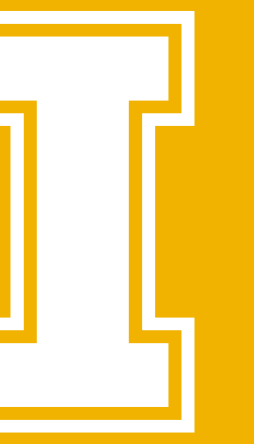


INDEPENDENTLY RAN RENEWABLE INTEGRATED SYSTEM



CHARLIE DIMKE, JASON FLOYD, KATHRYN WARNER

OBJECTIVE

Crosswalks are dangerous with speeding drivers; our team aims to make them safer by creating a lighting system that is:

- Clean
- Inexpensive
- Adaptable



KEY REQUIREMENTS

- I Transmit and Receive signals from juxtaposed units
- I Power a flashing LEDs light bar
- I Self-Powered Unit
- I Attach to multiple diameters of street poles and signposts

ACKNOWLEDGMENTS:

Lead Instructor: Brian Johnson

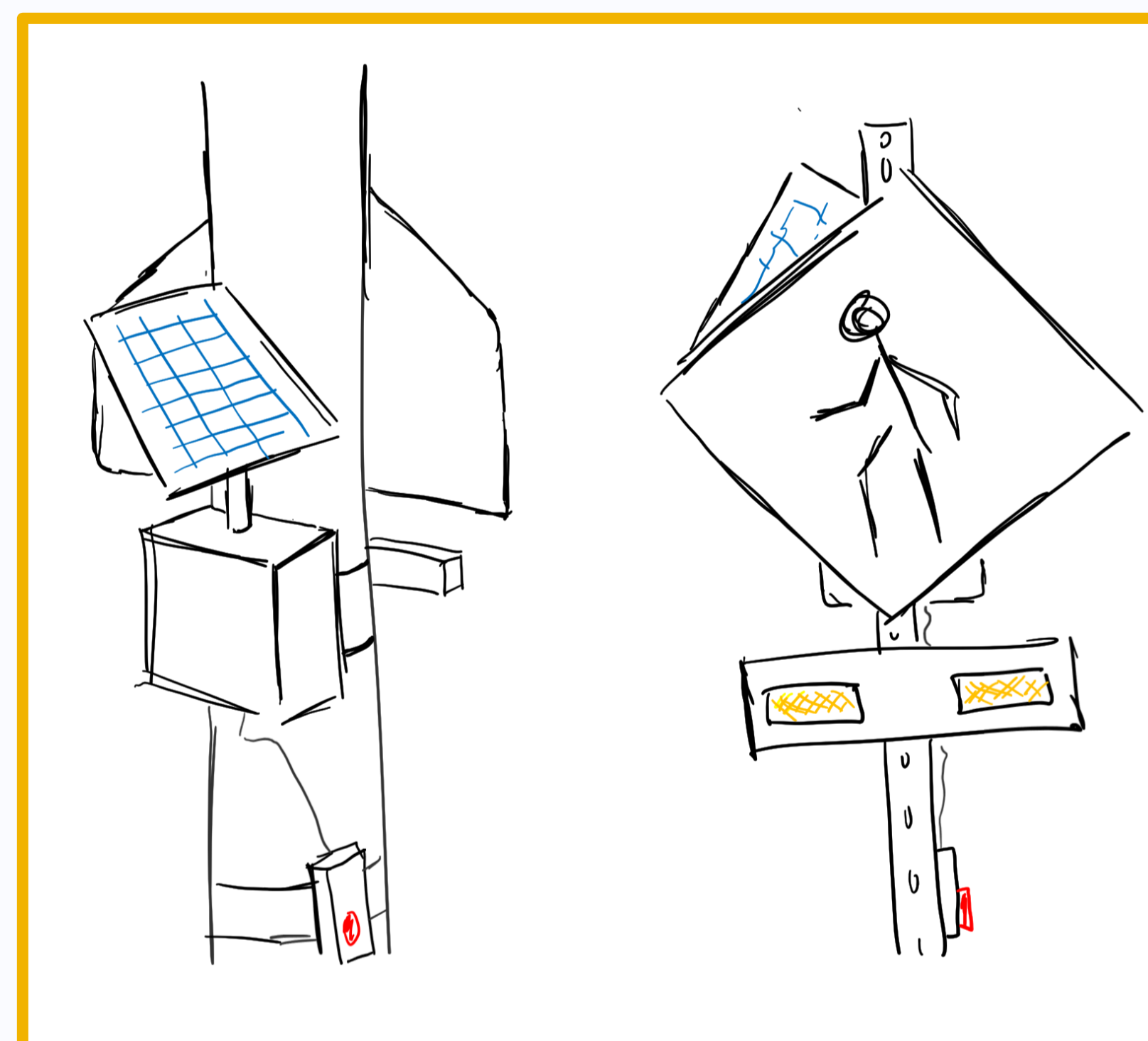
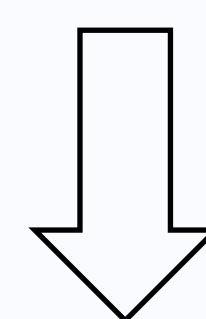
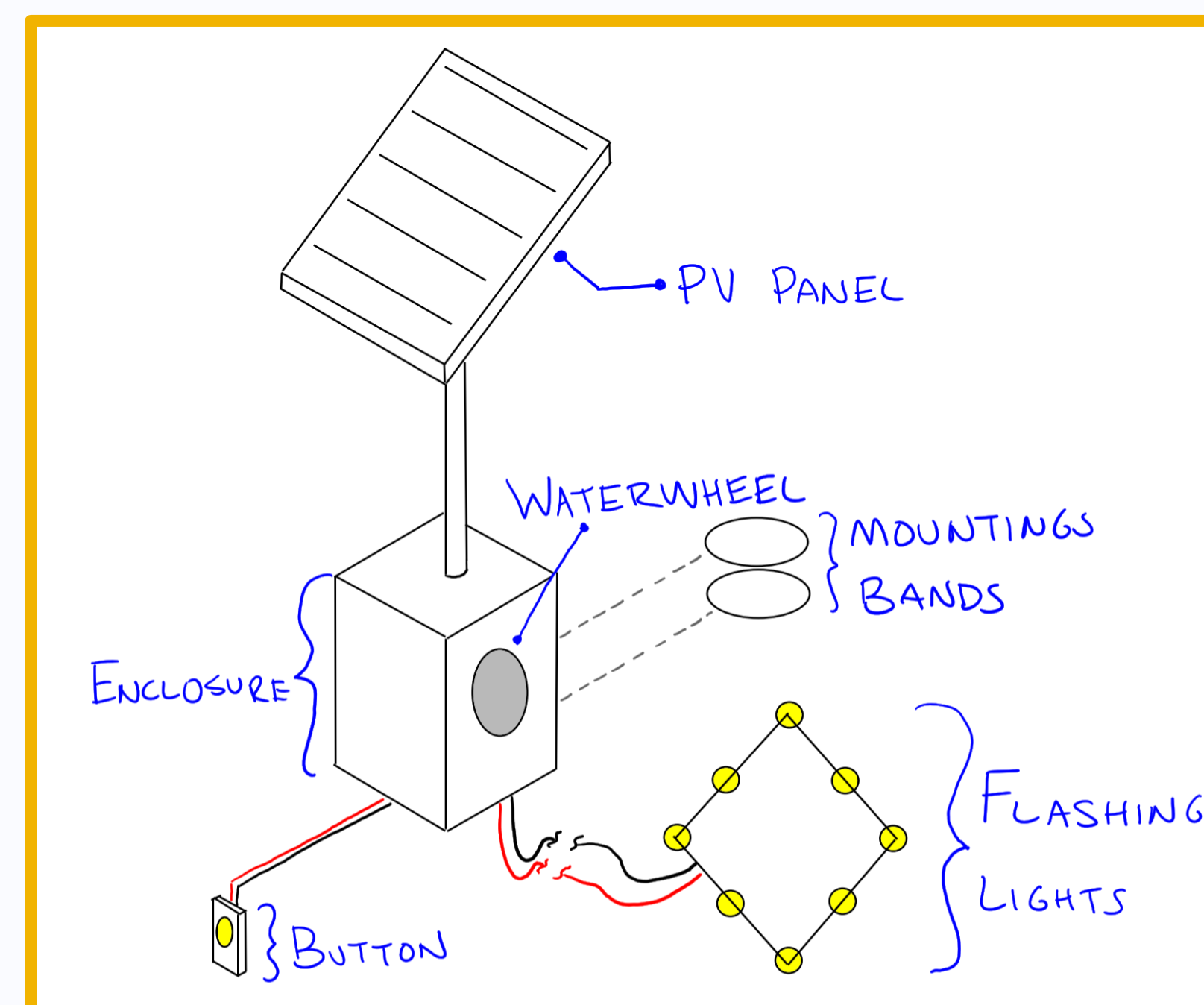
Mentors: Abdallah Smadi

Phillip Hagen

BACKGROUND

As students, we wanted to leave our mark on campus. What better way than making it a safer place!

CONCEPT DEVELOPMENT



VALUE PROPOSITION

- Cheaper than market alternatives
- No construction required
- Adaptable to different signpost sizes
- Efficient and inexpensive way to amplify crosswalk safety

FINAL DESIGN



VALIDATION

- Components tested for quality
- Wires upgraded for longevity
- Code tested on relay board before LEDs for streamline troubleshooting

CONCLUSION

- Prototype and proof of concept achieved
- Cost Effective
- Clean and Independent



LOOKING AHEAD

- Mechanical engineers to finalize design and weatherproof
- Electrical Engineers to create unique PCB
- Computer Engineers create communication protocols