

NMIX 4410

F A L L 2 0 2 5

LASERCUBE

PROJECT PLAN

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Project Overview



From official LaserCube website

The LaserCube, powered by LaserOS, is primarily designed for DJs and basic laser beam shows. However, its potential extends far beyond entertainment.

We have been tasked to explore and develop a unique, compelling application of the LaserCube that goes beyond its current use cases. We have to creatively reimagine how this technology can be leveraged—either through its open API or existing software—to serve new functions, particularly in the context of NMI events like NMIXpo and TEDxUGA.

This project can really go in any direction that we want to take it. By leveraging our diverse skillsets we aim to meet the needs of our client while also learning from each other.

Project Goals

Safety

- Gain a deep understanding of the LaserOS software and the LaserCube
- Give Chris an efficient way to utilize the LaserCube for NMI events

Main

- Develop a comprehensive library of assets for the NMI to use at their various events
- Find a creative way to display graphics using the LaserCube, balancing design complexity with the capabilities of the device

Reach

- Work with the API to develop a new system to display these graphics on stage
- Potentially work with other clients, such as the Rock Lobsters, to leverage these capabilities for their needs

Challenges

Complexity of the LaserCube

The LaserCube is a fairly niche and somewhat dangerous piece of technology, so working with it presents a steep learning curve. LaserOS's limitations become apparent when trying to implement more advanced or customized application, especially for stage design or interactive installations. Along with this, our interaction with the LaserCube is somewhat limited given that it needs to be utilized in a fairly contained environment. While we're technically able to check it out, this may pose more risks than rewards. We will have to see how things go and our comfort level with the technology before we consider bringing it home with us.

Unequal Work Distribution

As with many open-ended creative and technical projects, there's a risk of uneven workload among team members. Only one of our teammates has a development/coding forward background and three of them are more creative/design oriented. Choosing a project direction that suits all of our skillsets and ensuring consistent communication will help mitigate this issue. Hopefully, as we become more familiar with the technology, all of us will be able to contribute to multiple aspects of our project.

Challenges

Open-endedness of our project

The open-ended nature of our project is both exciting and daunting. With no fixed deliverables or constraints, the project can easily become unfocused or overly ambitious. Ensuring that we're strategic with our time and checking in with our client and professor will help to focus our efforts on something achievable. Along with this, ensuring that we assess our progress against the client goals regularly will help us stay aligned.

Project Timeline

Meeting Times:

In person Tuesdays & Thursdays - 9:35-10:50am

As needed on Teams: Sundays - 7-8pm

[Link to task management system](#)



Checkpoint #1

Presentation - Evelyn + All

- Design document and presentation layouts
- Fill out assigned section

Alpha - Michelle + Evelyn + Nathan

- Experimenting with the LaserCube
- Creating a simple design with the LaserOS software and getting it to project

Exploratory Research - Stella

- Compiling in depth research on our project in all aspects

Project Plan - Sam

- Explicitly state client goals, project challenges, and list out deliverables.

PR/FAQ - Nathan

- Construct a press release for the public
- Construct a list of frequently asked questions

Checkpoint #2

Presentation - All

- Fill out assigned sections

User Research - Evelyn + Sam

- Incorporate user research supported by images, videos, charts, pull quotes, etc.
- Comment on further research + testing

Beta - Michelle + Stella

- Build off of the Alpha and hopefully create a design that is functional on stage

UX Map - Evelyn + Michelle + Nathan

- Detail user experience of someone using the LaserCube with our designs

Checkpoint #3

Presentation - All

- Fill out assigned sections

1.0 - Evelyn + Nathan + Stella + Michelle

- Rough draft of final project
- Substantial library of assets

Visual Design Guide + Poster - Evelyn + Sam

- Incorporate all visual assets on the VDG
- Create digital poster for our project

Website Beta - Evelyn + Michelle + Stella + Michelle

- Draft of website hosting all of our findings/accomplishments throughout this project

Slam Promo - Sam

- Fill out promotional form

Checkpoint #4

Stage Presentation Beta - All

- Overview of our project in presentation form

1.1 - All

- Finalized asset library

Launch / Handoff / Social Deliverables - All

- Ensure Chris has access to library and knows how to use our creations
- Can also pass along project tracker with all links

Resume - All

- Update and submit resumes

SLAM + Final Deliverables

Operational Project - All

- Ensure entire project is complete

Stage Presentations - All

- Finalized overview of our project in presentation form

Booth Presentation + One Pager - All

- Booth setup for SLAM
- Everyone has knowledge of pitch
- One-page overview

Project Trailer - Sam

- 45-90 second video trailer for our project

Project Website - Michelle

- Full project overview from start to finish
- Ensure we are collecting artifacts from throughout the semester to display here