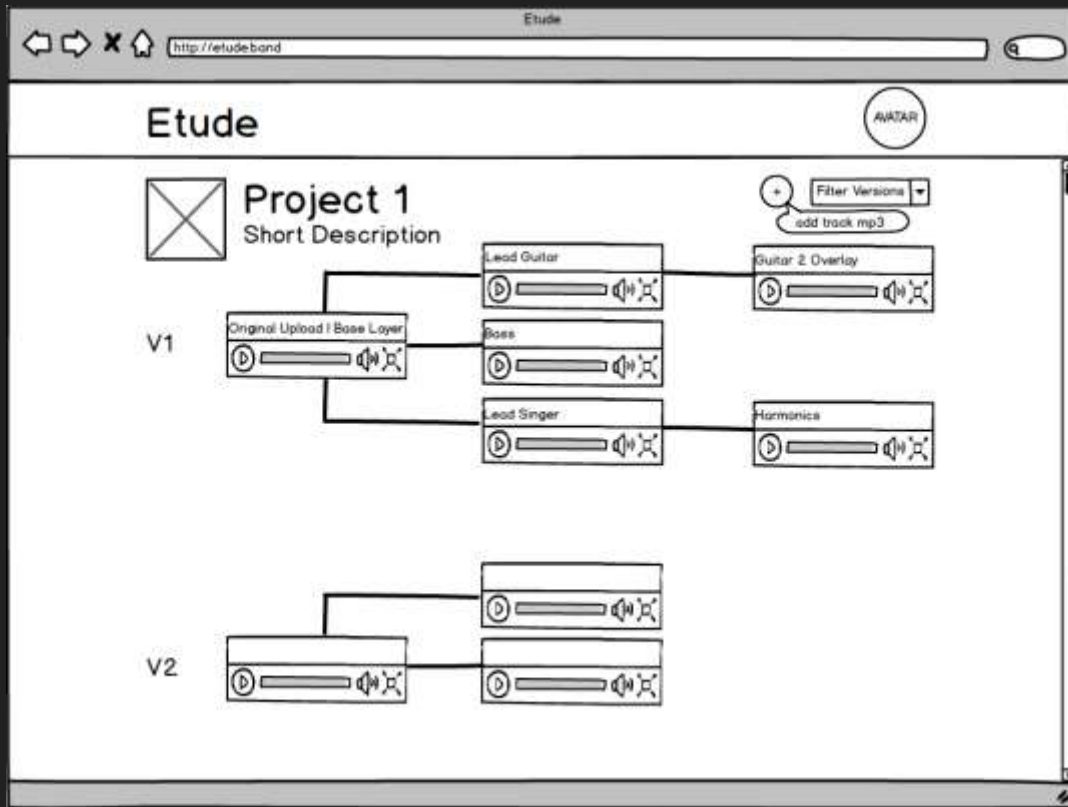
- **Node.js** as foundation to the **Express** Framework for a server backend
- **HTML5** and **CSS** for the UI/UX
- **JavaScript** and **jQuery** for the web-application frontend
- **D3.js** for the project visualization aspect of the hack
- **Balsamiq** and **Adobe Illustrator** for wireframes and logo



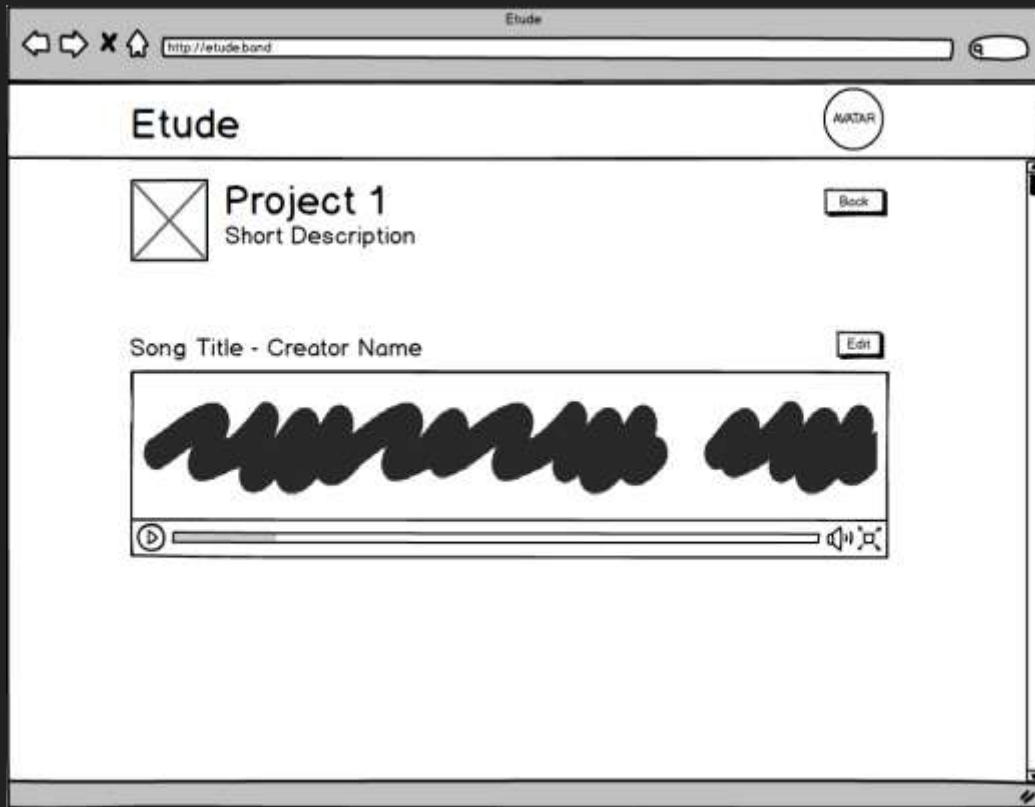
# User Interface Composition (Profile Page)



# User Interface Composition (Project Page)



# User Interface Composition (Track Page)



# Functional Prototype Demonstration

<https://www.youtube.com/watch?v=6G-ksRaR1p0>



# Future Work

- Implement backend database for account and project persistence
- Flesh out song visualization
  - adding versioning system between changes
- Add track-by-track editing features for on-the-fly changes to the song overall

# References

- D3.js homepage - <https://d3js.org/>
- D3 Tree Layout - <http://bl.ocks.org/d3noob/8375092>
- D3 Tree Layout with flat data approach - <http://bl.ocks.org/d3noob/8329404>
- BBC R&D Peaks.js (open-source waveform library) - <http://waveform.prototyping.bbc.co.uk/>
- BBC R&D Waveform Data GitHub Repo - <https://github.com/bbcrd/waveform-data.js>



# Thank you for your time

For more about this event: <http://www.sxsw.com/music/conference/hackathon>

Questions?