

Now that you have analyzed a problem, proposed and refined a solution, and developed a pitch for your idea, you will create a Technical Brief describing your product and the process you used to find a solution.

### **PART 1.**

Briefly describe your solution and how it solves the problem or challenge you identified.

### **PART 2.**

Describe the mathematics, science, and engineering you researched to design your product. Include links to websites or other resources you used.

### **PART 3.**

Describe the decisions you made to choose your design and the challenges you had to overcome.

### **PART 4.**

How did developing your Key Business Proposition and related Business Models affect your process?

### **PART 5.**

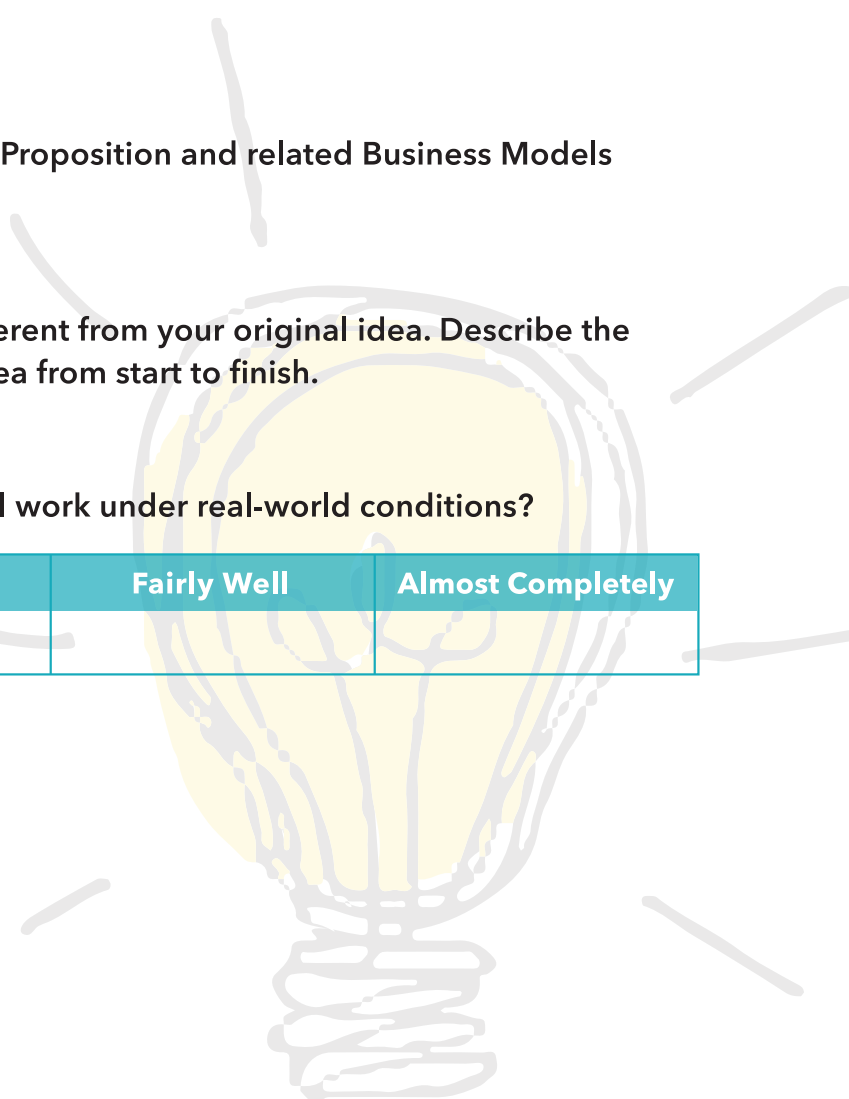
Your final solution probably looked different from your original idea. Describe the process for how you developed your idea from start to finish.

### **PART 6.**

How well do you think your solution will work under real-world conditions?

Just a little	Somewhat	Fairly Well	Almost Completely

Explain your reasoning.



### PART 7.

Fully describe your Power Me Up solution based on the questions below.

- A. How much does it cost to charge an electric vehicle at your charging station?
  - a. Use calculations to show that the cost to charge an electric vehicle at your charging station is close to the cost to refuel a gas-only vehicle at a gas station.
  - b. Show how the costs (gas vs. electric) differ per mile for a typical gas station.
- B. How does your company charge electric vehicles?
  - a. Explain where the electricity comes from.
  - b. Explain how the electricity will be stored at the station.
  - c. Explain how the electricity will be delivered to the station.
- C. Where will your charging stations be located?
  - a. **Show on a map where you plan to build your charging stations and explain how you chose those locations.**
  - b. **Describe the region where you plan to start your company and why you chose that area.**
- D. How will your company make driving and charging an electric vehicle more convenient for customers?
  - a. Describe why your company is more convenient than current charging and refueling options. Be sure to justify any statements you make.
  - b. Describe how your company meets the needs of customers who drive electric vehicles. If you asked customers, describe the questions you asked and how customers responded.
- E. How will your company make money?
  - a. Explain how your company will make money using the business model you selected. Use calculations to support your claims.
  - b. Show that your company will make enough money to cover all expenses. Use calculations to support your claims.