

Hozhoni Foundation

Button Maker

03/09/2017



Presentation 2, ME 486C

Team 26

Abdullah Alajmi – (project manager.)

Majid Alenezi – (secretary/ document) manager.

Mutlaq Alajmi - (website developer.)

Faleh Alajmi –(budget liaison)

NORTHERN
ARIZONA
UNIVERSITY



Project Description

- Build a device that cuts out circular patterns out of paper for creating pinback buttons.
- Cut out 6 circles at a time
- Guide to position the paper exactly and not let them move during cutting
- Cut out pattern cleanly with no ripped edges



Video



Updates-New Design

1- Base plate

The base plate was made to be more stable by providing creating a bigger base that can handle the six holes at a time

2- Press arm

The arm press remain the same with removal or the foot press

3- Spring's

The springs remained the same with position adjustments to fit the new design

4- Cutter

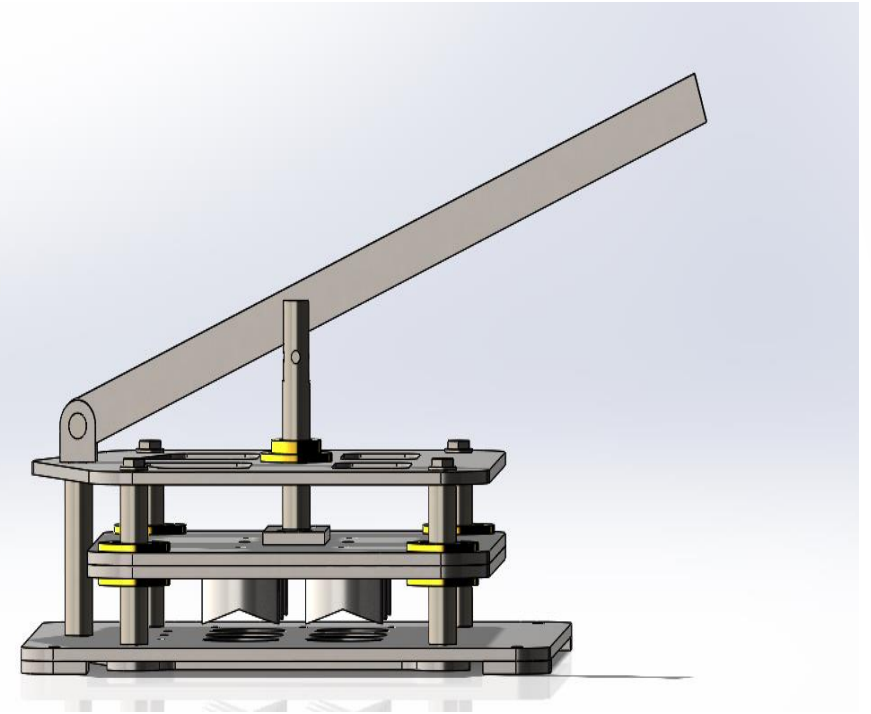
The cutter was widened to effectively cut six circles

5- Top plate

The top plate was also widened to be of similar size with the other parts of the cutter

6- Holder for the cutter

The holder was changed in a manner that it can be able to hold the new design, which is more broader

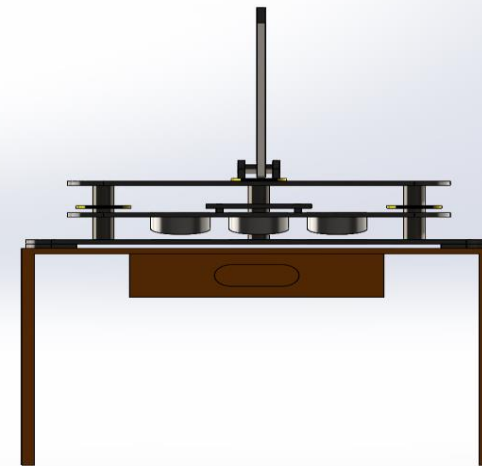
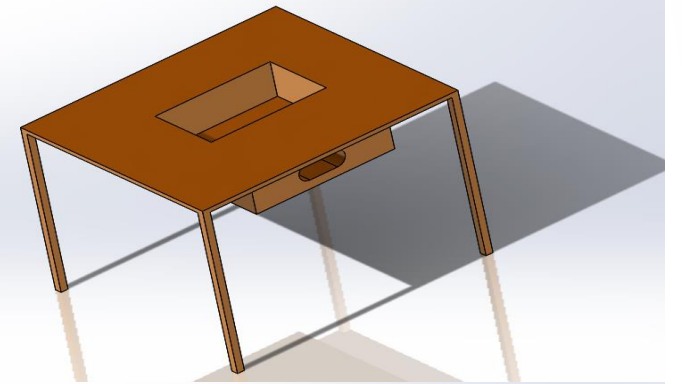
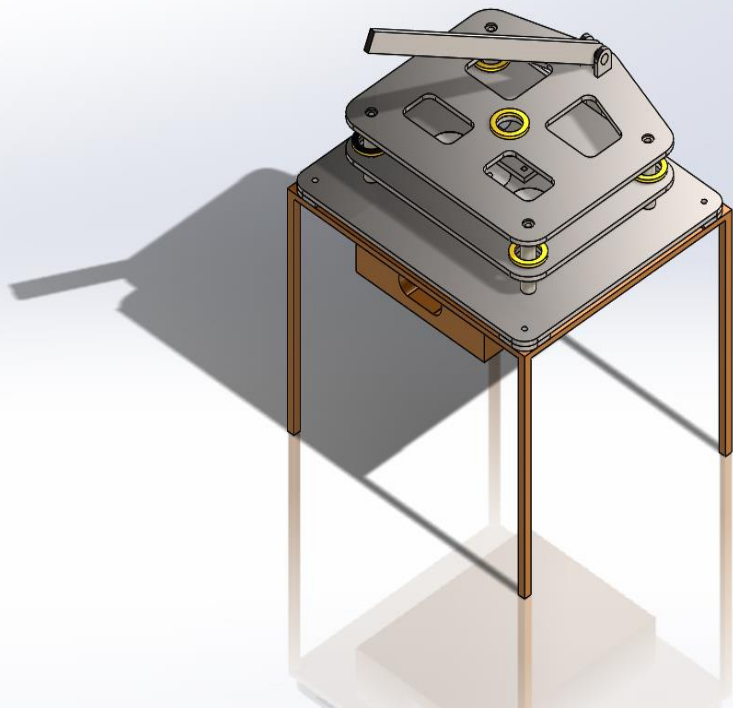


Mutlaq Alajmi

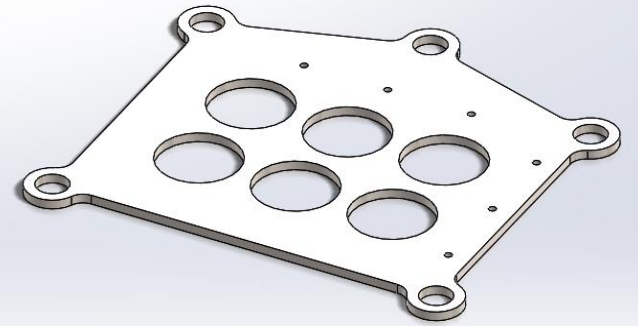
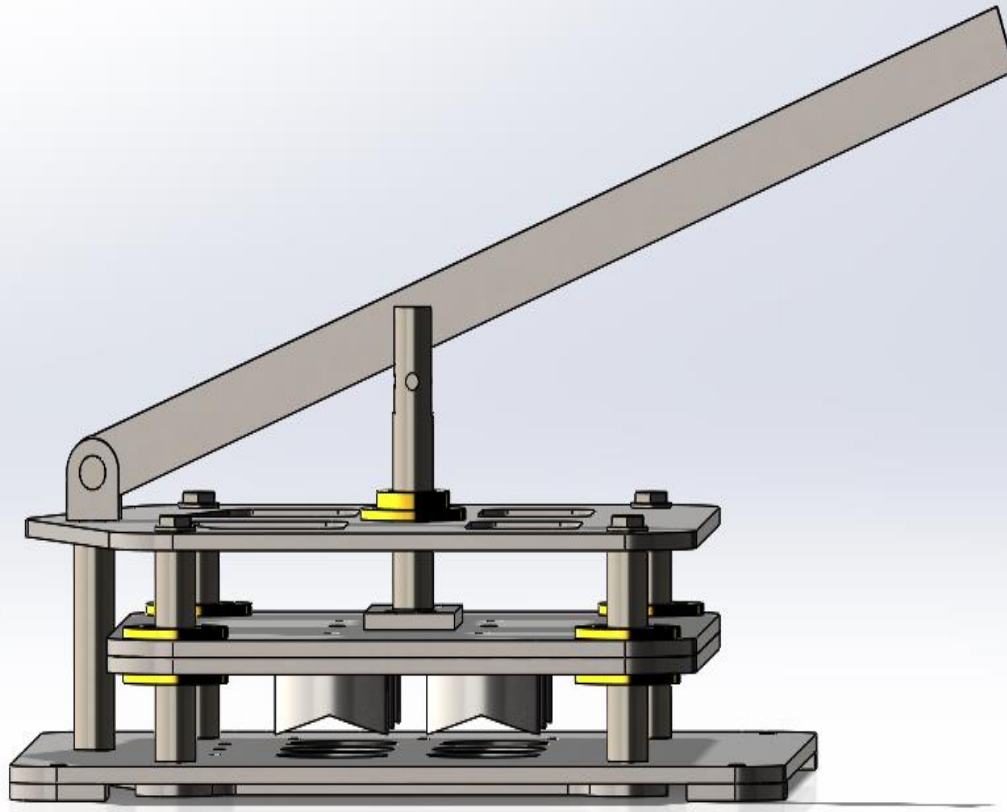
Updates

- Changes to the design:
 - The design is now broader and more effective in cutting six buttons at a times
 - The design incorporates a new structure of press with new dimensions, levels of press, and ability to cut out six holes at a time
 - The design also includes a holder, which will be collecting the buttons once they have been cut
 - The updated design also did away with the foot press
- What is left in the manufacturing process
 - The manufacturing process seeks to make the changes to the design to fit they new system

Detailed View of New Design



Manufacturing



contingencies

- More springs
- Provide extra cutters
- Improve the handle

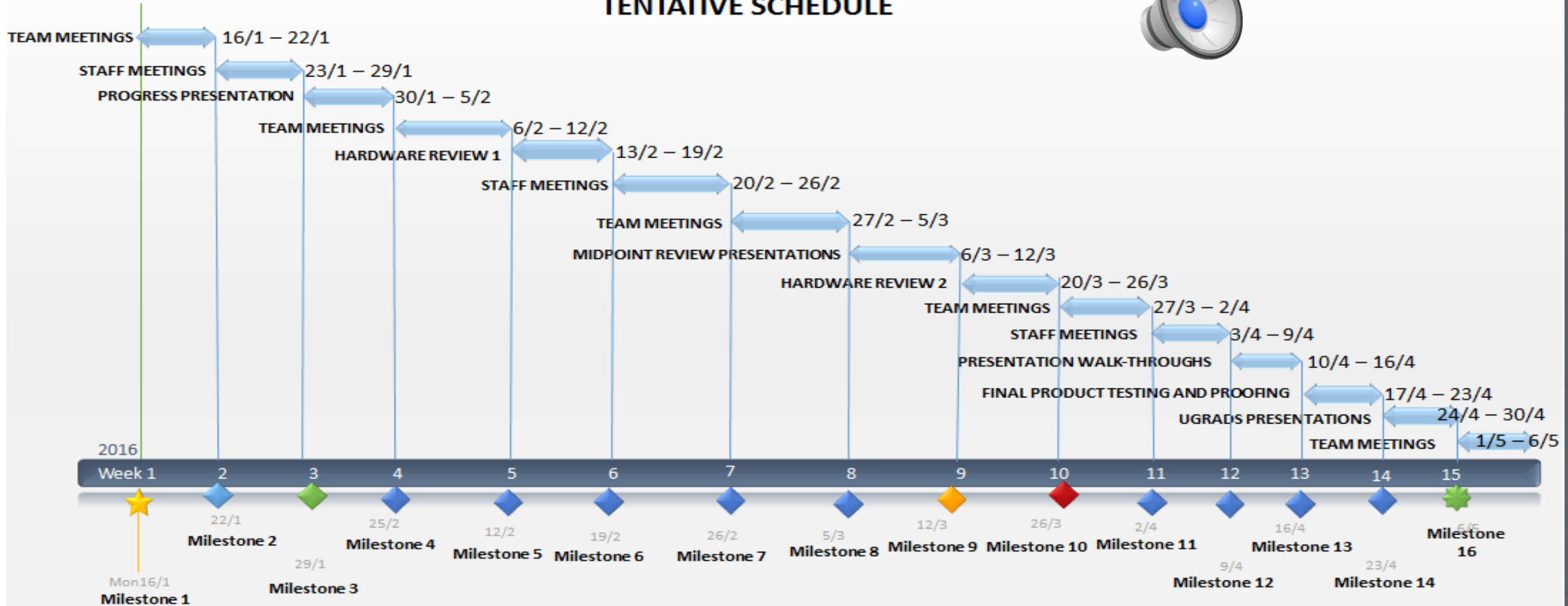
Responsibility

- Majid- SolidWork
- Mutlaq- Handle
- Abdullah- Cutting
- Faleh- Materials



Gantt Chart

TENTATIVE SCHEDULE



According to Gantt Chart our team on Schedule

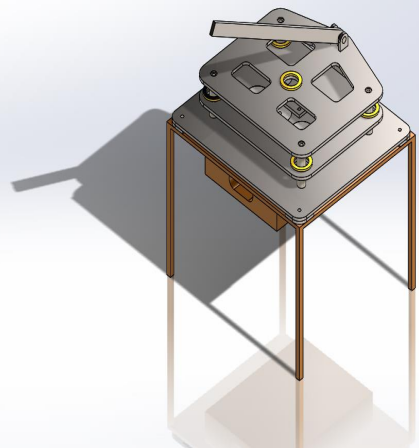
Budget



- Our budget for this project is \$1500.00, funded by Hozhoni

Total: \$1100

Reaming: \$400



Item Number	Item Name	Description	Material	Quantity	Total Cost
1	Base plate	It's a Die of punching Cutters and fixing of slide bars.	Black Steel	1	\$70
2	Top plate	To keep distance between slide bar's fixed and make joint of press arm and guide way.	Black Steel	1	\$70
3	Cutter Holder	To fixe punching Die's	Black Steel	1	\$70
4	Cutter	Treated to be more hard and grinded to accept sharpness for circumference of die	Certified Steel	6	\$450
5	Slide bar's	Bars of steel and coating by Hard chrome layer to increase life time and make very smooth surface for slider's	Hard Chrome Bar	6	\$130
6	Slider's	Hollow bar to slide on chrome bars	Brass	4	\$70
7	Press Arm	To use as hand of press	Black Steel	1	\$30
8	Press Axe	To transfer the force from arm to the holder	Steel	1	\$40
9	Spring's	To restore the holder to initial position	Steel	4	\$20
10	Table	For holding the design not moving	Wood	1	\$100

PRESENTATION FINISHED

ANY QUESTIONS?