



Go Baby Go-D

Sponsor/Client: Dr. Sarah Oman

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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]

Design Description

Original scoot → electrical scoot

Advantages: 1. Comfortable seat.

2. The child can feel the ground.

Disadvantages: 1. It is too low device have to elevated a bit.

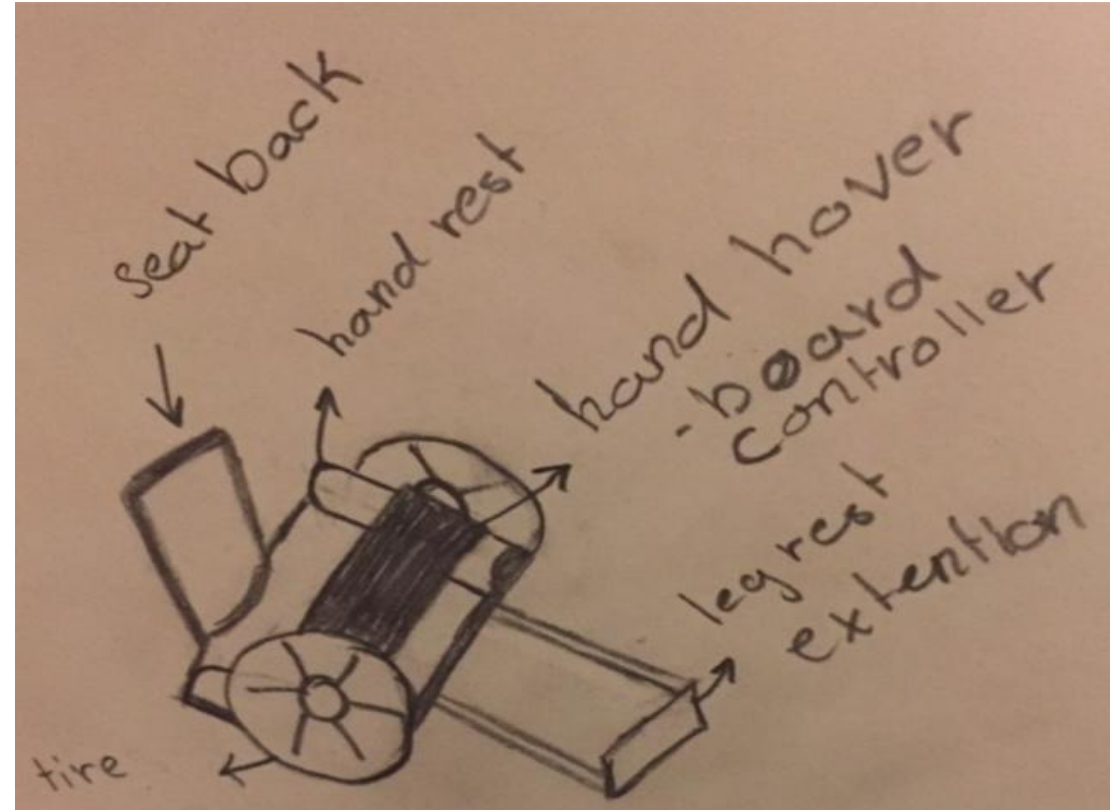


Figure 2: Final Design Sketch [2]

Prototype

Products used:

- Used K'NeX toys
- Duck tape
- Thread
- Construction paper

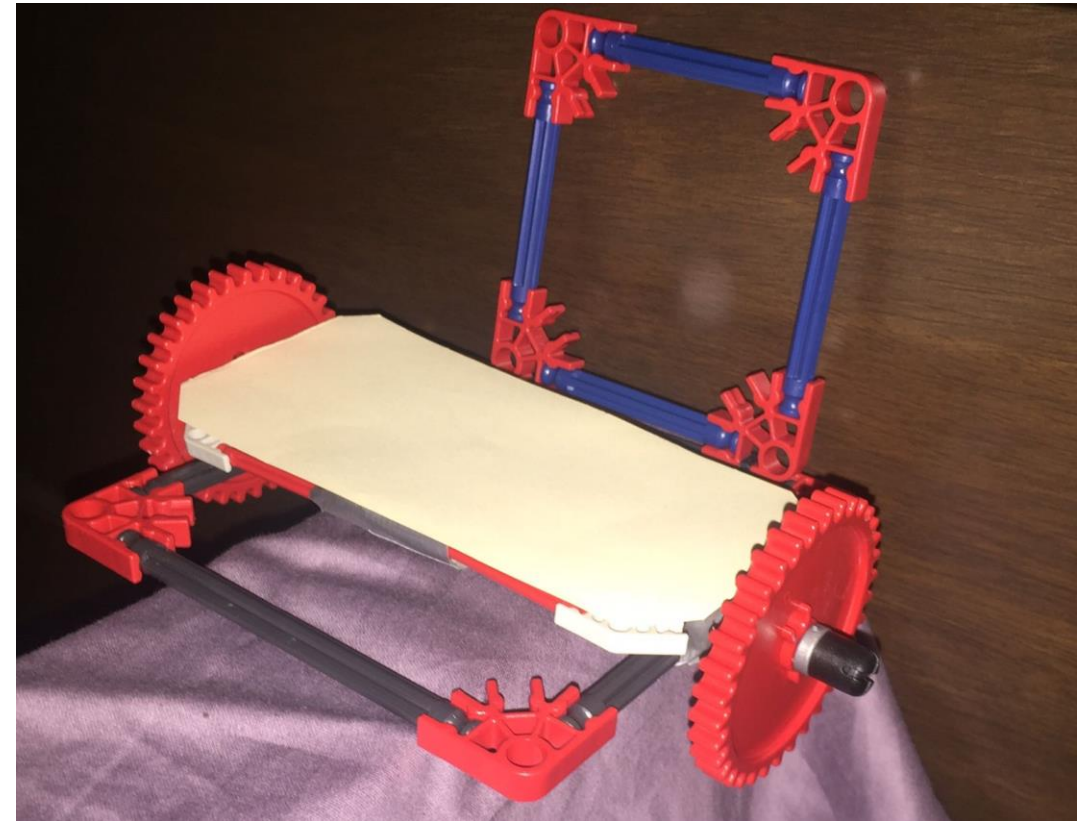


Figure 3: Design Prototype

Solidwork Design(CAD)

- Seats made from Plastic
- Top part of the Hoverborad (The pressure pad ONLY)
- Power Motor wheels.

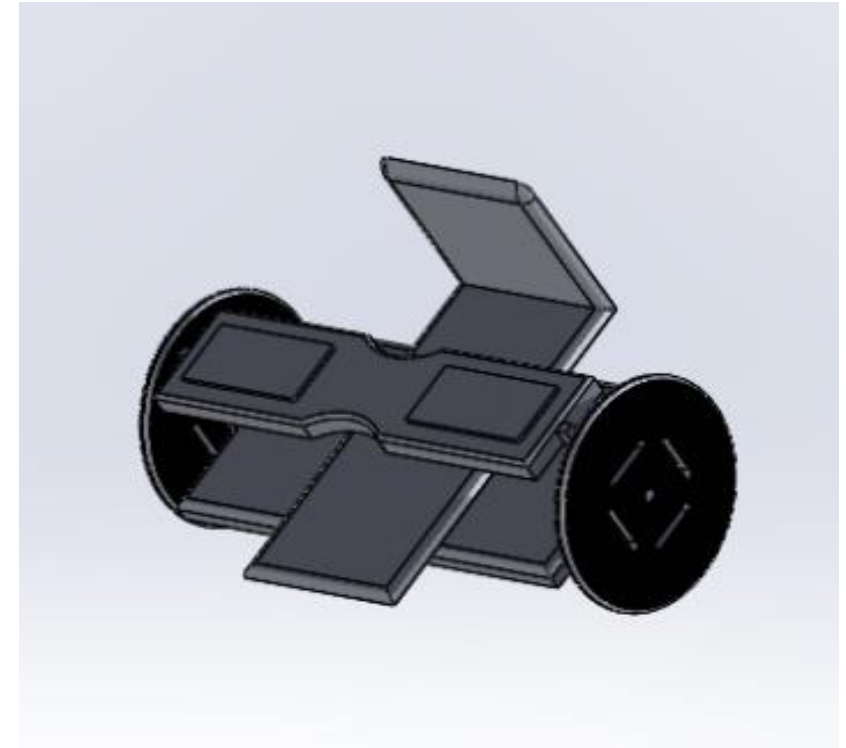


Figure 4: CAD Design

Design Requirements

- Low cost
- obtainable parts
- jerking motion
- final design

Customer Requirements

CUSTOMER REQUIREMENTS	EXISTANCE IN FINAL DESIGN	MET FINAL DESIGN?
CONTROL ACCELERATION	Using the driving pads	✓
BRAKES	Using the driving pads	✓
COMFORTABLE SEATS	Included in the final design	✓
TRUNK MOBILITY	Fits in the average size of cars trunk	✓
LEGS SUPPORT	Final design has legs support attached to the system	✓
EASY TO OPERATE	Design is easy to operate	✓
FINANCIAL (400\$)	Final cost is 385.46\$	✓
SEATBELT HARNESS	Included in the final design	✓
SAFETY BARS	Included in the final design as a hand rest	✓

Figure 5: How CRs meets the Final design

Budget

Table 1: Bill of Materials [8-12]

Parts	Market		Cost
Graco Affix No Back Booster - Davenport	Walmart		\$64.97
BAA SHOP Two Wheels Mini Smart Self Balancing Scooter (Adapter)	Amazon		\$40.99
D@Boards Replacement Rubber Parts for 2 wheel self balance scooter hoverboard	Amazon		\$21.96
(CE FC ROHS)36V 4.4Ah 158Wh Battery Pack for 6.5" Classic Electric Scooter Hoverboard	PandaWill		\$54.99

RocketBus Replacement 6.5" Inch Power Motor Wheel for Self-Balance Smart Scooter IO Hawk PhunkeeDuck Swagway Hoverboard	Amazon		\$44.95
VIIVRIA® 9 in 1 Balance Scooter Circuit Repair Kit Board Main Hover Board replacement parts 2 Wheel 6.5"	Amazon		\$89.99
Cloudings(TM) 16 * CREE 80W LED Motor Bike/Moped/Scooter/ATV Headlight Bulb BA20D H6 Car LEDs Lamp Lighting	Amazon		\$19.98
Lap Seat Belt, Chrome Lift Latch, 60 Inch Length	Amazon		\$14.64
K'NEX Combat Crew 5-in-1 Building Set	Amazon		\$32.99

Total Cost \$385.46

Team Project Website

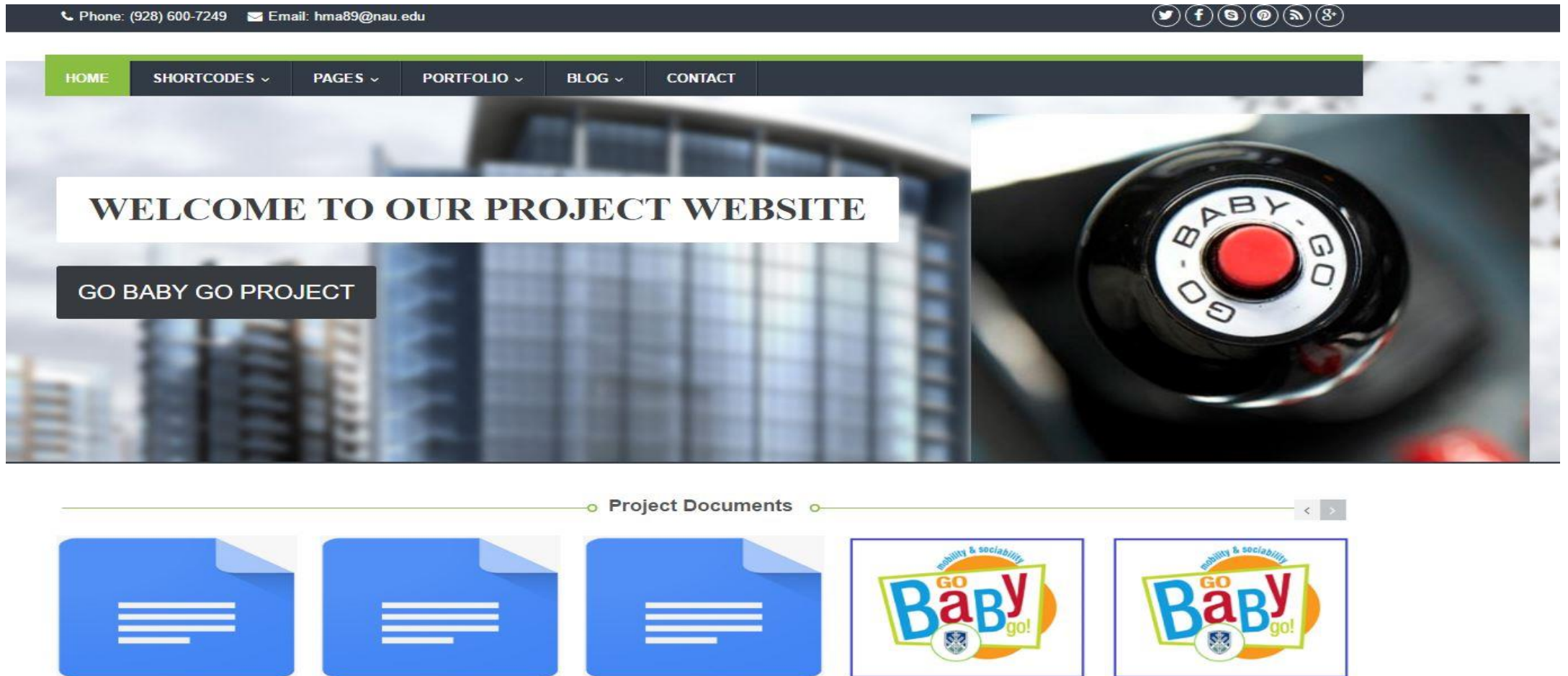


Figure 6: Project Website [13]

Gantt Chart

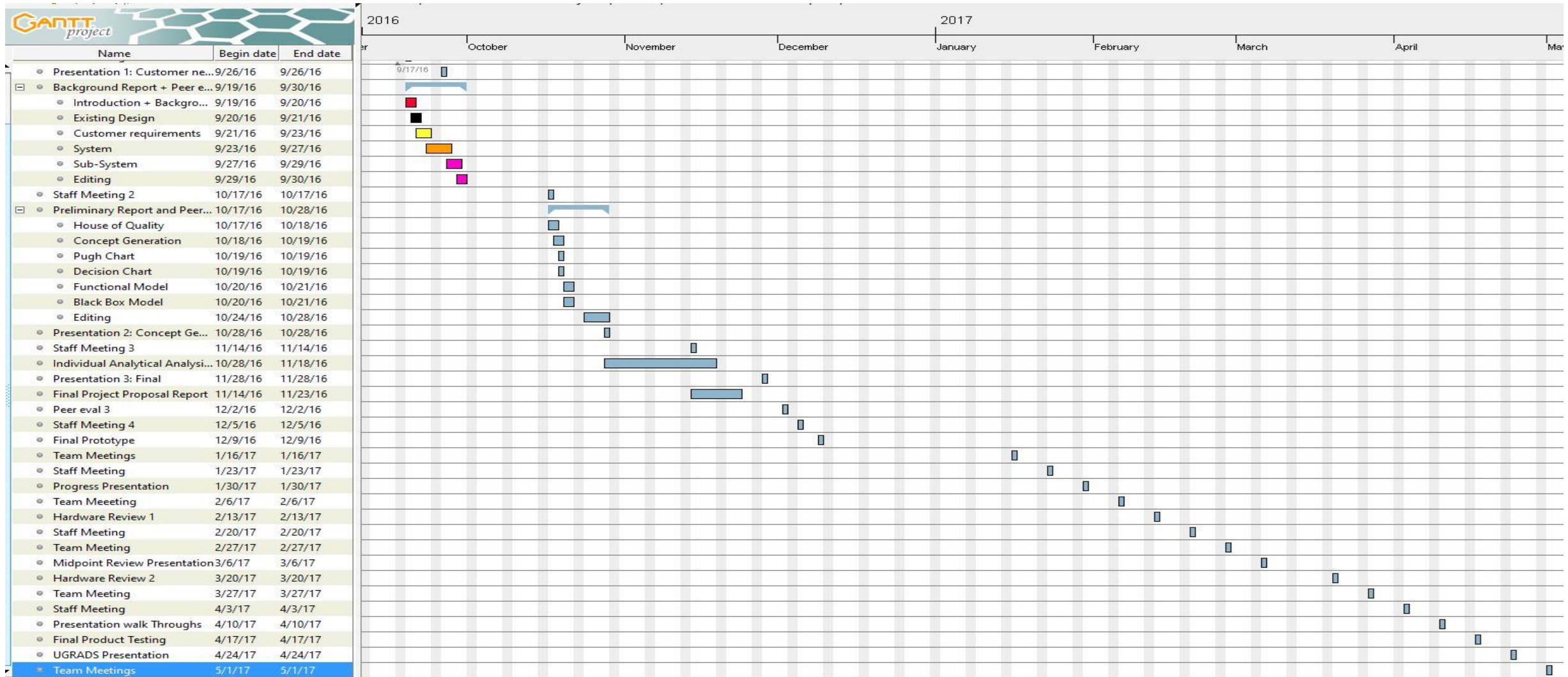


Figure 7: Gantt Chart

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Thank You

