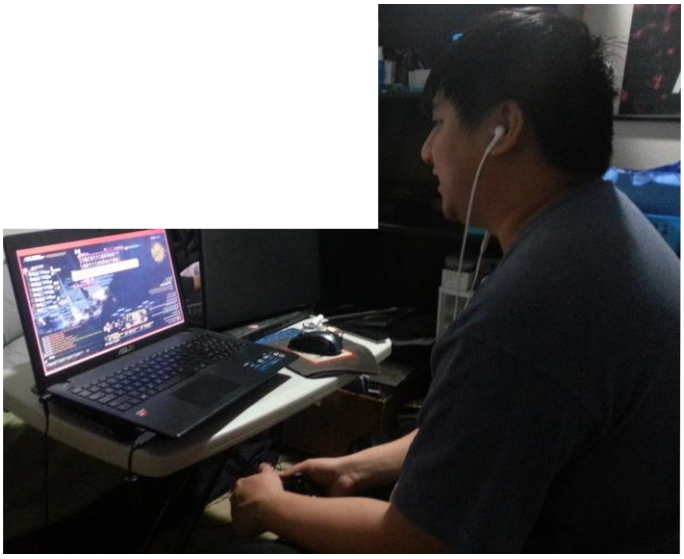
Project 3: Collection and Analysis of Photographic Data

We often associate a lack of cognitive activity with a seemingly routine motion of playing a video game, but even some of the least action demanding activities may involve extreme computational complexity. Here, I analyze JT playing the online game Final Fantasy 14 on a laptop utilizing a controller.

A1:



Within this first image, A1, we see JT sitting in a slight hunch position on the bedside with a folding table holding his laptop at about a few inches above his lap. JT sits aligned with the table with the laptop facing him at a slight askew angle with the screen at obtusely facing him. His gaze is fixated onto the laptop screen displaying the game, slightly tilted to the right facing his body head on. JT holds the controller with both hands while playing without the use of the keyboard embedded within the laptop. He talks into the small rectangular microphone attached to his white earphones a few inches below his right ear.

B1:

In this second image, B1, we have a segmented snapshot of the User Interface displayed on JT's laptop as he is playing the game. In B1, we have a series of icons divided in the center creating two

groups of eight icons showing us all the different allocated skills, and is further segmented by this plus like shape creating groups of four within the two larger groups left and right. The “SET 5” gives feedback that the current skill bar is the fifth out of eight and the acronyms L2, R2 and R1 represent physical buttons on the controller that highlight either half of the skill bar, or change it completely. Below this skill bar shows a green bar representing the amount of health JT’s character has, a pink bar representing the amount of magic points, and the yellow bar showing the amount of tactical points. Each number value attached is the specific amount currently for each status, and the letters tacked are the acronyms for each representation (Health Points, Magic Points, and Tactic Points) respectively.

As JT plays this game, his attention, memory, and dexterity all come into play to deal with a computationally complex scenario in managing both his actual body and his character within the virtual world. In the first image, we see JT’s overall body posture facing towards the game screen, yet there is no indication of focus onto the controller even though the controller is what is used to communicate with this virtual world. Of course, the controller’s layout could be stored in memory due to the extreme ergonomic nature embedded with this relatively unchanging design throughout many iterations of its history. In light of this, perhaps the content displayed to JT as he is playing acts as multiple dynamic and interactive virtual inscriptions that provide immediate visual feedback as he constantly reorients his hands in relation with the controller. Bringing Goodwin’s practices of acting with coding schemes, in this case the design of the controller in relation to virtual actions, we can explain JT’s behavior of being fixated on the screen in the first image as his practice in knowing the expected visual feedback on the screen from tilting the left control stick on the controller (Goodwin 1994: 609). JT makes sense of the causal relationship between visual and physical action because of his experience by categorizing controller actions into virtual movements allowing him to attend to what is only on what's on the screen.

Further analyzing JT’s intensive focus fixated on the game, we zoom into a large salient object towards the bottom of the screen. The skill-bar in B1 gives us a glimpse of the spatial organization set by the of icons completely customized by the user which represent set actions within the virtual world. Scott Klemmer provides this notion of mental model versus actual model. A mental model is the visualization of how something works in the real world, and the actual model is the physical object itself (Klemmer 2015: Lecture). JT’s cognitive activity lies within him having the correct understanding of the design structured for interacting with the game using his controller, and his quick dexterity stems from this match between gestures on the controller plus the feedback displayed on the screen. We see in B1 this clear one to one correspondence between the layout of each icon and the layout of the controller JT is holding in A1, which allows JT to solely focus on the screen because of this natural arrangement of segmented plus sign shapes in lieu of the controller compared to just a rows of icons. The inherent design of artifacts, both physical and virtual, facilitates JT’s cognitive activity by directing his attention during the game.

Works Cited:

Klemmer, S. (2015). Cognition and Design [Powerpoint slides]. Retrieved from http://d.ucsd.edu/class/intro-hci/2015/lectures/HCI-05-1-Cognition.pdf