Preliminary Verification

Group C | Angelina Barone, Mira Faizul, Dan Haikal, Ranga Rutiser Sundar

Measurements

- Time taken to remove the trapped hair from the brush (5 trials)
- Bristle breakage force Force is applied to the top of the bristle until it breaks (3 trials)
- Number of brush strokes needed to adequately clean the pet (5 trials)
- 1-10 score rating based on how comfort the brush is for the pets (3 trials)



First prototype bristles



Certain users did not understand the intended use.

Success of Prototype

- First prototype too sharp, did not test
- Second prototype tested with two cats
- Springs and bolts replaced with zip ties
- Score: 20/28 (Appendix A)

Requirement	Score Rubric									Score	
		8	7	6	5	4	3	2	1	0	(20/28)
Time to clean hair out of brush (5 pts)	0 - 120 seconds				≤80 s	≤90 s	≤100 s	≤110 s	≤120 s	>120 s	5 pts
Total brush mass (1pt)	0 - 500 g								<250 g	>250 g	1 pt
Brush material cost (1pt)	\$0-20								< \$10	> \$10	1 pt
Force to break one bristle (3pts)	0-3 lbs of force						≥ 3 lbs	≥ 2 lbs	≥ 1 lb	< 1 lb	3 pts
Brush strokes to adequately clean pet (8pts)	1-10	1	2	3	4	5	6	7	8	≥9	6 pts
Pet opinion (7pts)	1-10		10	9	8	7	6	5	4	<3	4 pts

Appendix A: Testing Scorecard

Requirement	Range	Score Rubric									Score
		8	7	6	5	4	3	2	1	0	(20/28)
Time to clean hair out of brush (5 pts)	0 - 120 seconds				≤80 s	≤90 s	≤100 s	≤110 s	≤120 s	>120 s	5 pts
Total brush mass (1pt)	0 - 500 g								<250g	>250g	1 pt
Brush material cost (1pt)	\$0-20								< \$10	> \$10	1 pt
Force to break one bristle (3pts)	0-3 lbs of force						≥ 3 lbs	≥ 2 lbs	≥ 1 lb	< 1 lb	3 pts
Brush strokes to adequately clean pet (8pts)	1-10	1	2	3	4	5	6	7	8	≥9	6 pts
Pet opinion (7pts)	1-10		10	9	8	7	6	5	4	<3	4 pts

Group Responsibilities:

Project Manage	r for Assignment	Ranga Rutiser Sundar					
Deputy Manage	r for Assignment	Dan Haikal					
Drafted Assignment	All group members	Revised Assignment	All group members				
Reviewed Assignment	All group members	Proofread Assignment	All group members				
Created Figures	Angelina Barone	Created Tables	Mira Faizul				
	Other Co	ntributions					
	N	//A					
	Problems	Overcome					