



What is the HDU?

The Home Delivery Unit is a storage box that will protect delivered packages and groceries from theft and the outside elements.

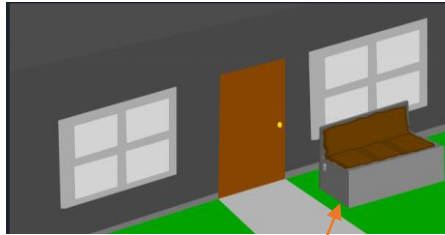
Problem

- 1.) Increase in deliveries, along with package theft due to COVID-19
- 2.) Grocery delivery spoilage
- 3.) No affordable / viable option

Solution

- 1.) Keeps delivered goods secure from burglary behind a password-protected electromagnetic lock
- 2.) Provides a refrigeration system & insulation to keep all delivered groceries fresh and away from the outside elements
- 3.) Low-cost, has multiple uses, and provides an option to turn refrigeration on/off for power saving purposes

Concept



A concept drawing of HDU placed onto a consumer's front lawn.

Value Proposition

- Rely on us for all delivery purposes
- Help reduce package theft
- Keep delivered packages secure behind password-protection
- Keep delivered groceries fresh & prevent spoilage



Goals & Ambitions

- Wi-Fi connectivity to work with a mobile app allowing control of lock & refrigeration away from device
- Allow a specific temperature value within HDU to be set
- Reinvent the physical design by adding cushioning
- Password change with no software update

Conclusion

- Learned invaluable lessons about teamwork and cooperation
- Knowing when to ask for assistance during debugging
- Hope to implement these new understandings into much a larger scale

Acknowledgment

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