

Project Proposal

Kate Lee Newcomb
Sara Brant
Eric Harmatz
Period 1

A) Who will you work with and why?

Sara Brant: We will work with her because she has great experiences with technology, she is very dedicated to her schoolwork, and puts 100% efforts into projects. She is a well-organized student and turns all of her assignments in on time. She is also cooperative with members and uses her creativity to make a creative final project.

Eric Harmatz: Eric Harmatz has a passion for a deeper understanding of how things work. From infrastructure of an entire city, to the mechanics of flight, to something as simple as a Compact Disk, Eric is always curious to experiment with different fundamentals. He attended the COSMOS at UCSD during the Summer of 2008 to enrich his engineering/math/science skills. While there, he worked on electrical and software engineering in embedded systems and worked on the programming for a simulation of a traffic intersection. Eric has a passion to always keep learning, and will achieve this by putting his full effort into the project as well as communicating between team members to get the job done in the most efficient way.

Kate Lee Newcomb: We will work with her because she has a basic understanding of simple machines, science and math that we feel will be a good contribution to the team. She is also very determined to get everything done to the best of her abilities, so she can help our project be the best and combine all of our strengths to create the final project.

B) What do you want to make? What theme will you go with?

We would like to make a toy wind up car. The theme we are hoping to go with is "Carl the Cat Car".

C) What will the inputs be?

The inputs we want to use are: a **crank** (in tail of cat car/ with a spring) and **CapSense** would be another input (even though it doesn't affect the toy per se its just an added realism thing to show that it's a cat.) Though we are aware the requirements call for only one input, we have decided the crank would be the best input option.

D) What will the outputs be?

The outputs would be: **rolling motion** (car wheels/ wheel and axle motion), **lights** (Lights will turn on (and perhaps change intensity i.e. an LED dimmer) when the car is moving), **speakers** (Music will be playing when the car

is moving), **eyes moving** (or wind shield wipers/ eyelids closing and opening) and **moving ears**. These are the outputs we hope to have for our final project.

E) Who will do what in the group?

Sara Brant: Work on the inputs and the outputs and help the members on creating the model of the design.

Eric Harmatz: Work on electrical components (such as Speakers), assist group with CAD, IT, DP design for the toy ("Marketing" and PR), assist Sara and Kate Lee with inputs and outputs, conduct Market Research through collaborating with little kids (our projects "Market").

Kate Lee Newcomb: Work on how all the simple machines will work inside the machine. Will also help with the exterior design. Also, help in making the inside simple machines work together so that all the outputs will be achieved.

F) Brain Storming ideas, preliminary sketches, research on hand powered toys.

Information in the Following Attachments