

Hozhoni Foundation Button Maker

10/27/2016

Presentation 1, ME 476C

Team 26

Abdullah Alajmi – (project manager.)

Majid Alenezi – (secretary/ document)
manager.

Mutlaq Alajmi - (website developer.)

Faleh Alajmi –(budget liaison)

**NORTHERN
ARIZONA
UNIVERSITY**



Client's information

- Hozhoni foundation company
- It's a leading provider of services for people with disabilities
- Our client is Dr. Sarah Oman



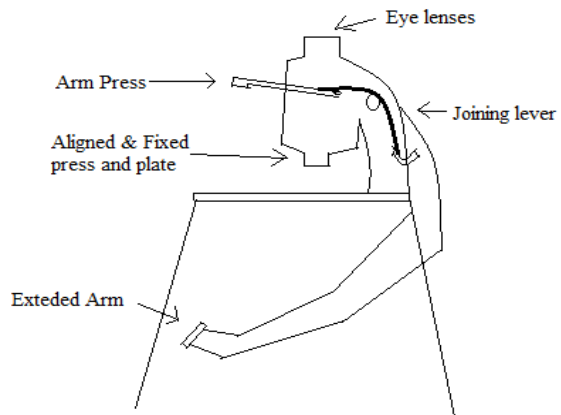
Project Description:

- The goal of this project is to create a device that cut six circle at once.
- The product is directed towards disability who need an assistance cutting the paper.
- With the QFD and product research in mind, the team developed viable designs.
- Each engineering requirement has a target and acceptable purpose



Designs Considered

- The team performed overview for the small-scale and personal button makers.
- The team found out that personal use button makers can either be electric (automatic) button maker or manually operated button makers.



Design 1



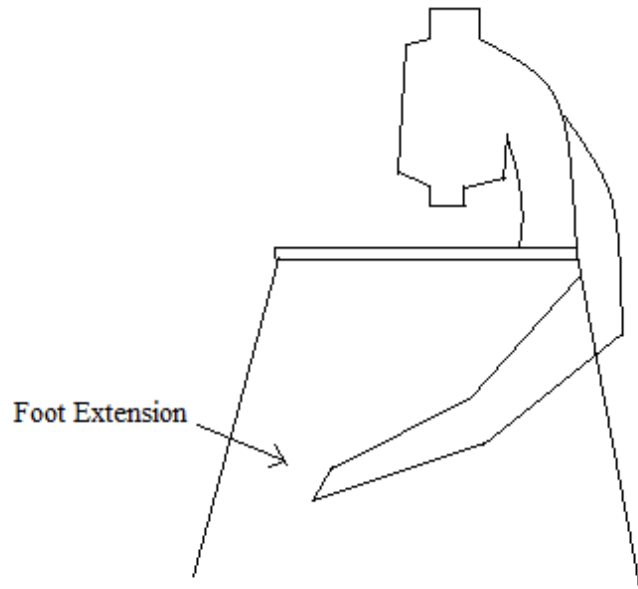
Design 2

Abdullah Alajmi

Pros and Cons of electric and manually for the designs

Existing Design for the button maker	Advantages	disadvantages	
electric (automatic)	1- Easy to use 2- save time 3- high quality	1- less safety 2- expensive 3- power needed	
manually operated	1- Option of using either hand or leg 2- less cost 3-work anytime	1- Not moving 2- Not easy to store	

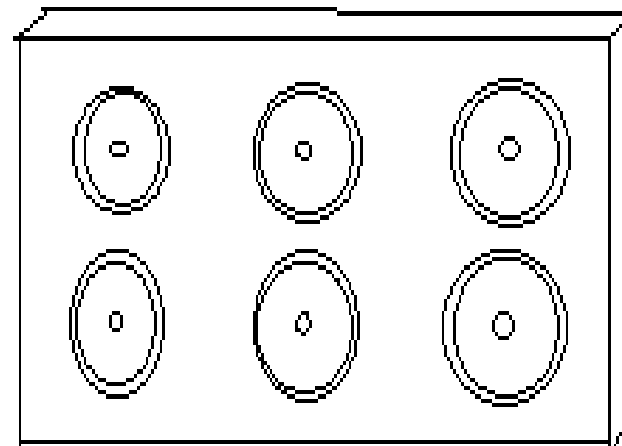
Design Selected:



Design #3

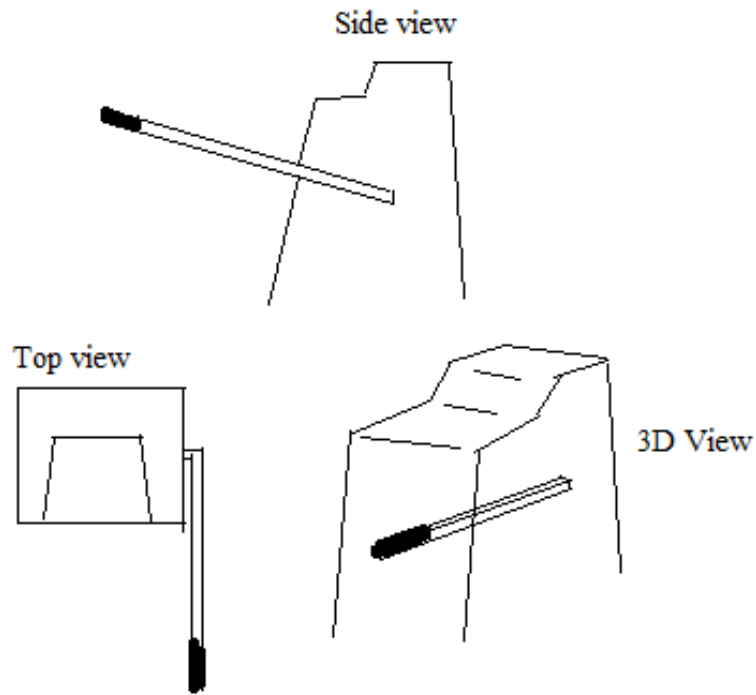
Abdullah Alajmi

Press plate

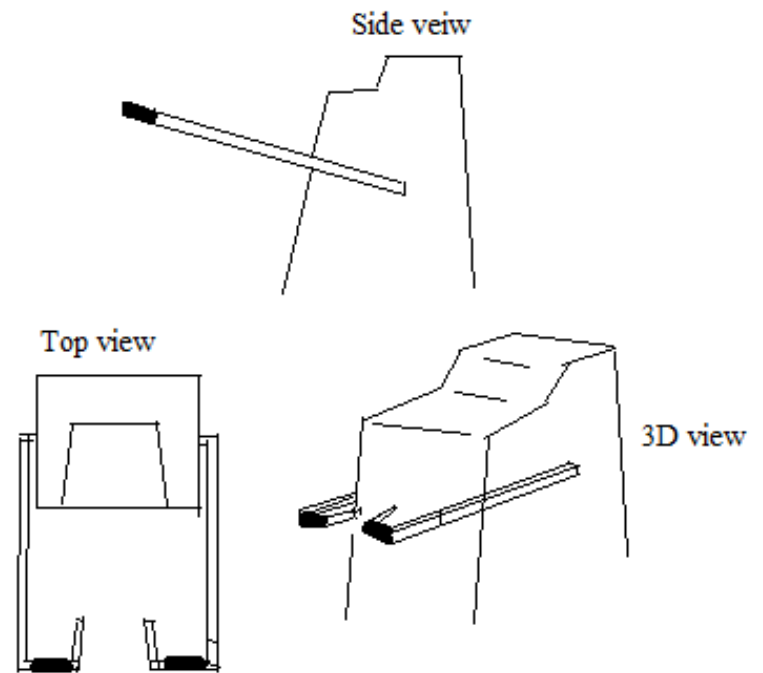


Design #4

Design Selected:



Design 5



Design 6

Pros and Cons of Design Selected

Advantages

safe time

Using leg

Small size

Light weight

disadvantages

Not Safety

Not moving

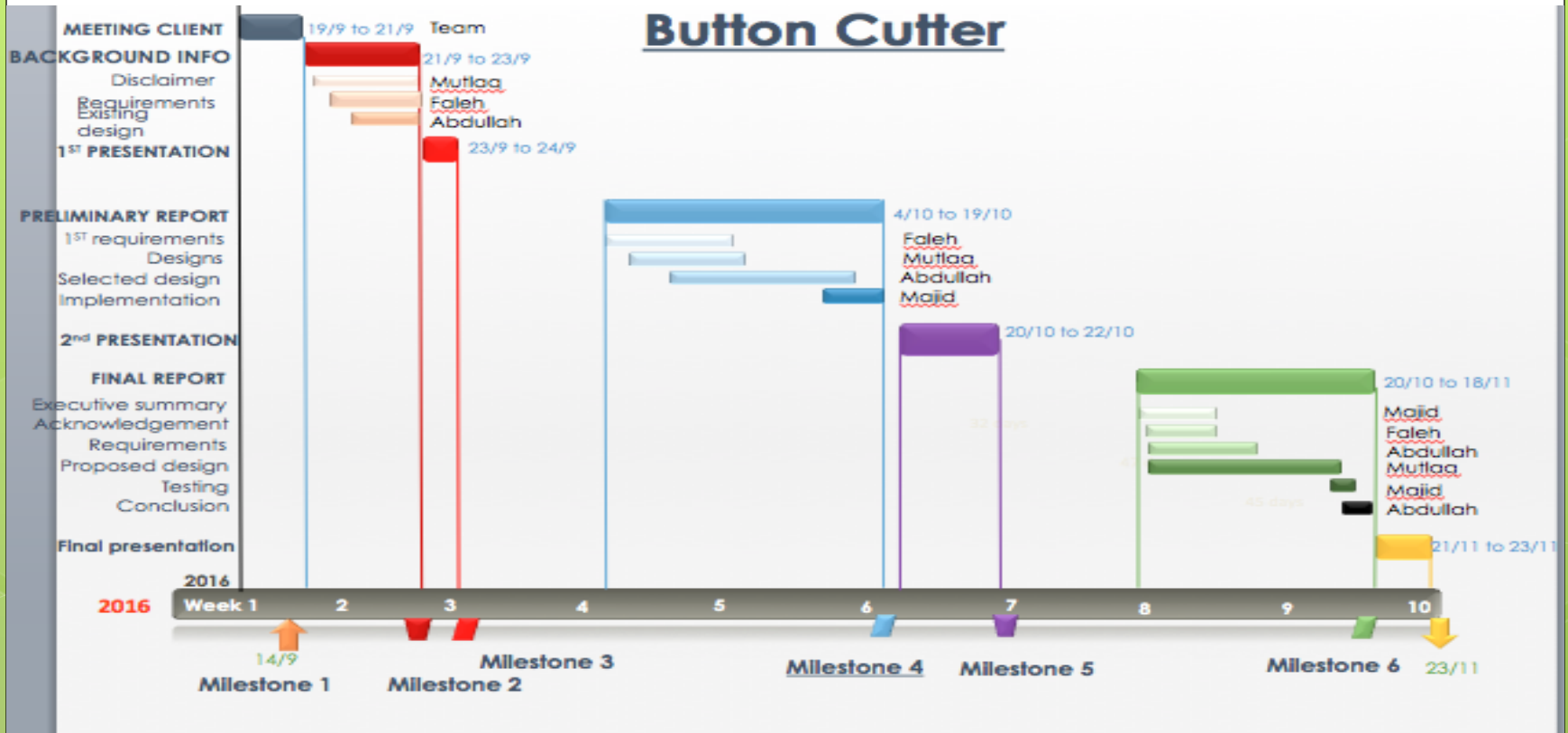
Not easy to store

Pugh Chart

Button Maker										
	1	2	3	4	5	6	7	8	9	10
smaller than last year's solution	S	S	D	+	S	-	+	S	S	S
lighter than last year's solution	S	-		-	S	+	-	-	-	S
cut out six circle patterns at once	+	S	A	-	-	-	+	S	-	-
cut out patterns cleanly with no ripped edges	+	-		-	-	S	+	-	+	+
operational with only one hand/arm	+	S	T	S	+	+	S	-	S	+
guide to position the papers during cutting	+	-		-	-	S	S	S	S	S
S+	+4	+0	U	+1	+1	+2	+3	+0	+1	+2
S-	-0	-3		-4	-3	-2	-2	-3	-2	-2
S	4	3	M	1	1	2	2	3	3	3
Ranking	4	0		-2	-1	2	3	0	2	3

Schedule

Button Cutter



- Tentative Schedule for Fall Semester, pending schedule of course deliverables

- According to the Gantt Chart, the design team is currently on schedule

Faleh Alajmi

Button Maker

Project Budget

INCOME		Budget	Actual	Difference
	Budget	1500	-	1500
Total INCOME		1500	-	(1500)
EXPENSES		Budget	Actual	Difference
Materials		750	-	750
Prototyping		100	-	100
Shipping		150	-	150
Manufacturing		250	-	250
Printing		100	-	100
Unexpected Expenses		150	-	150
	Subtotal	1500	-	1500
Total EXPENSES		1500	-	1500
NET (Income - Expenses)		1500	-	1500

Any question?

- We welcome for your questions.

Faleh Alajmi
Abdullah Alajmi
Majid Alenezi
Mutlaq Alajmi