Hozhoni Foundation Art Team

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Project Description

Goal: Create an assistive device capable of self-supporting clients' artwork while painting or drawing. This device must meet both the needs of the Hozhoni Foundation clients who possess both physical and mental disabilities, and the Hozhoni Foundation itself.

Stakeholders:

Hozhoni Foundation

- Better aid the clients
- Provide safe, ergonomic ways to spend client time

Hozhoni Foundation Clients

- Improve comfort and stability

Jeannette Nelson Dec 7th,2015 Hozhoni Foundation - Art Team

Background

- Only one easel currently at Hozhoni
- Not wheelchair friendly
- Bulky and difficult to set up
- Three point non-adjustable easel

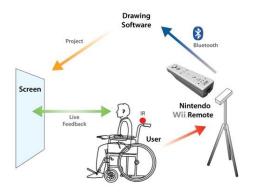




Benchmarking



DaVinci Multimedia Easel [1]



Digital Wheel Art [2]



Assistive Gripping Technology [4] [5] [6]



ErgoRest Arm Support [3]

Customer Requirements

Design Requirements:

- Design a system that will assist current and future Hozhoni clients with the their art and other creative projects
- Help clients work more comfortably
- Provide an option for clients that can be used in many configurations

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Maggie Collins Dec 7th,2015 Hozhoni Foundation - Art Team

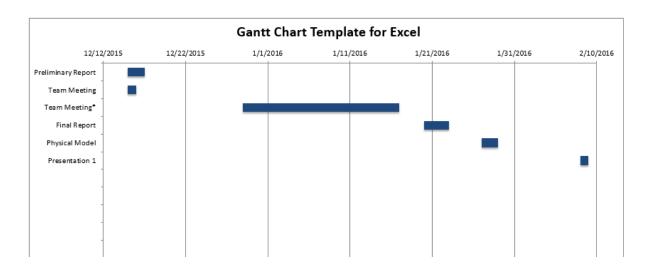
Customer Requirements

Table 1. Customer Requirements and Weights

Customer Requirements	Weight	Customer Requirements	Weight
Adjustable Configuration	45	Safe to Use	25
Durable	40	Capable of Holding Art Supplies	20
Easily Stored	30	Able to be Duplicated	15
Comfortable for Daily Use	25	Accommodate Different Sized Templates 15	
Easy to Assemble and Disassemble	25	Accommodate Different Types of Templates	10

Schedule

Task Name	Start	End	Duration (days)
Preliminary Report	12/15/2015	12/17/2015	2
Team Meeting	12/15/2015	12/16/2015	1
Team Meeting*	12/29/2015	1/17/2016	19
Final Report	1/20/2016	1/23/2016	3
Physical Model	1/27/2016	1/29/2016	2
Presentation 1	2/8/2016	2/9/2016	1



*The team will be working over winter break

**Currently on schedule to complete all deliverables

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Budget

- Funding still coming from W.L. Gore
- Starting with \$1,500 toward supplies for physical devices
- Desire to make more than one complete system
- No expenses to date

3

References

- [1] http://www.jerrysartarama.com/discount-art-supplies/easels/studio-easels/da-vinci-multimedia-easel.htm
- [2] http://risknfun.com/project/digitalwheelart/
- [3] http://www.alimed.com/ergorest-extended-height-articulating-arm-support.html
- [4] http://www.rehabmart.com/product/hand-grip-1829.html
- [5] http://www.rehabmart.com/product/arthwriter-hand-aid-18617.html
- [6] http://www.maddak.com/steady-write-writing-instrument-p-27897.html?osCsid=8h1uo18sq0r89kh76beehn4ak3