

EE/CprE/SE 491 WEEKLY REPORT 03

2/12/2026 – 2/26/2026

Group number: 6

Project title: CyVital

Client &/Advisor: Dr. Meng Lu

Team Members/Role: Kate Endersby, Claire Haas, Max Tanruther, Reza Choudhury

○ **Weekly Summary**

The software team made communicative code edits and assisted with meetings and the integration of the PCB with the software. The hardware team has worked on the 3D housing for the PCB. In addition, the team has identified datasheets to replicate the CyVital documentation on. The team met with the Senior Design staff and discussed objectives for the future and ways to improve on team dynamics.

○ **Past week accomplishments**

- Reza Choudhury: Modularized the code (locally), which includes breaking up tkGui into smaller categories. Once it reaches a satisfactory level, it will be pushed to the public GitHub repository. Made changes via GitHub issues to smaller items, but have been notified that the SW team will be moving to a more public system (public git) for future edits
- Claire Haas: Created Bill of Materials using the ETG template containing over 50 line items. Created detailed list of any discrepancies between PCB footprints and in-stock items as more supply chain issues arise. Coordinated with Max on vision for 3D model based on PCB connectors.
- Kate Endersby: Worked on creating a wiki for students to access to know how to operate the GUI and developing the GitHub. Worked on several bug fixes.
- Max Tanruther: Worked on the CAD design from dxf import

○ **Pending issues**

- Reza Choudhury: Lab manuals for sensor testing and next steps
- Claire Haas: May need to change the polarized capacitor footprints due to additional supply chain issues.
- The nonautomatic play has a problem where it needs the user to tap the graph before it actually starts playing
- Max Tanruher: Scaling the cad design to real size and making sure the design can be printed and machined

Individual contributions

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Reza Choudhury	<ul style="list-style-type: none">- API documentation- Blueprint and Brainstorm module splitting process	10	20
Claire Haas	<ul style="list-style-type: none">● Created ETG Bill of Materials● List of discrepancies/revisions necessary● Identifications of datasheets for technical writing	15	28
Kate Endersby	<ul style="list-style-type: none">● Wiki development● Code fixes including reset, export label, and no automatic play	12	32
Max Tanruther	Designing Case in CAD	17	28

○ **Comments and extended discussion**

- No longer need Analog to Digital MUX, so can change in code

○ **Plans for the upcoming week**

- Assemble the PCBs
- Print 3D case
- Claire Haas: Create a branch to merge multiplexer selection in GitHub

○ **Summary of weekly advisor meeting**

There are not many updates for this meeting, as the team waits for parts. Dr. Lu wants to machine the top and bottom of the case for the final version in aluminum in order to make things more durable.