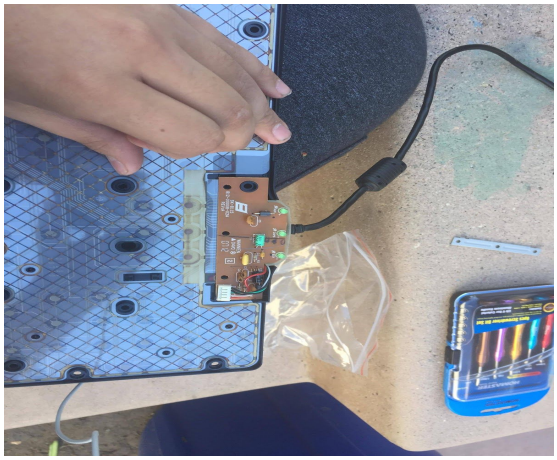
Team 8301A

Texas Instruments Challenge

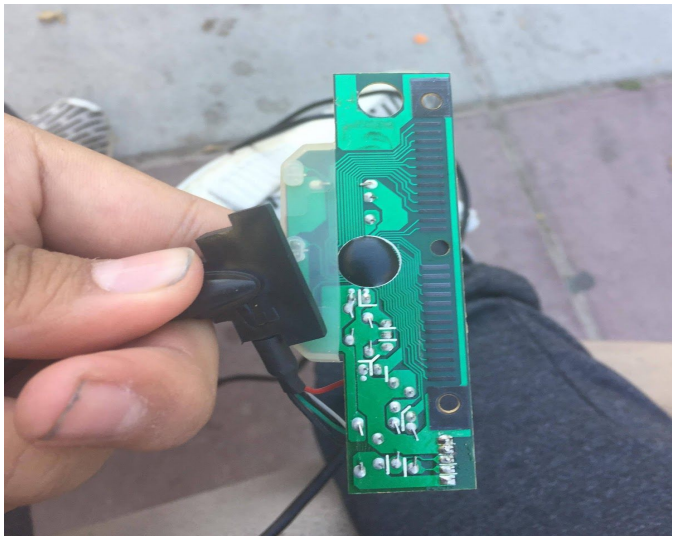
The item demonstrated in the photos is a DELL Keyboard. The DELL keyboard contains a variety of components. As such, it was chosen because we thought that the keyboard is only a necessary component of communicating in a different kind of language from which our perspective we might not understand but the computer does. It is a whole other way of being able to communicate to something other than us humans having the ability to. Some of the components we found inside of the DELL keyboard was first of all the hinge caps. The Hinge Caps are the main source in which identify different alphabets that used to type any word. In other words, the Hinge caps identify the basic alphabet to help create from words to messages. Not only does it help us read but every time a hinge cap is pressed an immediate message is transferred to the computer where it initiates its command. Near the top trim of the keyboard's hinge caps, the bottom panel is like a shelf in which it holds the hinge caps in place. The bottom panel contains a silver plate with a transparent plastic that comes in contact with the hinge caps every time one is applied pressure onto. The plastic not only is a protection but its main function is to detect whether the letters that are pressed so that it can transfer the coding into the insertion. Onto the plastic transparent part of the keyboard in the middle is located a green rectangular which contains three small LEDs that start light up when the hinge caps "Num lock", "caps lock", and "scroll lock" were activated. Meanwhile, along with a side of the LEDs, there is a cable located under and which holds transfers electrical signals within to carry it all the way to the computer's USB port. As we were taking it apart from the DELL keyboard the components inside had all been in contact. The way it was organized was to commute to the computer. Then we are able to read and send messages. For example, the key hinges have plastic bases which come in direct contact with the 3 layers to form an electrical connection. Covered with electrical metal tracks the hinge key is pressed and the contact is being transferred. Then the electrical signal gets sent to the LED's to initiate its activation meanwhile another road is being electrical signal is being sent to the computer. The lessons we learned from this experiment was how there are many aspects of complexity that the keyboard has to communicate to the computer. Just as people try to communicate to others, the keyboard is able to compose of either verbal or psychical communication with the computers. Although we as people have a complex understanding of languages so does the computer when we are typing. We communicate with a computer through what we understand to get an outcome of what we expect. But the computers transform it and send out their assumption.

DELL Keyboard's Hinge Caps, the squared alphabets whose main function is to transform, understand and communicate to the computer in order to activate any command.

The plastic transparent DELL Keyboard sensitivity conductor, it transfers the information. It's like a channel gathering information and transforming it for the computer to activate.



Bottom platform working as a shelf to withstand the layers of each part in the keyboard, in order for it to conduct and baggage information.



LED's is part of the DELL keyboards component whose job is to compact the information and send it to the computer in order to start.