Help Joule Case design an innovative portable battery system for people to use and store green energy.

What is a Joule Case?

In 2007, Alex Livingston and James Wagoner had a vision to improve the design of electric cars and invented a new and innovative battery system called Fuel 2.0™. They worked with European car manufacturers and received international recognition as leaders in Green Technology.

Now, they are working on the Joule Case, an advanced, energy dense, sustainable, and modular lithium battery. With this new Green Technology, they have a new vision to revolutionize the way we use power in our future Hybrid Homes™.
The Opportunity!

In 2019 and early 2020 many homes in Northern and Central California experienced total blackout power outages, that for some lasted up to two weeks! The Electrical Grid in the United States is owned by companies like PG&E and are solely responsible for powering millions of homes throughout California. If problems occur like the outages early this year, households must be ready to supply their own electricity, and the demand for personal power storage is rising.

Currently, there aren’t many good options. If you have solar panels, you are generating your own power, but you probably aren’t storing it, and the power you are storing is not portable. Most of the electricity is sent back to the grid, and companies like PG&E send it back to you when you need it. But, that doesn’t help if there are outages and you can’t use it when you want it! The Tesla Powerwall offers some storage capacity, but there is only one giant option, the $10,000 block. What about people that want a more customized, portable, or affordable option for their electric needs? Another option is to buy a diesel or gas powered generator, but they are loud and release pollutants into the air. What about the people that need electricity in places where the Electrical Grid doesn’t reach; places like remote campsites, or businesses that operate off-grid like Doctors without Borders? What about people that operate mobile businesses like food trucks?

There is an opportunity to help Joule Case invent a new environmentally friendly, portable, powerful, and user friendly battery system for people to store and use electricity whenever and wherever they need it.
### Your Objectives

- The battery system should give people the ability to choose how and when to use their electricity.
- Your team should design the user interface, look, and feel of the system.
- The battery system should be easy and safe to use.
- The battery system should have some capacity to connect with a power generation source and store power (Solar, Wind, Hydro, etc.).
- The battery system should be environmentally friendly and designed with the target customer in mind.

### The Constraints

- The battery system must use Joule's patented modular battery technology.
- The battery system must operate within the legal guidelines for generators or "off-grid" electrical systems.
- The battery system must be portable in some capacity (meaning able to be transported: lifted, stowed, or moved by the user.)
- The portable unit must weigh less than 80 pounds.
Final Deliverables

Product Design
Marketing Strategy
Competitive Analysis
Sales Strategy
Pricing and Finance

PORTFOLIO PIECES

Product Rendering & Business Plan