Special Project Grant Application for the University Computer Club (UCC)

Guild SPG Application for Semester 2, 2020
Due: August 14, 2020, 11:59 PM
Club Name: The University Computer Club Inc
Club's Account Number: 4020504

Background

UCC owns and operates an internet-controlled Coke machine outside of its clubroom in Cameron Hall. Obtained by UCC in 1992 as a regular vending machine, and inspired by similar student clubs in the USA, the club members at the time set about connecting the machine to the Internet. Since then, it has dispensed more than 100,000 drinks and remains one-of-a-kind in Australia. Unfortunately, it has recently stopped cooling for an unknown reason and is in need of repair.

The machine is important to our club, serving three main purposes:
- As a drawcard for new members interested in computers and technology
- For students to learn and practice on a real-world embedded computing project
- As a fundraising source to allow the club to maintain and upgrade other computing infrastructure for members

Internet-connected embedded "smart" devices, now known as the Internet of Things, are an area of technology currently undergoing massive growth. As such, the ability to be involved with and learn from the development of such a project presents a valuable opportunity for students studying degrees in a computing-related field.

Proposal

We hope to use the grant to fund necessary repairs to bring the machine back to a working state and ensure its future operation. Alongside those repairs and into the future, we intend to run a series of events to demonstrate the technology involved in the machine, and to engage members with the hardware and software engineering involved. Our proposed steps are as follows:

1. Perform initial diagnosis of issue and determine a more detailed estimate of repair cost, consulting with those knowledgeable in the design of the machine.

2. Run event (#1) to showcase the technology and history of the machine, and introduce it to new members. This "tech talk" format is a proven formula for successful UCC events.
3. Conduct repairs. This may be as simple as replacing a single broken part, or require obtaining a more complicated quote and repair from a licensed refrigeration company.
4. Run event (#2) to present the working machine and explain the technical details involved in the repair, and how it relates to areas of future involvement for students.
5. Run subsequent events and projects with members that involve the machine's systems, encouraging students to learn more about embedded technology and allowing them to develop real, working software.

Budget

The budget required for the repair is potentially variable due to the unknown details of the required fix. As mentioned earlier in the proposal, it may involve the purchase of one or more new components, or work from a licensed specialist.

The events that can be run once the machine is returned to a working state will have no further costs, and as UCC educational events are usually free for all members, will not be anticipated to have any revenue.

Estimated cost of the repair:

(A) $500 - $1000 if the problem is due to the compressor unit. This estimate is based on current costs for like models; the precise cost will not be known until we identify the specific fault and part that needs replacement.

(B) If the machine has a problem that requires a quote/repair from a specialist company, UCC would seek to obtain quotes from several sources to ensure the cost is fair, reasonable, and remains within a similar budget.

If the amount proved infeasible to be covered solely with this SPG, the club would seek to fundraise the remaining balance from members and alumni.

We hope that this application is suitable for consideration for this round of Special Project grants and look forward to hearing the Societies' Council's thoughts on the project. Please don't hesitate to contact us should you wish to discuss or clarify any aspect of our proposal.

Regards,

James Arcus
President
The University Computer Club Inc