



ZOO – MID SEMESTER DESIGN REVIEW

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PRESENTATION AGENDA

- Projects
- Project Members
- Project Partner
- Donation Box
- Bird Call Interactive Kiosk

PROJECTS

- Donation Box
- Bird Call Interactive Kiosk
- Animal Enrichment Camera

PROJECT MEMBERS

David Herbert (Design Lead) – Donation Box

Manaa Altaibi (Project Partner Liason) – Donation Box

Kendrick Lau (Project Archivist) – Bird Call Box

Minli Lu (Financial Officer) – Bird Call Box

PROJECT PARTNER

Non-profit organization in West Lafayette

Mission: to encourage the appreciation of the world's wildlife, to enhance the preservation and conservation of biodiversity and to inspire educational discovery and exploration in a fun, family-oriented environment for all citizens of the Greater Lafayette Area.



DONATION BOX

CURRENT DESIGN

- Current design is based on the Plinko game from “Price is Right”
- Came back to Purdue EPICS to be refurbished and returned to the Zoo

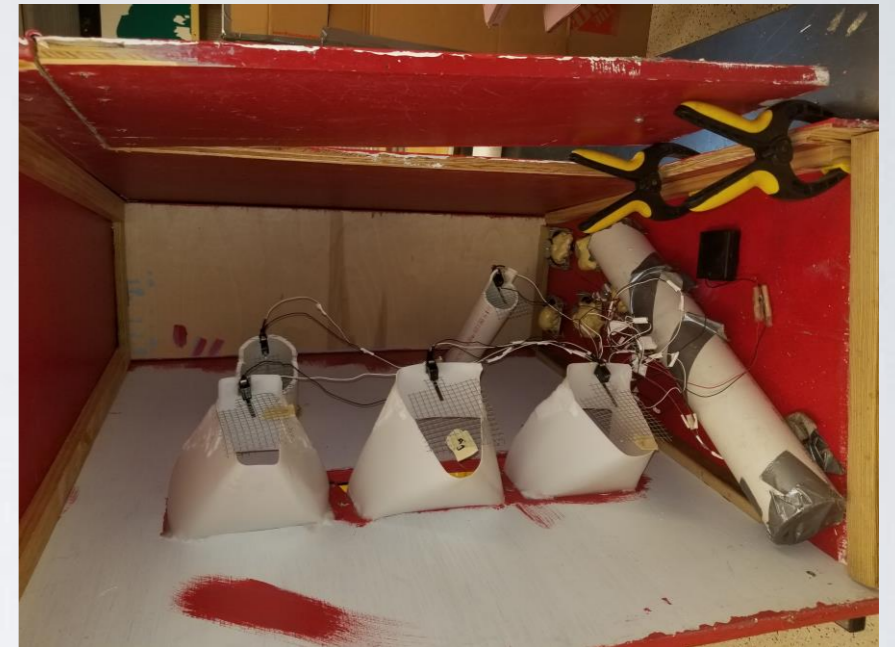


ISSUES

- Donation box base needed to be replaced
- Wheels not secured properly with lock washers
- Plexiglass needed to be tightly secured
- Electronics were not working
- Coins would get jammed in the slots

DONATION BOX PROGRESS

- Applied supports to the main body of donation box
- Patched holes
- Sanded and painted new base
- Discussed solution for Plinko game
- Taped electronics housing



DONATION BOX GOALS

- Reevaluate the Plinko game and come up with a new design
- Attach new casters and base
- Attach electronic housing to side of support
- Test game and final details
- Apply sealant to protect against moisture and temperature changes

BIRD CALL INTERACTIVE KIOSK

ISSUES

- Need to fabricate a new enclosure
- Power electronics need to be evaluated

PROGRESS

- Fixed hardware wiring setup
- Evaluated source code
- Reformatted corrupted SD card

INTERACTIVE BIRD GOALS

- Set up Arduino hardware system
- Waterproof box enclosure
- Compile concise documentation
- Draft a operation manual
- Test system with power electronics
- Brainstorm ideas for new enclosure

QUESTIONS?