

**Team:**

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url: <https://vivian-b.github.io/proxyU/index.html>

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## **ProxyU**

### **Prototype Progress Report :**

By definition, a prototype is a preliminary representation of the core ideas of a final product. It is the element that bridges the gap between impalpable, unquantifiable thoughts or ideas and tangible, working machines or artifacts through understanding and improvement.

The way by which a prototype archives such feats is first and most importantly validating the basic plausibility and functionality of those ideas; the concept needs to be something that can be realistically created/archived given the specific circumstance of the project, be it technical limitations, budget, resources, or other shortcomings outside the designer's control. If an idea cannot pass this phase, then it is more of a fantasy than a concept for a prototype. So far, our project, ProxyU, is still in a difficult phase. We were able to find the right materials/components to realize our project's ideas through feedback. While the interaction between the two artifacts works, thanks to particle argon and their cloud interactions (subscribe/publish feature), the main part of our project is still under testing: the geolocation and distance calculation).

A prototype will help further our understanding of the concept and its functionality by bringing forward previously obscured concerns, difficulties and problems. One cannot possibly foresee every single aspect of a concept, even when a plan is carefully laid out step by step on paper with everything imaginable accounted for. There is bound to be more details showing up during the physical realization of the concept. For us, this

aspect mostly manifested as various more drastic problems in the form of impractical designs that warranted reconsideration. Likewise, the targeted size of the device was reconsidered multiple times due to our expanding knowledge of what components are needed, how big they are, how we could organize things around and what can be used as a substitute. Another example can be the replacement of the entire aspect of button controls by other sensors, most notably motion sensors for activation due to the hurdles that come with integrating buttons into the build. Accordingly, new sensors brought along new affordances, specifically they would allow the user to interact with the device more naturally. Instead of using one hand to wear it and one hand to “operate” the device, the device now can be operated through one simple motion of one hand (shaking) via a tilt sensor. In return, more efficient communication of the device’s feedback will be enabled by the use of light sensors, allowing more operation time and more interactions.

These types of remarks may or may not always be a concern or problem that requires fixing or redesign, but they are always worthy of being noted down as learning and feedback is the most important goal of a prototype.

Which brings us to the final step, the most influential aspect of a prototype is how our knowledge of it single handedly affects every other iterations of machines of the same concept based on it. With a working prototype, it can serve as a base for refinement, especially after discovering its shortcomings during step two; a template for further expansions, or maybe even a change of course in the initial concepts. As of right now, our prototype is low fidelity given a variety of reasons, as such it is still a bit early for considering its ability to communicate further development of the concept and much less to advocate for it. But on the other hand, We do not believe that the initial intention of our project changed over the course, in fact we believe it has been even more firmly planted due to all the extra information we have gathered and have been taught. They positively reinforced our trust in the abilities of machines and electronics to communicate our messages even more effectively.