

DRAFT

1. Project title: Body Impact Responsive Device (B.I.R.D)
Working on a title... Maybe something like: Body Impact Responsive Device (B.I.R.D) for short.

2. Team members:

- Ryan Hoffman
- Nick Bender
- Hua-Pei Yen

3. One paragraph “elevator pitch.” What is the big idea of your project? Why is it important? (Obviously your ideas about the project will develop over time, but you should be thinking about this already.)

Does it hurt when a 12 year old karate kicks you in the gut? Well then maybe you should have worn pads! Or better yet, what if you had a way of knowing exactly how hard that kick was and if it were a few inches to the left it could have broken a rib. Maybe you want to know exactly how hard your partner is hitting and if you are blocking correctly. Analyzing where and how hard you were hit provides more information to fighters and athletes in general.

4. One paragraph research plan. Who will you talk to in order to understand the problem? What criteria will you use to evaluate your work?

Asking muai thai fighters, talking to football players and lacrosse players. High contact sports are interesting where analytics don't exist. The best that can be done now in terms of tracking impact is asking the player how they feel and sometimes whats in a helmet. Expanding that data collection and improving how athletes compete in their sports. Between injury detection, and

5. Initial sketches. Sketch out some ideas for your project on paper.

Think just the same as a base layer shirt and pants, or in padding an athlete might wear.

6. Collaboration plan. You should discuss with your partners how you will manage the group project. Write up an initial collaboration plan here. You should address the following topics (and whatever else you think is relevant):

1. When and where will you meet to work on the project? What will you do if a meeting needs to be rescheduled? Who will handle scheduling?
2. What tools will you use to communicate about the project and share your work? Who will set them up and manage them?
3. How will you handle accountability for the project? How will you ensure that everyone contributes to the project? How will you address a situation when someone is unable/unwilling to complete their assigned work so that you can still turn in your work by the deadline?