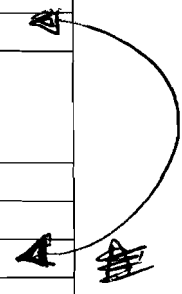


To: Greg Bucks, Bei Bei Li, David Pickup
 From: Epics Zoo Team
 Date: September 13, 2007
 Re: Semester Plan
 Attachments: Donation Box Proposal

Epics Zoo Semester Plan, Fall 2007

Currently, the Zoo team has four projects in progress and one new project that they would like to tackle. The continuing projects include the Information Kiosk, Primate Biscuit Dispenser, Animal Bingo, and the Lynx Enrichment Toy. Several ideas were thrown around for the new project, but after discussions with Claudine Laufman, the Zoo director, it was decided that a new donation box would provide a practical project for the new Epics members to complete. Since there is only one returning member from last semester, new students had to assume responsibilities of project leaders for four of the projects. Table 1 shows our current team organization and our responsibilities for each project.

Team Leader	Robert Klein
Partner Liaison	Melissa Hain
Webmaster	Ryan Adams
ESAC	Timmy Tahan
Keykeeper	Evan Kahrig
Project 1: Lynx Enrichment ✓	
Project Leader	Kayla Frame
Members	Corey Lane Joe Wootton Timmy Tahan
Project 2: Information Kiosk	
Project Leader	Ryan Adams
Members	Melissa Hain Mike Gasser Rob Klein
Project 3: Animal Bingo	
Project Leader	Evan Kahrig
Members	Melissa Hain Rupa Subramanian
Project 4: Biscuit Dispenser	
Project Leader	Rob Klein
Members	Mike Gasser



	Jenni Morsches Melissa Hain Zach Leeke
Project 5: Donation Box	
Project Leader	Rupa Subramanian
Members	Rob Klein Ryan Scheidt Evan Kahrig

Chart 1: Team Organization Chart

These project classifications are not set in stone, however, as it is expected that any team member help any other project as it is seen fit. The entire team is responsible for all projects currently being worked on. Following is a detailed description of each project.

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Project 1: Lynx Enrichment

Start Date: Spring 2007

Estimated Delivery: Spring 2008

Current Status: Preliminary Design Stage

This project was initially designed to be an electromechanical device using a track to run a toy back and forth for the lynx. The idea proved extremely complicated and along with the zoo it was decided to scale it down to use boomer balls to entertain the lynx.

The project goal was to provide entertainment for the lynxes, and it was decided that boomer balls would satisfy this requirement. The original plan is still being used; however it will be accomplished with a different mechanism.

Current plans include using a 8-12 inch diameter ball and inserting electronics in it to force vibration, rolling, and other sensory appeal for the Lynx or any other animal which would use it. This semester will be mainly focused on design with a chance that a prototype may be developed by December.

Project 2: Information Kiosk

Start Date: Spring 2004

Estimated Delivery: Fall 2007

Current Status: Final Construction, Delivery Preparation, Final Coding

The information kiosk has been in development for some time, and its goal was the provide zoo guests with information on zoo events, a map of the zoo, and some entertainment.

Part of the code has been written, but many features including the map and an admin tool need to be added. The kiosk is almost completely built, however a touch panel monitor needs to be added so that the user can interact with the kiosk. Delivery was promised this semester as the zoo has said that this project is badly needed at the zoo.

Project 3: Animal Bingo

Start Date: Spring 2006

Estimated Delivery: Fall 2007

Current Status: Debugging

The Animal Bingo game is nearing completion, however some small details need to be worked out including a refinement of the sound, a reduction in weight, and some upgrades in the wiring. The build works, however there are bare wires and inadequate cabling used to connect electronic components. The zoo would like to use this for children, so it must be completely safe and lightweight. In addition, it must be entertaining and educational for the children that play it. This project has been promised to be delivered this semester.

Project 4: Biscuit Dispenser

Start Date: Spring 2006

Estimated Delivery: Spring 2008

Current Status: Preliminary Design Stage

The Biscuit Dispenser design started a year ago, however it has been slow moving. The goals include stimulating the primates, dispensing a biscuit, and being able to withstand punishment. Initially, a rotary motor was planned to drive a shaft to push the biscuit out. However, after building the prototypes last semester, it was determined that this design did not meet the engineering specifications because the reliability of the motor was low, the case size was too large, and a simpler design was needed. A linear actuator was found and looks promising to drive the dispenser. A redesign is needed so that the case may be built much smaller around this.

This semester, a complete design is expected to be made so that next semester it can be properly built. The zoo is excited about this project and how much it can stimulate the primates' intelligence.

Project 5: Donation Box

Start Date: Fall 2007

Estimated Delivery: Fall 2007

Current Status: Conceptual Design

The donation box is a new project taken on by the zoo team. It was decided that the next project should be manageable, and this was a need that Claudine pointed out as their old box was broken into several times and needed replacement. A detailed project proposal is attached at the end of this memo.

Project Proposal: Donation Box

The project partner for this project is the Colombia Park Zoo. The overall mission of the community partner is to educate and inspire an appreciation for the world's wildlife. The zoo will directly benefit from the project. Since our project is a donation box, the proceeds will go towards costs associated with the zoo. This included maintenance, educational, and activity costs. However, visitors of the zoo enjoy the benefits partially provided by the proceeds from the donation box. The project outcomes will be going to the zoo. The donation box will be located in the zoo's gift shop.

The project we are working on is a donation box. The current donation box was broken into and money was taken from it. The zoo has come up with a temporary fix for the box; however they are in need of a new one. The proceeds collected from the donation box will fund the zoo's operations; which include educational shows/activities. This project definitely supports the mission statement. It creates a way for the community to financially help support the zoo in educating and inspiring the community.

The project results are hopefully that a donation box will be created by the end of the semester. If we have not started building the product yet, we will leave a design of the product with all the details on dimensions/materials/cost which needs to be built by the future team. If the project is partially built, we will leave behind enough information (blueprints, design plan, etc.) so that it will be clear on how to finish it.

I think this project is not as technical intensive as others. It could require some technical aspects like sounds/graphics to make it more attractive. However I feel that most of this project requires imagination. The box itself has to be attractive on its own. We are trying to get people, most likely children, to donate money; therefore we need to attract them to the donation box. I feel that the project can be delivered at the latest by the end of this school year (May 2008)

The donation box is in the gift shop. If people are attracted to the donation box they might end in the store and buy something else. Besides our customer the people putting in money to the donation box are also affected. They might be more inclined to donate money if the box was more intriguing. This would definitely appeal more to young children.

The zoo director seems to have a vital interest in the project's success. She said that she really wanted a new safer box. She feels that this might be the most achievable and useful new project for the zoo.

The group's goals for the semester are to be able to come up with an imaginative, interesting design for the donation box. We want to be able to finalize the type of material for the box, what kind of animation/sound will be used, and the total cost of the box. We want to start building but if we cannot we want to leave behind enough information for the next group to start building