INTRODUCTION

Piano Simulator is a novel 24-key piano keyboard connected to the software. It is aimed to teach users how to play basic piano keys, where they are located, and how to read notes.

LED illuminated interface makes learning more engaging while the application guides users through short lessons.

An integrated feedback system helps users to improve their experience while following the lesson.

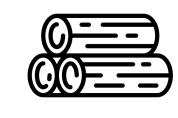
PROCESS

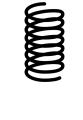
- Conceptualization.
- Parallel development of piano keyboard and web application.
- Test and update.

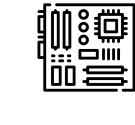


MATERIALS









Arduino

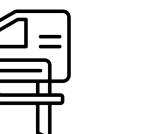
Acrylic Wood

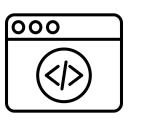
Spring

METHODS









Laser Cutting

Wood Cutting

Coding

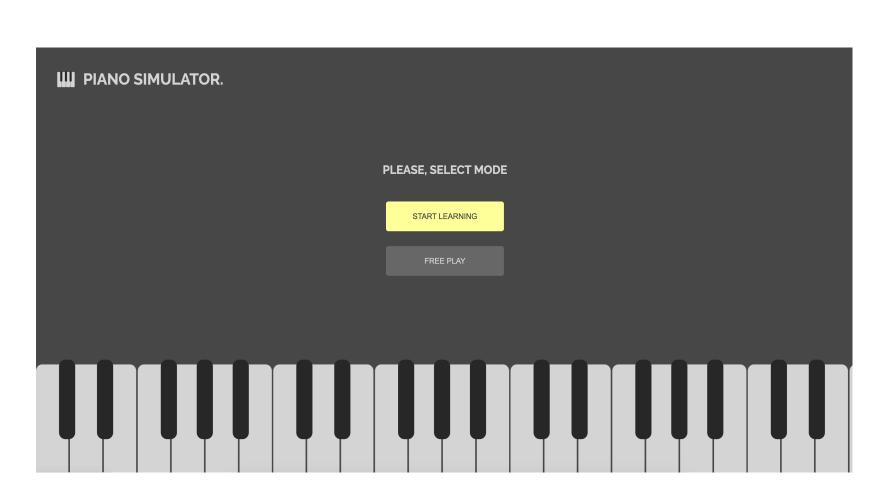
BUDGET

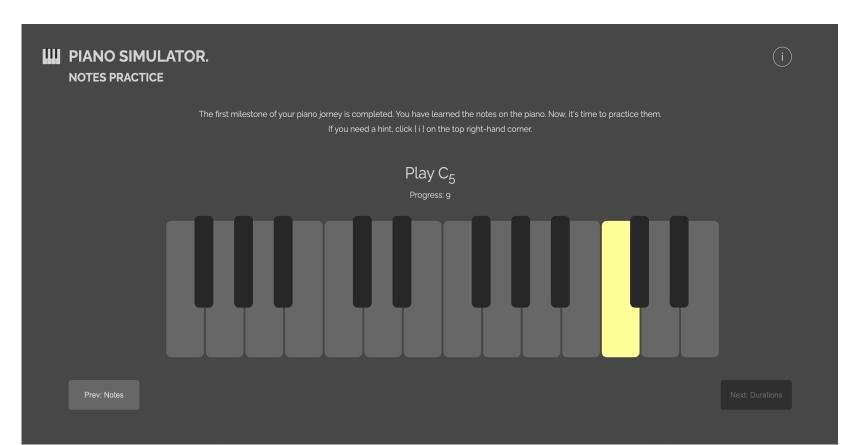
Estimated	Actual
\$200.00	\$149.35

RESULTS

Piano Simulator provides an accessible, convenient, and engaging way for beginners to learn the basics of piano playing. The small physical keyboard and accompanying application with guided lessons make it easy for users to learn at their own pace, while the integrated feedback system helps them to identify mistakes and improve their skills faster.







CONCLUSIONS

The project can spark an interest in piano playing for people who might not have considered it before. The convenience, accessibility, and affordability of the project can make it easier for people to try out piano playing and discover a new hobby or

The portability and affordability of the project can make piano education more accessible to people who might not have had access to traditional piano lessons or instruments. This can help to democratize piano education and make it more accessible to a broader range of people.

Additionally, the affordability of the project makes it accessible to a broader range of people who might not have the budget for more expensive instruments or lessons. Overall, this project provides a valuable tool for anyone interested in learning how to play the piano, regardless of their location, financial situation, or prior experience.

ACKNOWLEDGMENTS

I would like to thank **ALLISON BERKOY** for the guidance, feedback, support, and assistance throughout the project.

I would like to thank **ADAM WILSON** for his expertise, efforts, and helpful suggestions.

I would like to thank **JOSHUA CORN** for the advice and feedback he was happy to give me.

I would like to thank **RUDY GUERRERO** for the help with wood cutting and for letting me do some as well.

