

Product Description

1. **Team members**
2. **Team name**
3. **What *user problem* is your product/device trying to solve?**

NOTE: The “user” may be a potential customer (a human). The user might also be another device if your end result will be installed in something larger. For example, you may be building a component for a cube satellite project.

4. **Who needs this? Who will benefit from this?**

This is not a one-word answer. Briefly characterize the user or system that will benefit from your end product.

5. **What capabilities does your product/device provide that are not available without this?**

In other words, list the important features (functions) in terms of capabilities. Simply said, what can the user or some system *do* with this? For example:

- A rock band can use a phone to program distortion and speaker controls and switch from one setting to the next during a performance by using a foot pedal. This permits a smoother performance with less time required for setup between songs.
- Or, a person who wears a “solar smart shirt” can charge a phone or mp3 player when outside. This user is not an engineer or otherwise technically savvy.
- Or, wearing a special glove and using hand and finger motions that mimic desired helicopter movements, an older teenager or adult can remotely control a toy helicopter’s speed, direction, and yaw.

6. **What are the top *project* risks you perceive at this time?**

State the risks that are quite *possible* and would have a seriously negative impact on your *project’s* success. Later on, we’ll ask you to devise a plan to mitigate (reduce the impact of) those risks plus additional ones you perceive later. For now, just state them.

- For example, during testing, a team member may be injured by our quadcopter.
- Or, during testing, our helicopter may crash and destroy the components we built.
- Or, only one person on the helicopter project team understands the software. This constitutes a “single point of failure”. That person might need to leave school for personal reasons.
- Or, our project depends on a particular type of affordable component that we are unable to find. We learn this at a point when it is too late to build our own.
- Or, we may order certain important parts based on the manufacturer’s spec and discover too late that they do not perform according to specification.
- Or, we design a product using a key component. The manufacturer has announced a particular availability date for the latest version which has features we require. The manufacturer revises that date to third quarter, 2014, i.e. after semester's end.
- Or, A team member says s/he is on schedule for developing a particular component but the team discovers at the deadline that it does not work or, worse, does not exist.