**Mood Board:** This device will thrive through the characteristics of it being portable and quick to access, which is vital to the target audience, durable, which is also important for part of its functionality and outdoor use, intuitive to use and not overcomplicating things for the user, and its ability to provide face and accurate calculations.

### Portability / Not Large / Quick Access









# Durability











## Easy / Intuitive to Use



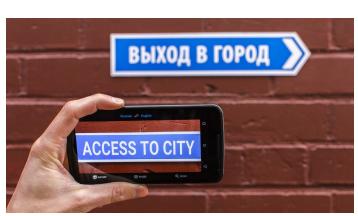






#### **Accurate / Fast Calculation**



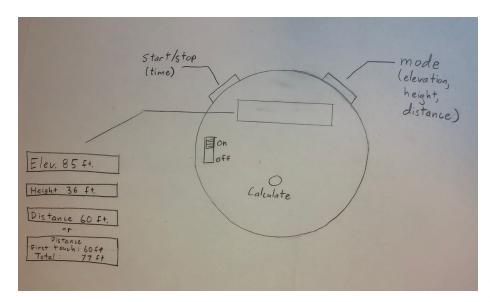






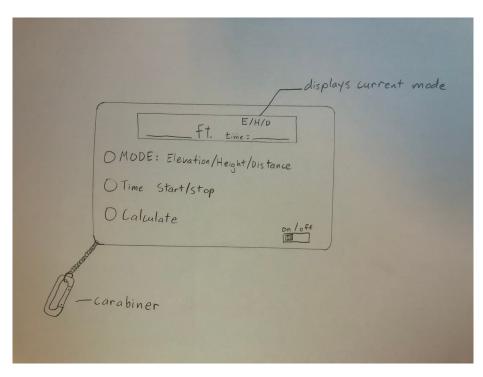


#### Aesthetic Concepts for "How High am I?+"

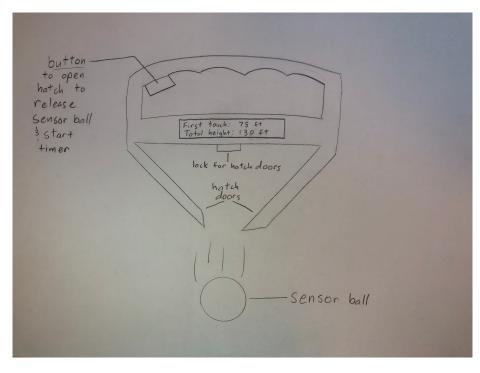


Concept 1: Spherical-This design is the initial idea for this gadget, specializing in a button to start and stop the timer, and then a button to calculate for the variable. Another button is conveniently placed on the top so the user can distinguish between which variable he wishes to know. The

last display example is an example of what it might look like if the item is capable of measuring the first time the item hits ground after being launched as compared to its final resting spot (total distance).

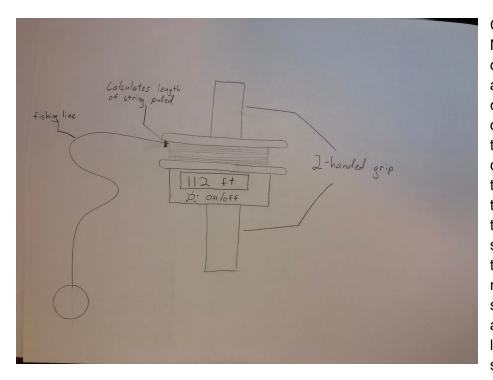


Concept 2: Attachable-This design concept keeps all of the same capabilities as the previous model, but is designed in more of a standard flat, rectangular form. The main function of this design is the carabiner, which will allow for easy carrying on a keychain or belt loop and easy access to the item while hiking/climbing etc.



Concept 3: Handle with hatch- This design is unique in that it houses a sensory ball in the main section of it. Upon pushing the button on the ergonomically-friendly handle, the hatch doors will open, releasing the ball. Once the ball comes in contact with the ground, it will send a signal to the main device, displaying the distance, then it will send another signal once it reaches its final

resting place to show the total distance travelled.



Concept 4: Physical Measurement- This design takes yet another approach to calculating the height of the user. Rather than using calculations based on time, the user throws the ball attached to the line and as the string is pulled from the reel, the sensor notes how much of the string has been pulled and displays the length/distance on the screen. It also sports a 2-handed grip so

that the user does not lose control of it when the ball is falling through the air.

#### **Concept Summary**

Overall, a design which includes a carabiner or other wearable aspect will be extremely beneficial to the user so that they do not drop the item on their journey, nor will it fall out of their pockets because it is attached. Some foreseeable challenges are programming the device to discern when exactly the first contact happens with the ground and the specifics of what sort of information the sensory ball would send back to the main device. As a whole, the smaller and more portable the item is, the more likely someone is going to be able to use it, so having 2 hand grips may not be extremely user-friendly for example.