❖ Hozhoni Cleaning Crew
❖ Final Proposal

➢ **Group 34:**

- Fahad Alaenezi (Web Designer)
- Amber Juare (Secretary/ Document manager)
- Calvin Schnorbus (Client Contact)
- Hussain Alwateeb (Budget Liaison)
- Hasan Aldhefeery (Project Manager)

NORTHERN ARIZONA UNIVERSITY

HOZHONI FOUNDATION. INC.

Project Description

▶ Client: Hozhoni (ho-sho-nee) Foundation company.

▶ Our goal is to create a system that allow those in wheelchairs to safely and efficiently transport cleaning supplies.

▶ Device must be storable and be compatible with different wheelchairs.

▶ The solution must be adaptable for different sizes types of wheelchairs

Functional Decomposition:
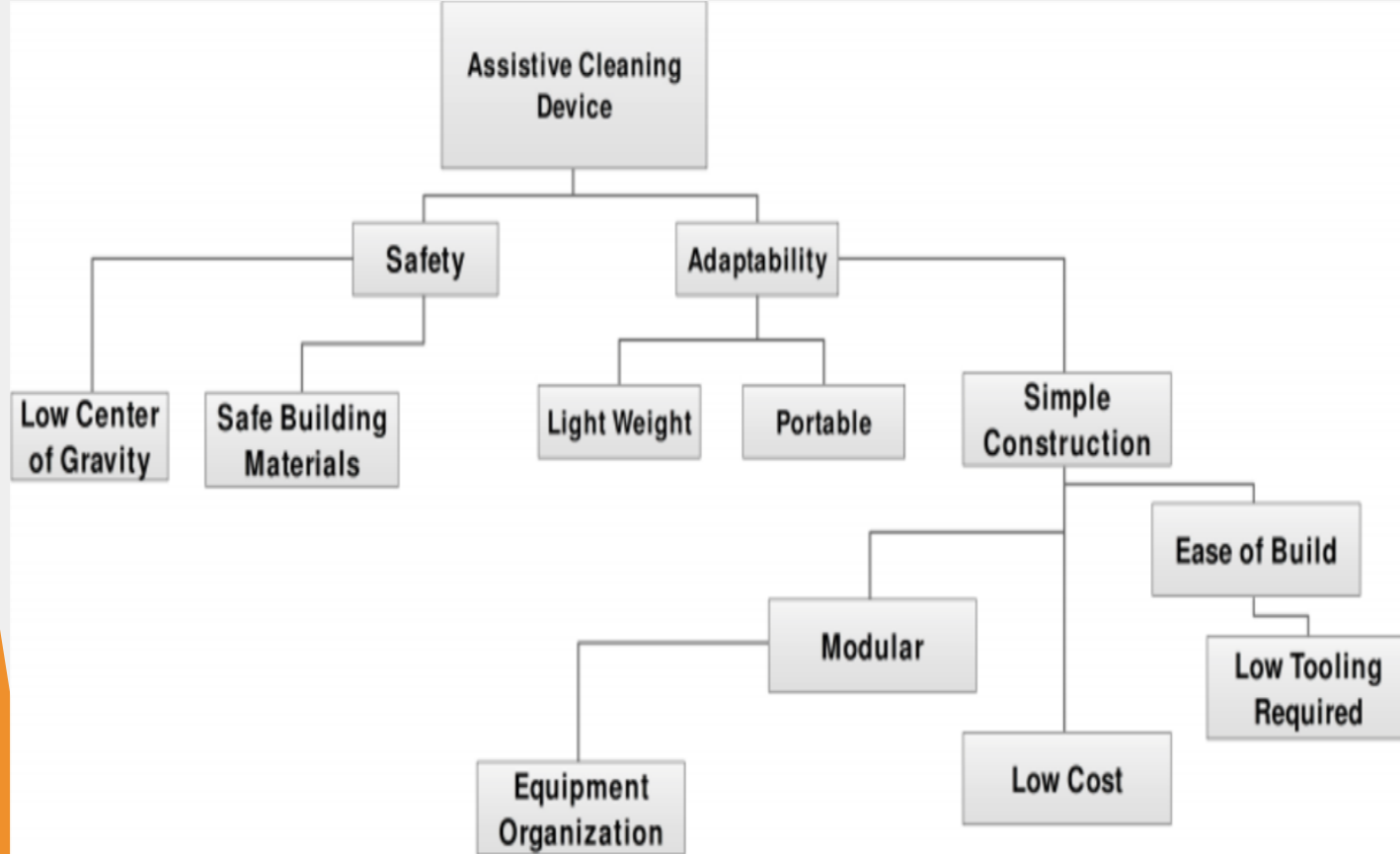
Final Design Description: Lap Table
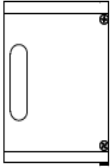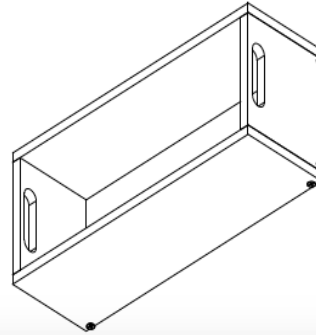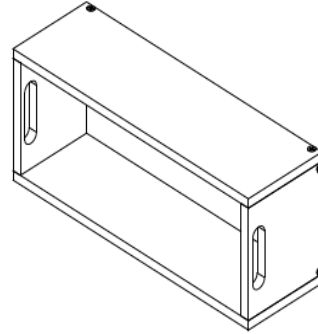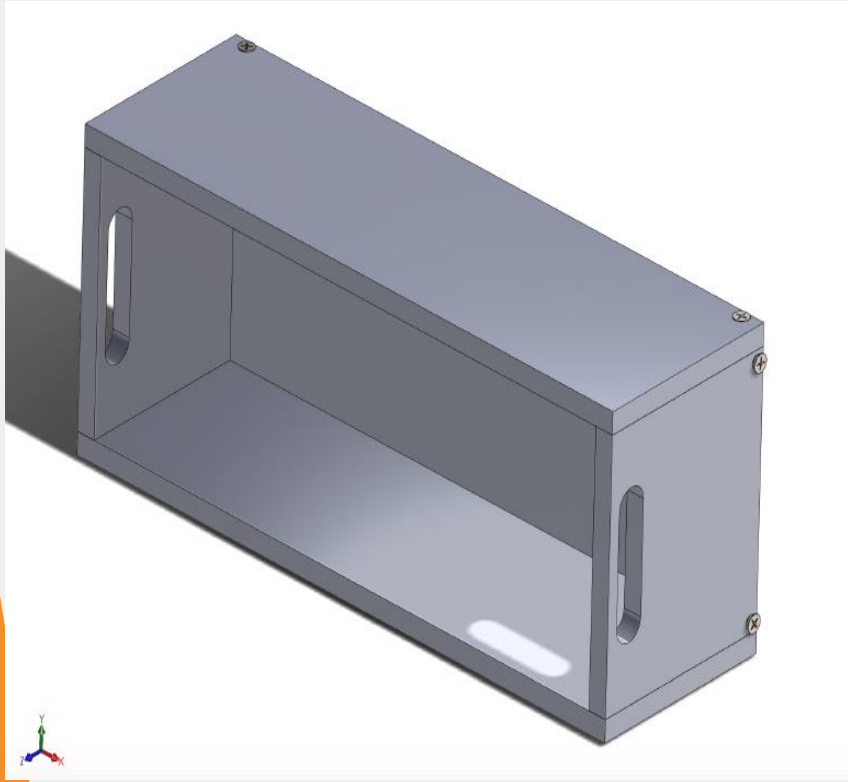
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	Base	This is the base of the table it will be made of wood	1
2	short side with handle	lift and right sides with handles	2
3	long side	front and back sides	2
4	FLATCKIT 0.25-16-0.413-type l-AB-1.813-N	screws to hold the sides with the base	8
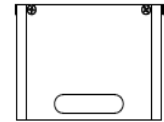
Design Function:

▶ Simple rectangular box with handles on the side for users comfort

▶ Velcro system that allows the device to stay securely on lap

▶ Most materials required for the design can be found at hardware stores and craft stores Currently

Bill Of Materials:Wood

Material	Quantity	Price	Location
1 oak panel (0.5in x 24in x 48in)	1	$15.00	Home Depot.com
Velcro (5ft long, 3/4in wide)	1	$2.89	Velcro.com
Wood screws ($0.04 per screw)	8	$0.32	Home Depot.com
1 yard felt fabric	1	$3.99	JoAnns.com
		Total: $22.2	

Bill Of Materials:ABS Plastic

Material	Quantity	Price	Location
1 sheet ABS Plastic (24in x 48in)	1	$42.12	Onlinemetals.com
Velcro (5ft long, 3/4in wide)	1	$2.89	Velcro.com
1 yard felt fabric	1	$3.99	JoAnns.com
		Total: $49.00	

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Design Requirements:

▸ Must have sufficient storage space for supplies.

▸ Device does not interfere with the user's mobility.

▸ Be able to store in small closets.

▸ Device must be lightweight, about 20lbs or less.

▸ Adaptable.

Schedule:

Task Name	Aug 2	Sep 5	Sep 12	Sep 19	Sep 26	Oct 3	Oct 10	Oct 17	Oct 24	Oct 31	Nov 7	Nov 14	Nov 21	No
1 1-Background report														
2 1.1 Background														
3 1.2 Requirements														
4 1.3 Existing Design														
5 1.3.1 system level														
6 1.3.2 subsystem level														
7 2-Background presentation														
8 2.1 project description														
9 2.2 Background and Bench														
10 2.3 CRs														
11 2.4 Budget and Scheduling														
12 3-Evaluation report														
13 3.1 Background														
14 3.2 Requirements														
15 3.3 Existing Designs														
16 3.4 Design considring														
17 3.5 Design selected														
18 4-Evaluation presentation														
19 4.1 Project Description														
20 4.2 Designs Considred														
21 4.3 Design Selected														
22 4.4 Scheduling and Budget														
23 5- Final Proposal														
24 5.1 Background.														
25 5.2 Requirements.														
26 5.3 Existing designs.														
27 5.3.1 System level														
28 5.3.2 Subsystem level														
29 5.4 Design Considered														
30 5.5 Design Selected														
31 5.6 Proposed Design														
32 6- Presentation 3														
33 6.1 Project Description														
34 6.2 Design description														
35 6.3 Design Requirements														
36 6.4 Schedule														
37 6.5 Budget														

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Budget

➢ The total budget for this project was $1,500 funded by Hozhoni to create our system(s).

Wood lab table	$22.2

ABS plastic lab table	$49

Allocating Price:	Cost
Prototyping	$40
Final design	$800
Shipping	$100
Total	$940
Remaining	$560

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Our prototype: