

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 Building Algorithms solution based on the questions below.

- A. What does your algorithm do?
  - a. Include a description that will allow others to test your algorithm.
  - b. Represent your algorithm as an algebraic expression. Explain the meaning of each coefficient, term, and variable in your algorithm.
- B. How does your algorithm work?
  - a. Describe the variables you used in your algorithm and how you decided on the weights for each variable.
  - b. Explain how your algorithm determines a rating or ranking.
  - c. Show how you would use your algorithm to calculate a rate or rank.
  - d. Include a spreadsheet showing the ratings or rankings for at least 10 things in the category you care about.
- C. How will your company make money?
  - a. Describe the business plan you will use for this company.
  - b. Show, using calculations, that your company will make money.
- D. What are the limitations of your algorithm?
  - a. Describe what your algorithm does well.
  - b. Describe what your algorithm does **not** do well.
  - c. Describe any extra information would you want to find a way to use in your algorithm.
  - d. Explain why you didn't include this information in your algorithm.