

TARGET MARKET

Designed for 3-6 Year Olds

Ages 3-4: Match colors, push keys

Ages 4-5: Hear songs, imitate

Ages 5-6: Read and understand music

Appeal to Parents, Child Educators, Daycares - \$\$\$

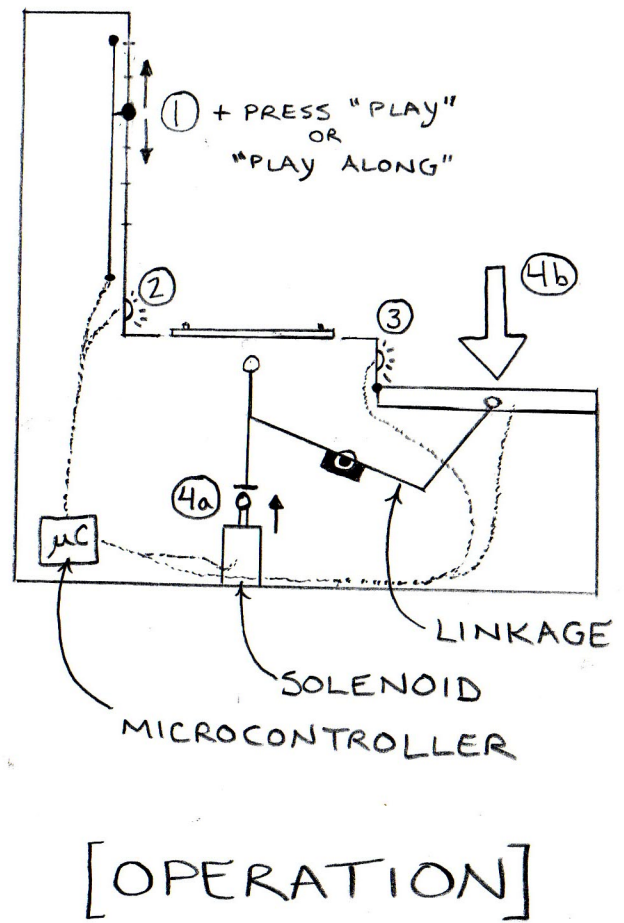
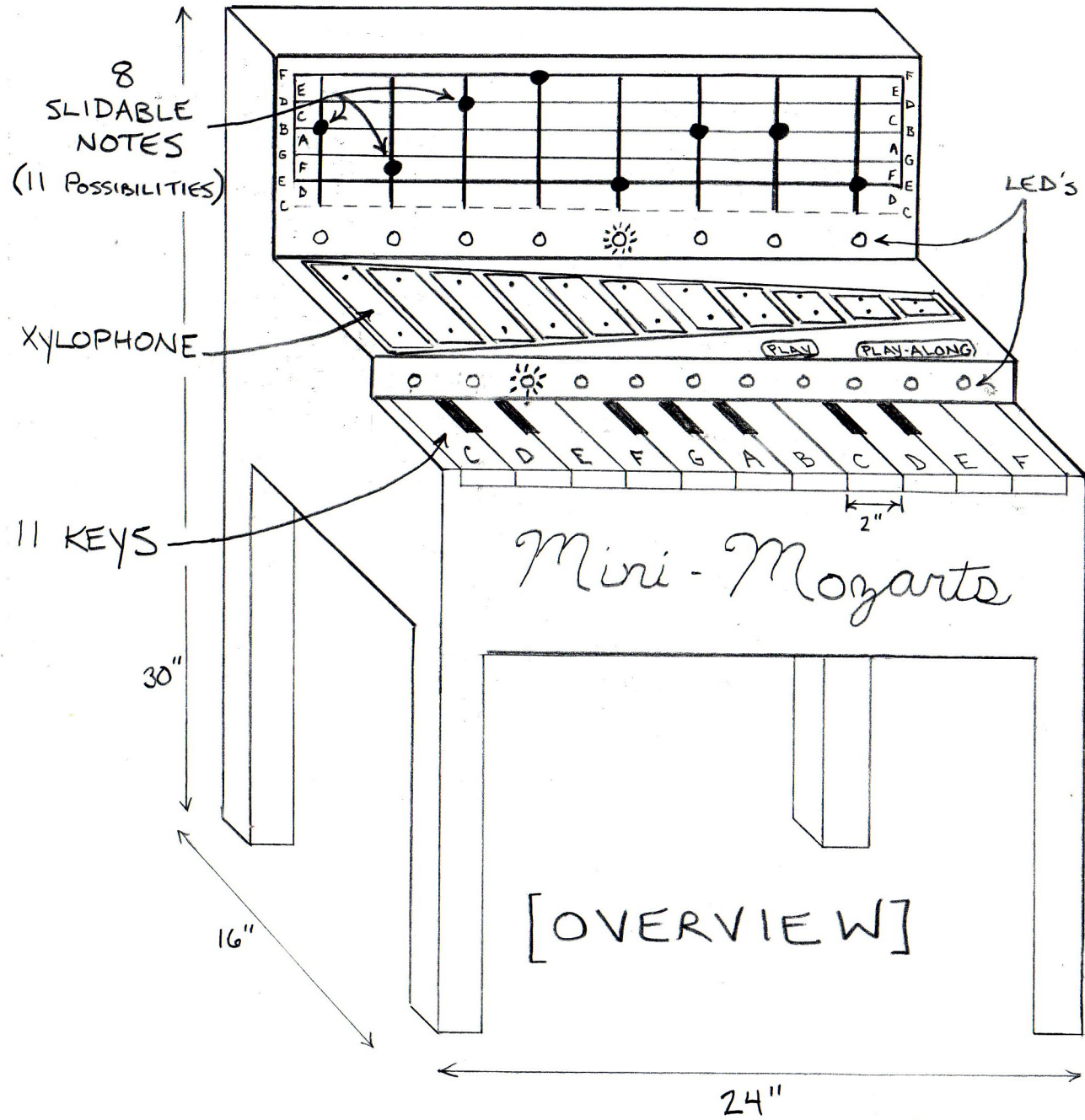
Not only fun, teaches them something as well

Keep it cheap

KEY TECHNICAL CHALLENGES

- 1.) **SLIDING NOTES:** How to read the notes position on the staff and have the microcontroller understand it as a distinct musical note?
[Potentiometers, Resistances, etc?]
- 2.) **MAXIMIZING VOLUME:** How to take a small input force from the child and strike the xylophone with a greater force?
[4 Bar Linkages, Swinging Hammers, etc?]
- 3.) **PROGRAMMING:** How to interface the microcontroller, sliding notes, key sensors, solenoids, LED's, user buttons?
[Multiplexers, Logic Devices, # of pins needed, etc?]

QUESTIONS?



MINI-MOZARTS

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