



Go Baby Go-D

Sponsor/Client: Dr. Sarah Oman

Presented by: Hussen Alajmy, Saleh Almasari, Shahah Eshkanani, Yousef Alraqem, Yousef Alenezi

Project Description

- Aims in helping Disabled children.
- Make children feel normal.
- Help build a better prototype for the child in need.



Figure 1: GBG [1]

Project Description

- The team managed to find a sponsor for the project over the winter break
- Sponsored by Auto Rehab garage
- Provides welding machines, experience, space..
- Sponsor information:
 - ❑Specialty: Automotive repair and performance enhancements for vehicles
 - ❑Location: 799 Historic Rte 66, Flagstaff, AZ 86001
 - ❑Phone: (928) 774-9351



Figure 2: Sponsor logo [2]

Updates

- Previous CAD Design
- Needed Leg support
- Seat base was too long and needed some adjustments

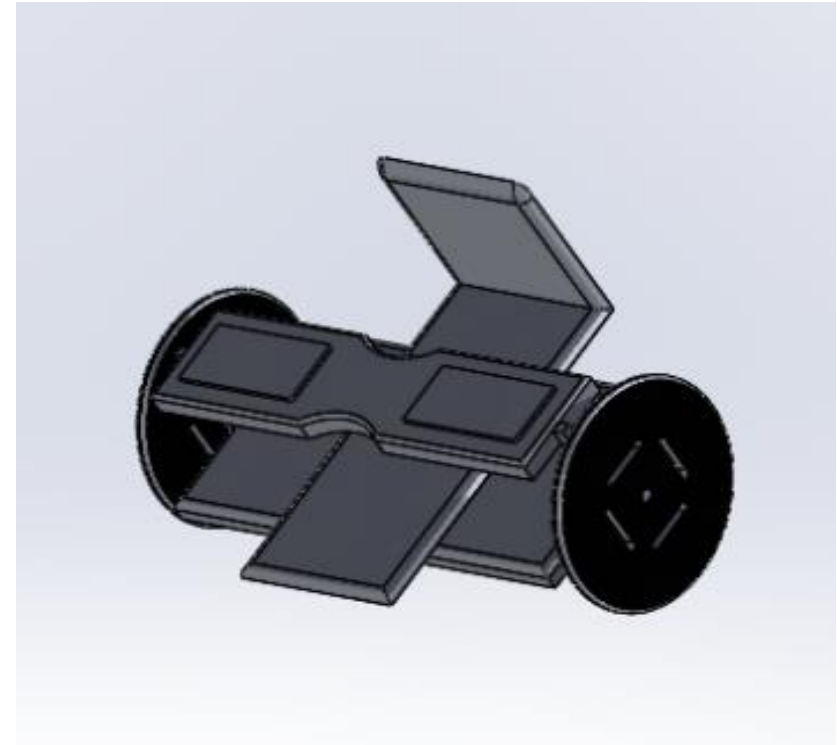


Figure 3: Capstone part 1 final PPT CAD design

Updates

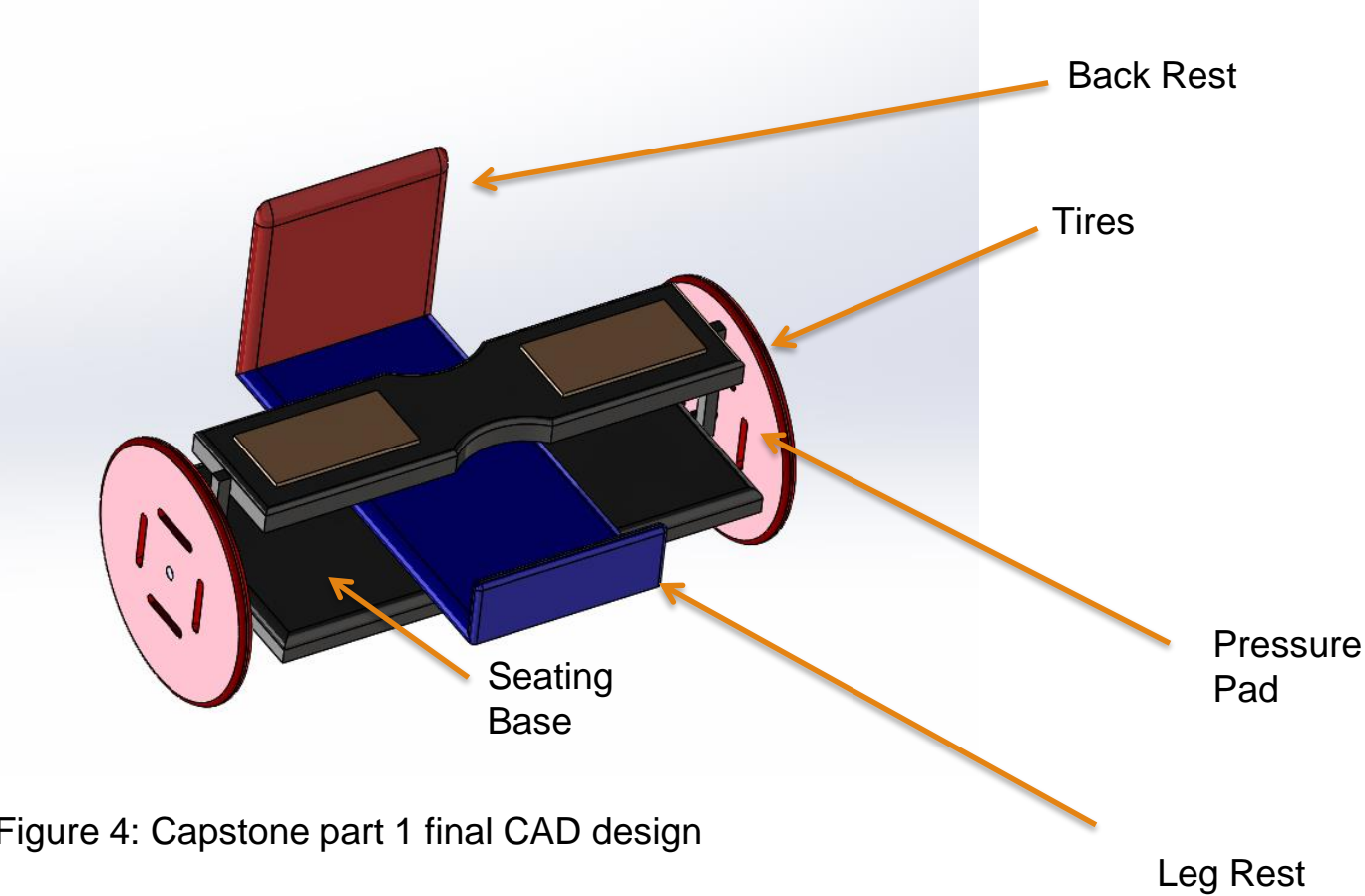


Figure 4: Capstone part 1 final CAD design



Figure 5: Leg rest

Updates

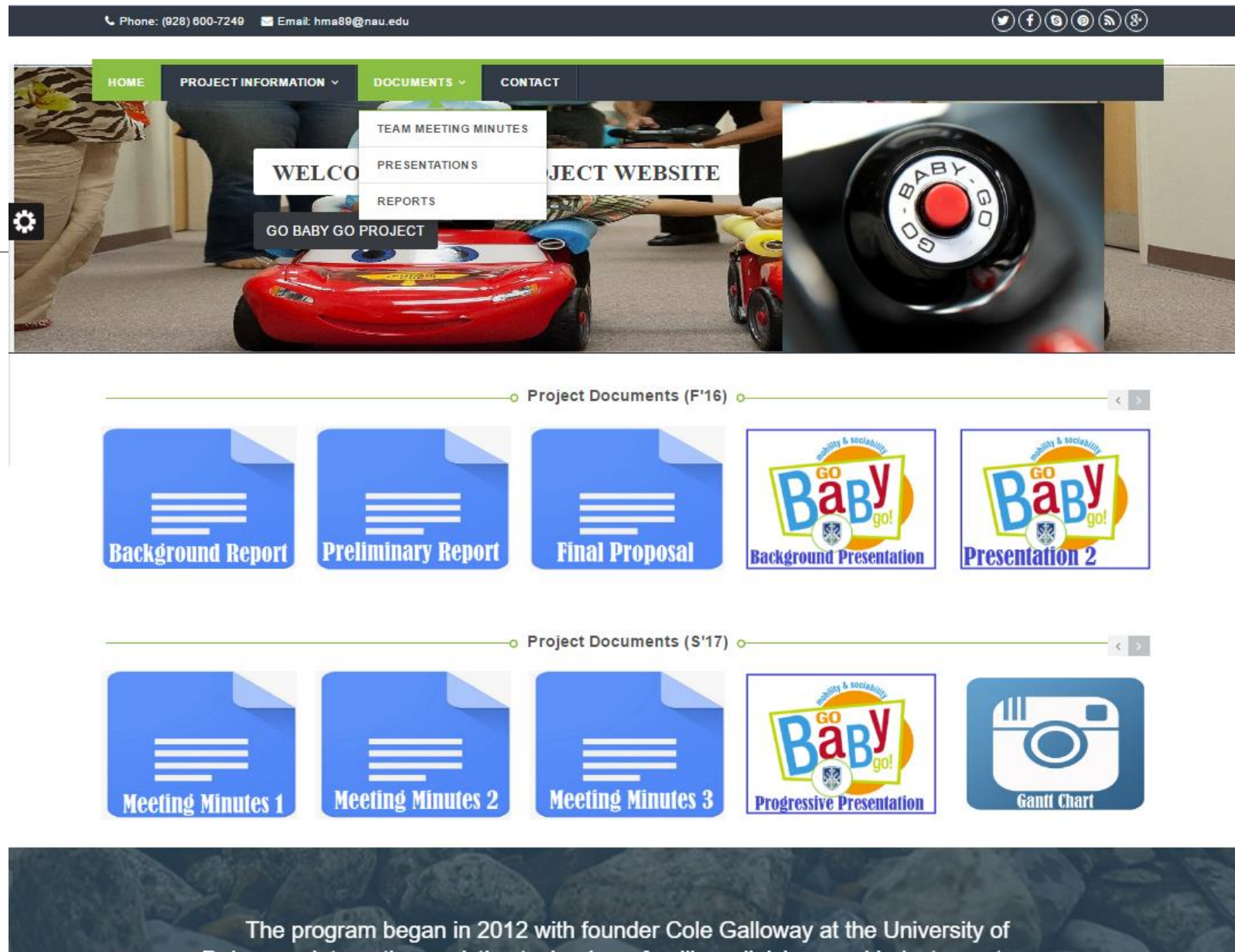


Figure 6: Team website

Capstone part 1 final report

- Grammar issues
- Labels and figures
- Update some parts of the report

Team's website

- Added a new link for (meeting minutes + Presentations + Reports)
- Added Project Documents on the main page for Spring 17
- Updated team members information
- Substituted sponsor information to Go Baby Go information on the home page

Manufacturing

- Manufacturing Plan:
 - ❑ Hardware 1 - Electric scoot base
 - ❑ Hardware 2 – Hoverboard, leg rest and tires attachments
- Testing:
 - ❑ Weight compatibility
 - ❑ Electric circuits
 - ❑ Pressure pads
 - ❑ Heat generation
 - ❑ Balance check

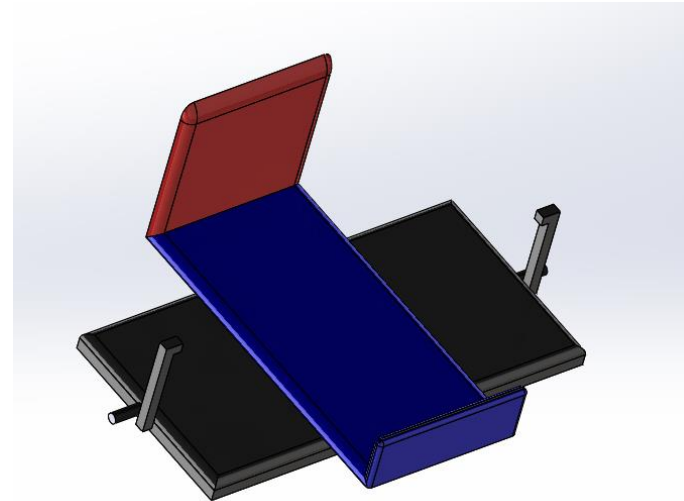


Figure 7: Electric scoot base

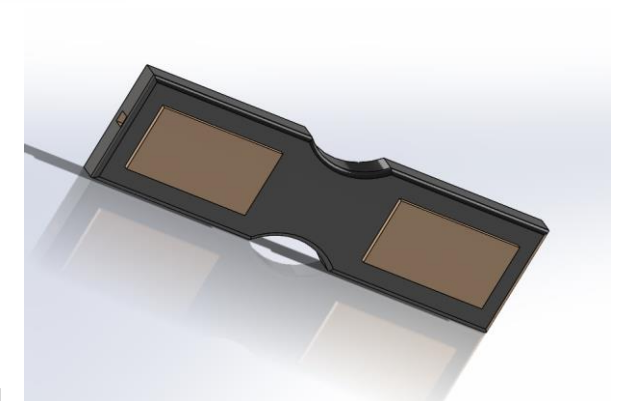


Figure 8: Hoverboard

Manufacturing

Table 1: Team members responsibilities and skills

Name	Responsibility	Skills
Hussen Alajmy	Testing	OSHA safety background, PMP
Saleh Almasari	Welding	Manufacturing
Shahah Eshkanani	Electronics	Circuits layout
Yousef Alraqem	Interior design	Solidworks
Yousef Alenezi	Alignments	Solidworks

Budget

Table 2: Bill of Materials [8-12]

Parts	Image	Market	Price
Graco Affix No Back Booster – Davenport[1] Option-A		Wal-Mart	\$64.97
Speedway Motors Aluminum Hot Rod Bomber Seat [2] Option-B		Amazon	\$199.99
Jaybird and Mais 30/31 Adhesive Foam: 1/4 in. thick x 5 in. x 2 yds. (White)[3] Option-B		Amazon	\$11.05
KINGSO 7PCS Cotton Fabric Bundles Quilting Sewing DIY Craft 19.7x19.7inch Polka Dot [4] Option-B		Amazon	\$9.99
1-1/2 in. x 3/6 in. Plain Steel Angle with 1/8 in. Thick [15]		The Home Depot	\$9.47
Loctite Ultra Gel Control Super Glue 4-Gram (1363589) [5] Option-B		Amazon	\$4.99
Toolkit 550 Piece Metric Sheet Metal Screw Assortment - Contains 13 Popular Sizes [6] Option-B		Amazon	\$9.99
BAA SHOP Two Wheels Mini Smart Self Balancing Scooter (Adapter) [7]		Amazon	\$40.99
D@Boards Replacement Rubber Parts for 2 wheel self balance scooter hoverboard [8]		Amazon	\$21.96
(CE FC ROHS)36V 4.4Ah 158Wh Battery Pack for 6.5" Classic Electric Scooter Hoverboard[9]		PandaWill	\$54.99
RocketBus Replacement 6.5" Inch Power Motor Wheel for Self-Balance Smart Scooter IO Hawk PhunkeeDuck Swagway Hoverboard [10]		Amazon	\$44.95
VIIVRIA® 9 in 1 Balance Scooter Circuit Repair Kit Board Main Hover Board replacement parts 2 Wheel 6.5"[11]		Amazon	\$89.99
Cloudings(TM) 16 * CREE 80W LED Motor Bike/Moped/Scooter/AT V Headlight Bulb BA20D H6 Car LEDs Lamp Lighting[12]		Amazon	\$19.98
Lap Seat Belt, Chrome Lift Latch, 60 Inch Length [13]		Amazon	\$14.64
K'NEX Combat Crew 5-in-1 Building Set [14]		Amazon	\$49

Total Cost \$646.95



ated Budget

Materials [8-12]

Image	Market	Price								
 <p>Sheet Metal Screw Assortment - Contains 13 Popular Sizes [1] Option-B</p>	Amazon	\$9.99	2 x (CE FC ROHS)36V 4.4Ah 158Wh Battery Pack for 6.5" Classic Electric Scooter Hoverboard[4]		PandaWill	\$109.98	MDF Panel (Common: 3/4 in. x 4 ft. x 8 ft.; Actual: 0.750 in. x 48 in. x 96 in.) [10]		The Home Depot	\$31.95
 <p>BAA SHOP Two Wheels Mini Smart Self Balancing Scooter (Adapter) [2]</p>	Amazon	\$40.99	RocketBus Replacement 6.5" Inch Power Motor Wheel for Self-Balance Smart Scooter IO Hawk EfunkeeDuck Swagway Hoverboard [5]		Amazon	\$44.95	Minger Car LED Strip Light, 4pcs DC 12V Multi-color Car Interior Music Light LED Underdash Lighting Kit with Sound Active Function and Wireless Remote Control, Included Car Charger [11]		Amazon	\$20.99
 <p>D@Boards Replacement Rubber Parts for 2 wheel self balance scooter hoverboard [3]</p>	Amazon	\$21.96	VHVRIA® 9 in 1 Balance Scooter Circuit Repair Kit Board Main Hover Board replacement parts 2 Wheel 6.5" [6]		Amazon	\$89.99	Wise Economy Low Back Seat [12]		Amazon	\$33.89
 <p>4 x (1-1/2 in. x 3/8 in. Plain Steel Angle with 1/8 in. Thick) [9]</p>	The Home Depot	\$37.88	Lap Seat Belt, Chrome Lift Latch, 60 Inch Length [7]		Amazon	\$14.64	SOLOOP 480Pcs 12 Size Assorted Insulated Electrical Wiring Wire Terminal Crimp Connector Kit Butt Spade Set [13]		Amazon	\$20.98
			KNEX Combat Crew 5-in-1 Building Set [8]		Amazon	\$49	Caster Set (2 Swivel/2 Locking) [14]		Global Industrial	\$34.95

Total Cost \$562.14

Gantt Chart

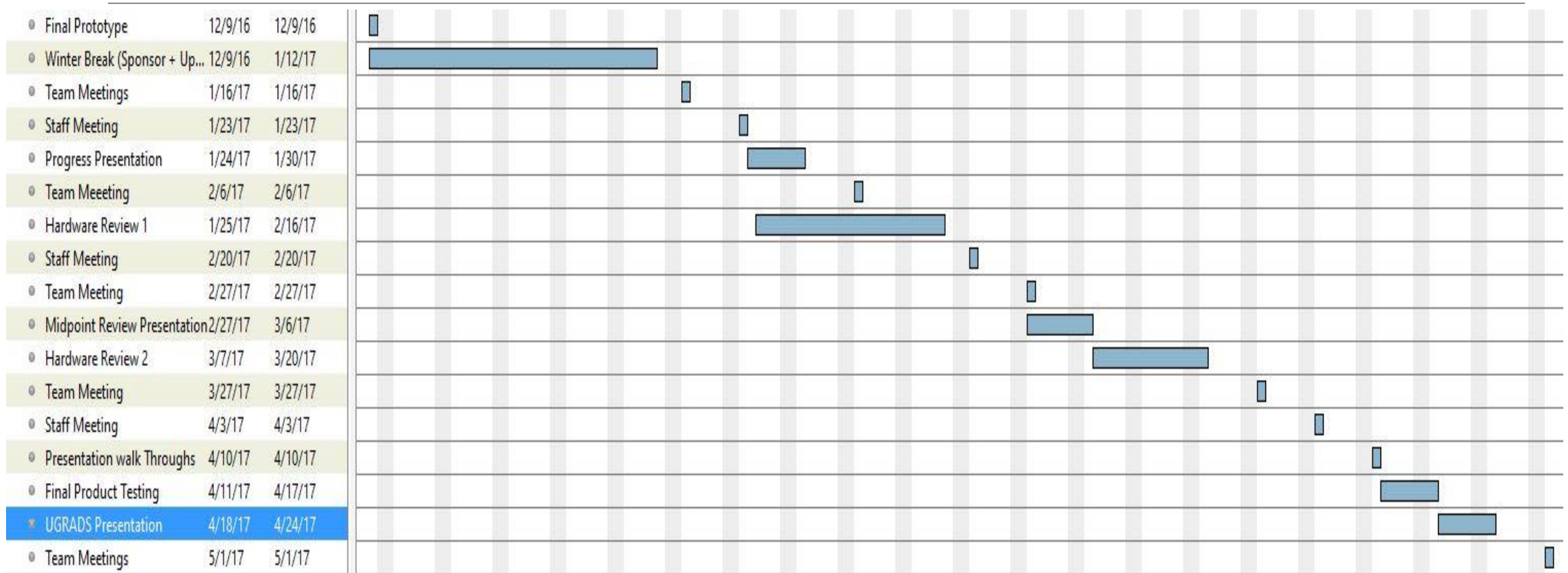


Figure 9: Gantt Chart

References:

- [1] "'Go Baby Go' mobility program for children with disabilities expands to OSU | News and Research Communications | Oregon State University", *Oregonstate.edu*, 2016. [Online]. Available: <http://oregonstate.edu/ua/ncs/archives/2014/nov/%E2%80%98go-baby-go%E2%80%99-mobility-program-children-disabilities-expands-osu>.
- [2] "Does Your Car Have the Shakes? Not Quite Acting Itself? In need of an intervention? Get it checked in at Auto-Rehab / Flagstaff / 928.774.9351", *Auto-rehab.com*, 2017. [Online]. Available: <http://www.auto-rehab.com/#/autorehab>.
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- [12] 2016 Studica and its affiliates, "Adobe Dreamweaver creative cloud for non-profits | Studica®,". [Online]. Available: http://www.studica.com/us/en/AdobeNonProfit/adobe-dreamweaver-creative-cloud-non-profit-license/65231265bb01a12.html?ex_ref=google_feed&qclid=CjwKEAiA6rrBBDsrLGM4uTPkWASJADnWZQ4bcCP2TN5E1QgRU-pMftI6qdJs9UyPsFmHigrf7sDWxoCyl w wcb.
- [13] "Velocity Responsive Multipurpose Template", *Cefns.nau.edu*, 2016. [Online]. Available: <https://www.cefns.nau.edu/capstone/projects/ME/2017/GoBabyGoD/>.

Thank You

