EE / CprE / SE 491 – sddec19-12

Campanile-Carillon Model Phase II

Jan 2019 – Dec 2019

Client: Dr. Tin-Shi Tam

Faculty Adviser: Dr. Gary Tuttle

Weekly Report 6

April 1 - April 5

Team Members

Ryan Roltgen – Software Engineering – Meeting Scribe

Sam Habel – Computer Engineering – Meeting Facilitator

Yicheng Hao – Electrical Engineering – Power Systems Lead

Gabriel Stackhouse – Software Engineering – Software Lead

Kienan Otto – Computer Engineering – Report Manager

Grant Mullen – Computer Engineering – Integration Manager

Weekly Summary

This week was devoted mostly to continuing the port of the program from Linux to Windows. Significant progress was made in replacing all the Linux-only libraries with Windows ones, and as of this week the program is building successfully in the Windows environment. Further work needs to be done to fix runtime-issues that still persist, but with the program running successfully, we believe that we're not far off from having it in a 100% working state. At that point we can resume the process of adding additional features to the program.

Further work was also done on the battery solution. A meeting with the Mechanical Engineering group was set up in order to get a further picture of the space constraints of the battery, and research was done on both the battery indicator solution and a custom PCB. Work on both of these fronts will continue in the following weeks.

Past Week Accomplishments

- Continued work on Windows port of the program - Gabe, Ryan, Kienan

- Set up meeting with Mech E group - Sam

Pending Issues

- Continued bugs arising from porting to new OS. Fixing incrementally.

Individual Contributions

Team Member	Contributions	Weekly Hours	Total Hours
Ryan	Worked on windows port and created some libraries not available on Windows to make our program work properly	6	37
Sam	Got in contact with the Mech E group working on the campanile project and set up a meeting for next week to discuss the project timeline. Reviewed code from the port.	4	29
Yicheng	Worked on simulate different battery indicator solution.	4	32
Gabe	Continued work on Windows port. Built upon Ryan's work to remove further Linux-only dependencies, replacing them with Windows code. Got the program to build successfully, albeit with runtime errors.	6	37
Kienan	Worked on the windows port and found and replaced windows incompatible libraries.	5	34
Grant	Found multiple possible devices for our message board. Planning on looking over with team next week.	4	31

Plans for the Upcoming Week

- Continue work on Windows port
- Look into options for the standalone program to be with the carillon model
- Meet with Mech E group to discuss project timeline
- Prototype the battery indicator and microcontroller on the breadboard