ART385 Design Document for Interaction Design

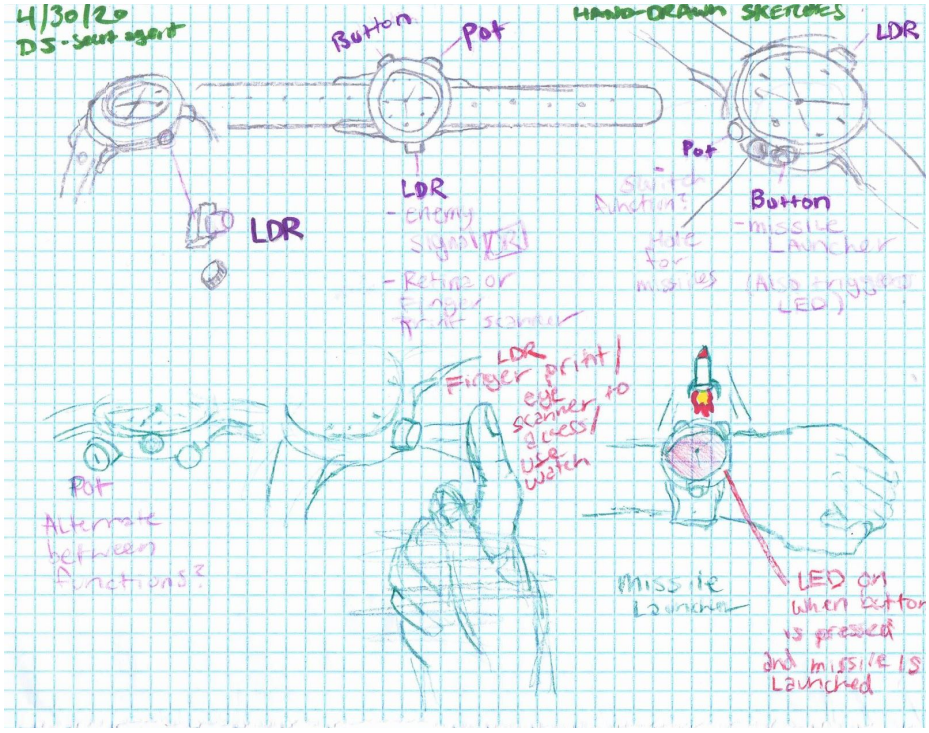
Document Info
DJ, ART385, Project 3 Secret Agent, Due May 12, 2020

A 2-paragraph summary of the Imaginary Prototype
This is an imaginary prototype for a secret agent gadget disguised as an average citizen watch. This gadget can be used for special-ops missions or self-defense. This watch is able to launch miniature missiles, spikes, a grappling hook, and make phone calls. It also has identity verification utilizing a fingerprint scanner to access the secret agent functions.

The ESP32 acts as an imaginary vessel of the watch, where the LDR is the fingerprint scanner, and the button sets off the four different secret agent functions of the watch. With more time I also would have made the potentiometer control which mode you were in, whether it be missiles, spikes, grappling hook, or phone call. In theory, these facets would be implemented into the actual gadget and the processing sketch would be a real-life scenario, but this is the prototype version.

A 1-paragraph brief explaining the target audience and intended interaction (e.g. passive, interactive, surveillance, intrusive)
My intended audience is secret agents that will need this gadget for special missions. This is an interactive prototype, that needs activation for its intended functions to work. Hopefully, secret agents all over the world can utilize this gadget to successfully complete dangerous missions and take out bad guys.

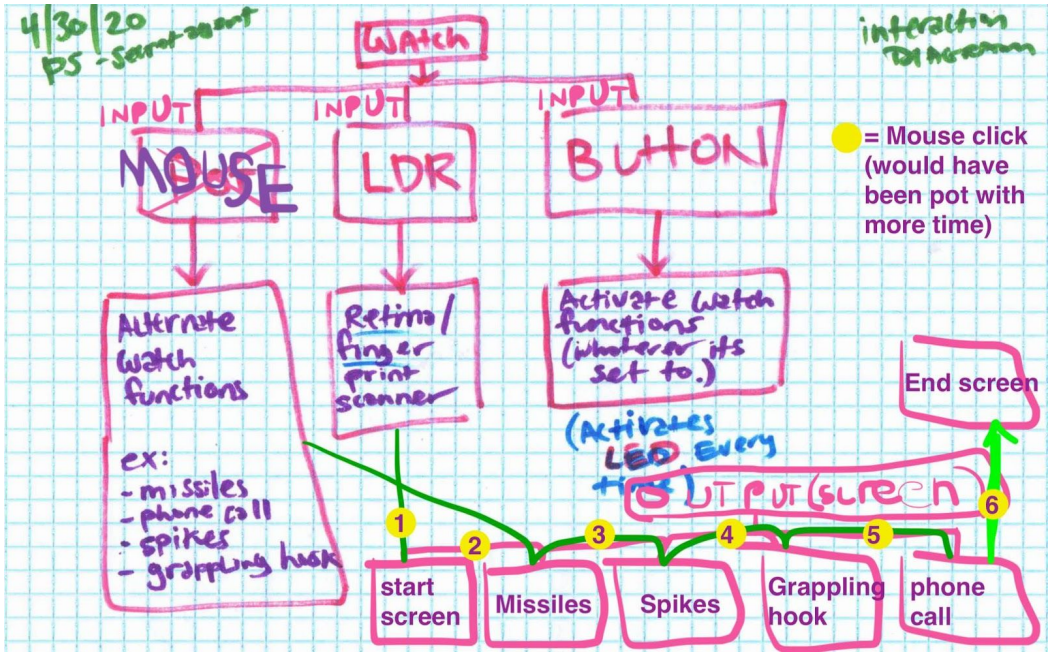
A hand-drawn sketch of the imaginary prototype



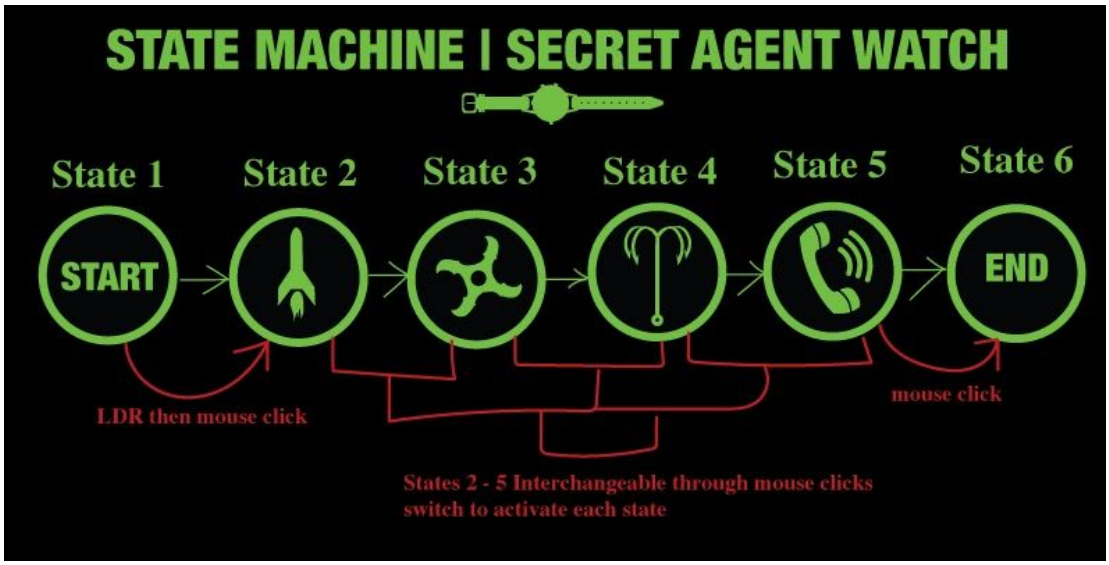
An overview of why you have chosen the aesthetic approach for the work that interfaces with the audience.

I have chosen the aesthetic of the processing sketch because I believe it fits with the secret agent vibe. I believe the high-tech black background with neon green accents and a touch of red gives off a top-secret and important aura. As for the aesthetic of the ESP32 and the switch, LDR situation, I believe its clean, simple, and gets the job done. It makes it so that the secret agent can quickly act accordingly based on their needs.

A hand-drawn interaction map that diagrams the inputs (electronics, mouse, keyboard) and the outputs (electronics and screen)



A state machine diagram that shows at least three states



Discuss the ways in which a real-life prototype could be implemented
Again, something similar to the LDR and switch could easily be fastened to an average-looking watch. As for the logistics on how to fit a dozen miniature missiles, spikes, a grappling hook, and telephone communication, I leave that up to the engineers. Although there would still be much prototyping and development left to make this watch a reality, this is just the seeds planted.