

Marshall Classroom



MARSHALL
ELEMENTARY SCHOOL
SCIENCE FAIR PROJECTS
DUE FEB. 2
IN-AREA KINDERGARTEN
REGISTRATION FEB. 23

ME 486C-5
Team F5

850

Abdulah Ali Almutairi

Mohammad Alkatan

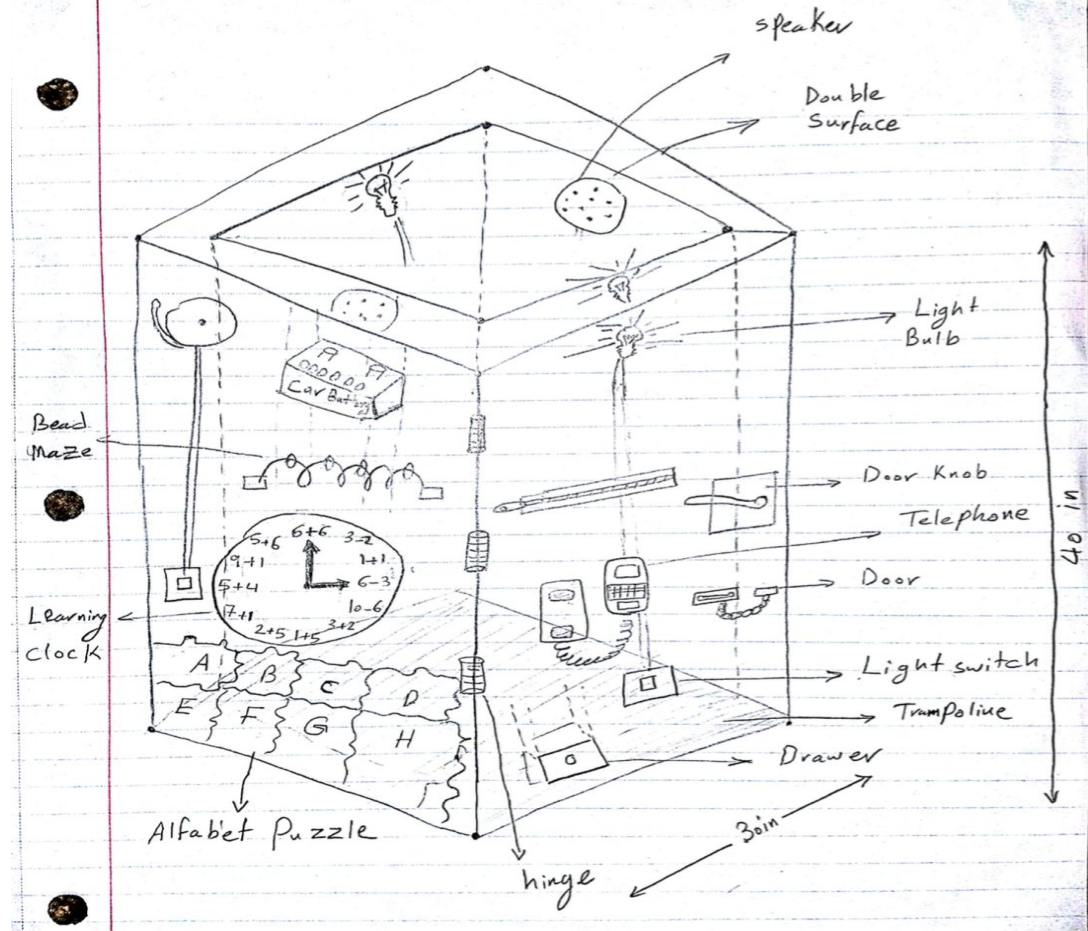
Abdullah Almutairi

Yousef Alkatan

Taha Alansari

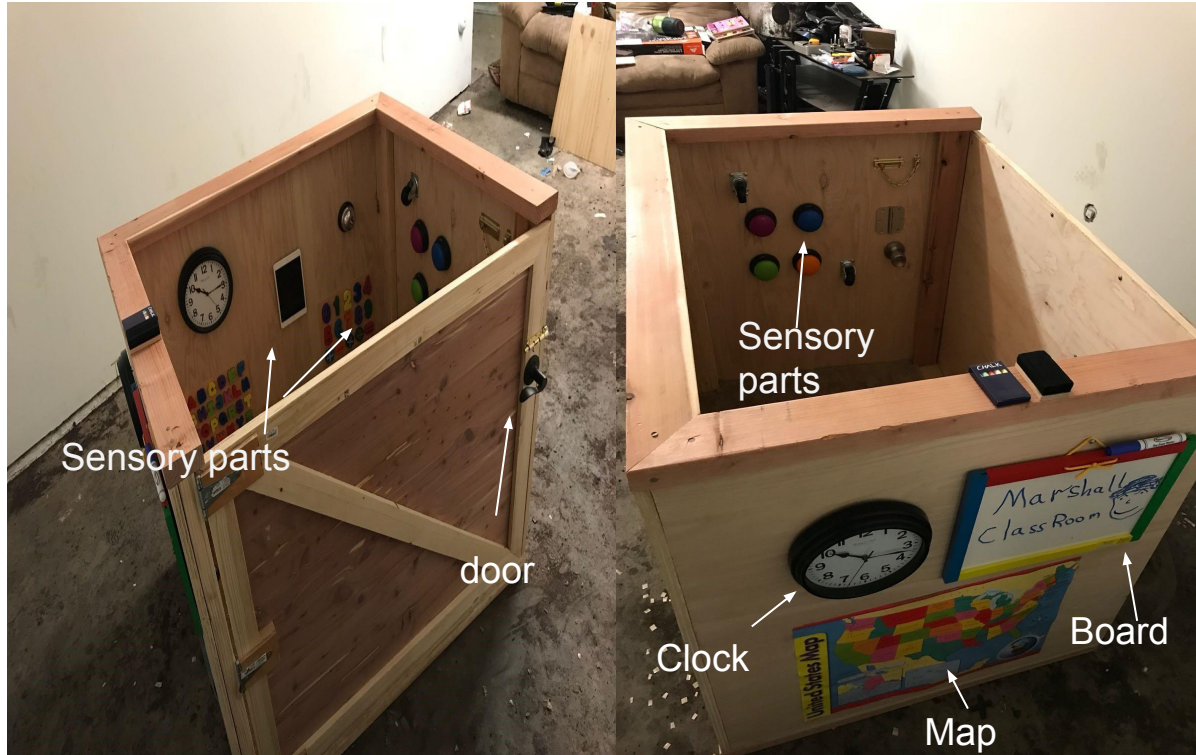
Project Description

- Sensory board
- Sensory parts attached
- Disabled kids



Images of the Design

Abdullah Ali - 3
03/14/2018
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Updates

Updates/Changes	Causes
1. Decrease the number of parts attached to the sensory board	● Decrease the size of the design
2. No Trampoline	● For safety
3. No car batteries	● For safety ● Large size of the car battery ● Cost

What is left in the manufacturing of the design?

- Adding more parts to our design.

Analytical Analysis:

- Wood thickness.
- Strength and type of corners.
- Stability of the design.



Moving Forward

Yousef Alkatan -6 (03/14/2018)

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Plans of manufacturing:	Who did it ?
1- Clients needs	Abdullah Ali and Mohammad
2- Sketch the design	Mohammad
3- The agreement from the client	Abdullah Ali
4- CAD	Yousef and Abdullah Ali
5- Prototype	Yousef,Taha, and Abdullah Abdulaziz
6- Buying parts	All the team's members
7- Analytic analysis	All the team's members
8- List solutions for the analytic analysis problems	All the team's members
9- Build the design	All the team's members
10- Test the design	-
11- Fix minor errors and build the final design	-

Moving Forward

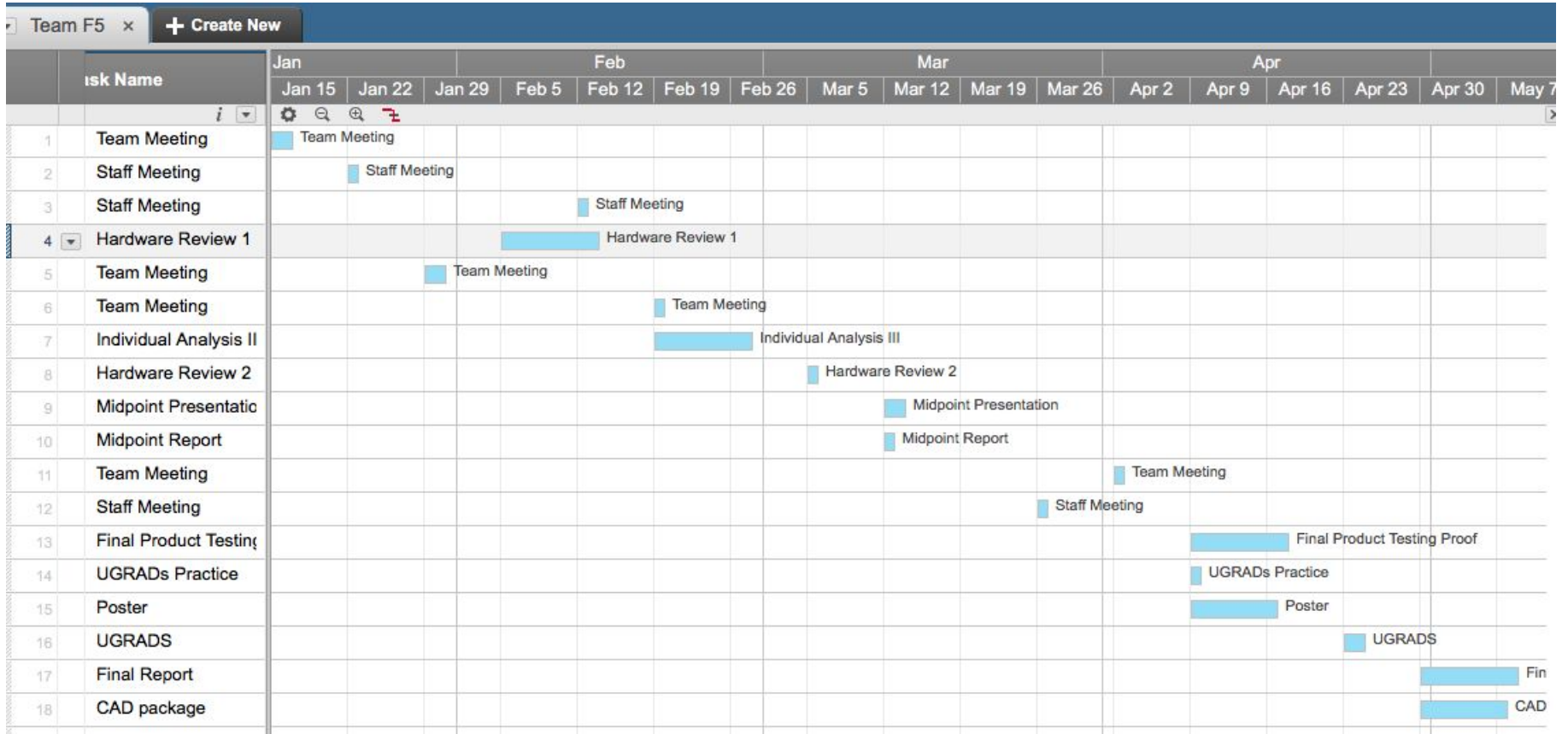
Plans for Testing:	Engineering Requirements:
Testing different types of wood	Medium Weight
Search and test many ways to make sure the design do no tip over	Safety
Choosing high quality of wood	Durability
<ul style="list-style-type: none">- Testing the ways of fasten the sides of the wood- Testing how to attach the parts to the wood	Cohesive

Results of Testing and Redesign

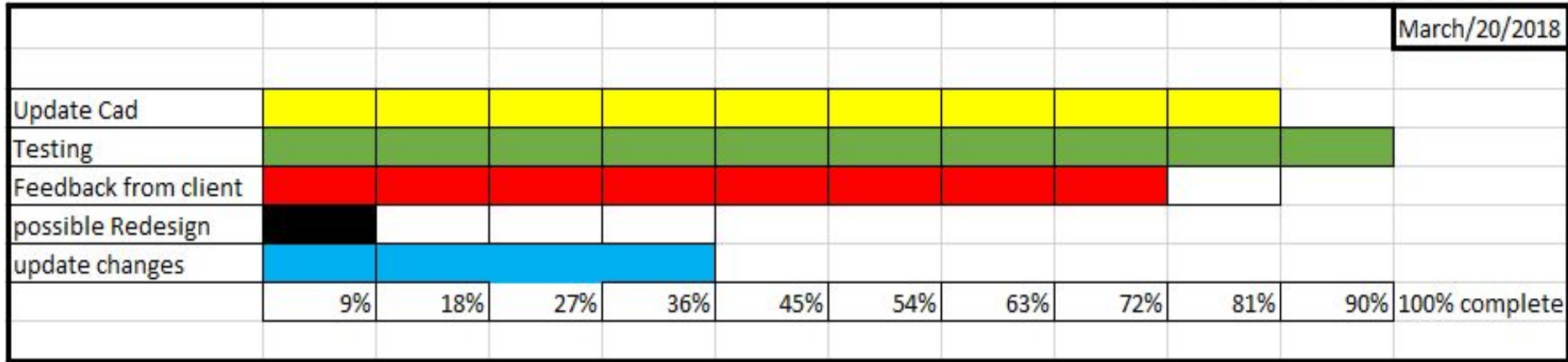
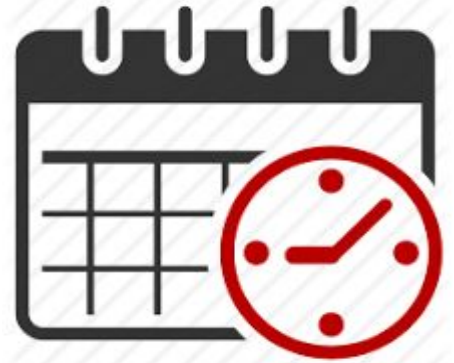
- Wood Thickness
- Number of hinges
- Trampoline
- Soft Balls

Gantt Chart

Abdullah A
 Almutairi - 9
 03/14/2018
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Schedule



Budget

- Total Budget for this project is \$2000
- Actual Expenses:
 - \$275.48 Wood
 - \$297.39 Other Supplies
- Anticipated Expenses:
 - About \$800



List of Materials:

	Materials	Cost in \$	Quantity	Total Cost \$
1	Alphabet and number puzzle	\$29.99	2	\$59.98
2	Bell	\$5.85	2	\$11.70
3	Zippers	\$7.50	1	\$7.50
4	Buzzers set of 4	\$18.97	1	\$18.97
5	Tax	\$1.70	N/A	\$1.70
6	Days cards	\$6.99	1	\$6.99
7	Monthly calendar cards	\$5.99	1	\$5.99
8	US map chart	\$3.49	1	\$3.49
9	Shapes Sound Puzzle	\$12.99	1	\$12.99
10	Tax	\$2.64	N/A	\$2.64
11	Wall clock	\$3.88	1	\$3.88
12	BP DOOR CHN	\$3.97	1	\$3.97
13	NK RD DR HNG	\$2.97	1	\$2.97
14	3 BRRL BOLT	\$2.67	1	\$2.67
15	2 WD SCRW	\$0.97	1	\$0.97
16	TAX	\$1.29	N/A	\$1.29
17	CASTER SWVL	\$2.94	4	\$11.76
18	DRLCK HALLCL	\$7.87	1	\$7.87
19	Wall clock	\$3.88	1	\$3.88
20	TAX	\$2.10	N/A	\$2.10
21	WORLD MAP	\$3.49	1	\$3.49

22	MAGNETIC CHALKBOARD	\$19.99	1	\$19.99
23	TAX	\$2.11	N/A	\$2.11
24	DOOR HANDLE	\$12.05	1	\$12.05
25	MAGNETIC TAPE	\$3.88	4	\$15.52
26	TAX	\$1.39	N/A	\$1.39
27	WOOD 0.725IN *48IN * 96 IN	\$49.98	3	\$149.94
28	WOOD 1.5IN *3.5IN * 96IN	\$9.77	8	\$78.16
29	SCREWS	\$8.38	1	\$8.38
30	HINGS	\$3.67	3	\$11.01
31	TAX	\$22.15	N/A	\$22.15
32	WOOD CEDR .216IN*23.75IN*47.75IN	\$16.92	2	\$33.84
33	TRIM BOARD	\$3.22	3	\$9.66
34	TAX	\$3.88	N/A	\$3.88
35	TAPE FOR THE IPAD	\$6.97	1	\$6.97
36	AAA BATTERY	\$11.78	1	\$11.78
37	AA BATTERY	\$6.94	1	\$6.94
38	TAX	\$2.30	N/A	\$2.30
39	IPAD Mini	Owned	N/A	Owned
TOTAL COST: \$572.87				

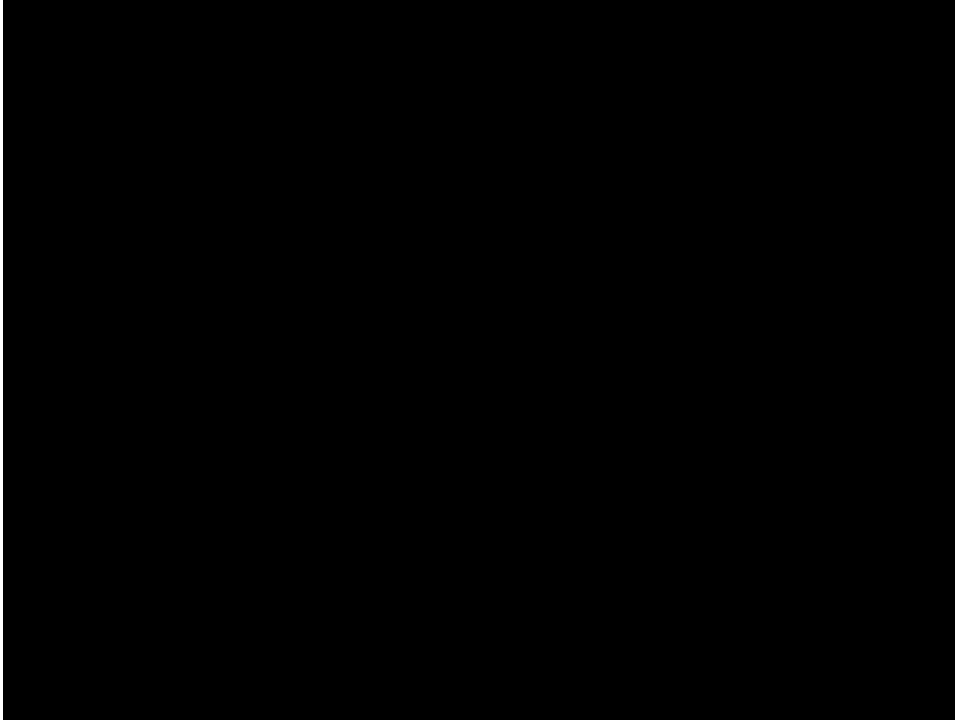
Abdullah A Almutairi - 12
 03/14/2018
 Marshall Classroom-F5

CAD



Taha Alansari - 13
03/14/18
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Hardware Review #2 (Video)



Hardware review #2 - Outside



Hardware Review #2 - Inside



Any Questions ?