

Progress Report for Week 11 of BME 200/300

Face Mask

Dr. Kurt Sladky (client); Dr. Steve Johnson (client); Katy Reed (group leader); Kristen Seashore (communicator); Steven Skroch (BWIG); Janelle Anderson (BSAC)

Date: 11/10/05 to 11/16/05

Problem Statement: Develop a face mask for use in reptile pneumotachometry. The face mask must be air tight and have separate input and output ports so they can be connected to pressure regulating and monitoring equipment. The masks will be used multiple times and will need to be cleaned.

Restatement of Team Goals: To develop separate air tight mask for a corn snake and a bearded dragon with input and output ports.

Team Goals for Next Week: Complete construction on final versions of Snake and Bearded Dragon masks and start on poster/paper.

Individual Goals for Next Week:

Katy Reed: Finish construction of Bearded Dragon masks, find out what “sticky hands” are made of, order snake tubes, my section of paper/poster, go over animal protocol.

Kristen Seashore: Work on my part of the paper, gather materials/pictures for the poster.

Steven Skroch: Model the masks in SolidWorks, complete final designs.

Janelle Anderson: Complete bearded dragon mask drawing; start sections of paper/poster; work with team on completing bearded dragon mask.

Summary of Accomplishments:

- Thursday Katy and Kristen met to work on the final Snake masks. We got the mask part constructed but noticed a problem with the membrane of the masks.
- Friday during class we listened to a lecture on Human Subjects Testing and met to talk with our advisor about the progress of our project.
- Saturday Kristen fixed the problem with the membranes on the snake masks. Janelle sent out a link to a web site that sells snake tubes with dosing ports.
- Monday Katy and Janelle met with the client to pick up the prototypes of both masks and to talk about the problems they had had with the Bearded dragon mask. It turns out that the neck hole for the mask was cut too small but they liked the over all design.

Statement of Team Goals: To create a mask that can be connected to a pneumotachometer and a regulator for a Corn Snake and another for a Bearded Dragon.

Project Schedule: This week we nearly completed construction of the final Snake masks and decided on the final Bearded Dragon mask design. Next week we will order the snake tubes, finish the Bearded Dragon masks, and begin the poster/paper.

Difficulties: Due to exams and group projects for other classes our team did not spend much time meeting as a group.

Activities:

Katy (2h 30 min) and Kristen (2h) met to build the final versions of the Snake mask (Thursday). Team spent 50 min in class listening to the Human Ethics lecture and meeting with our professor (Friday). Katy and Janelle (5 min) met with the client to pick up the prototypes and improvement ideas (Monday).

Katy Reed: 45 min, wrote progress report
 30 min, updating design notebook
 Kristen Seashore: 20 min, gluing snake mask
 Steven Skroch: none
 Janelle Anderson: 2h, updating notebook
 20 min, researching snake tubes

Project Time Line:

	Sept.					Oct.				Nov.			Dec.			
TASK	2	9	16	23	30	7	14	21	28	4	11	18	25	2	9	16
Project research & development																
Brainstorming		X	X	X	X	X	X	X	X	X	X					
Research		X	X	X	X			X	X	X						
Prototyping				X	X	X	X	X	X	X						
Testing						X	X	X			X					
Manufacturing											X	X	X			
Deliverables																
Progress reports		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Note books								X								
Mid-semester presentation							X	X								
PowerPoint							X	X								
PDS		X	X				X	X								
PDR							X	X								
Final design presentation & poster												X	X	X		
Design report												X	X	X		
Meetings																
Client		X		X		X	X				X					
Group		X		X	X	X	X	X	X	X	X	X				

Professor	X	X	X		X	X	X	X	X	X	X	X		X	X	X
Website		X	X	X	X	X	X	X	X	X	X	X		X	X	X

Expenses:

ITEM	COST
PVC coupling (1")	\$0.78
Replacement flapper	\$3.79
Plastic Welder Glue	\$4.49
J-B Kwik Bonding Compound	\$5.79
Nylon gaskets	\$1.50
Power Clamp	\$2.38
Chair leg ends	\$0.98
Rein hose	\$2.99
PVC tubing	\$0.79
Large chair leg ends	\$0.79
PVC coupling (3/4")	\$0.29
TAX	\$1.35
PVC pipe fitting	\$0.69
PVC pipe fitting	\$0.53
PVC pipe fitting	\$0.38
Silicone tape (clear)	\$5.29
Caulk cord	\$4.04
TAX	\$0.60
O-rings x4	\$1.55 each
TAX	\$0.34
Krazy Glue	\$2.69
TAX	\$0.15
Sticky Hands x10	\$0.15 each
TAX	\$0.08
Shipping	\$5.95
Glue x4	\$ 3.97 each
PVC pipe fitting x3	\$ 0.42 each
PVC pipe fitting x7	\$ 1.01 each
Sandpaper	\$1.47
TAX	\$1.41

TOTAL (including tax)	\$ 81.45
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