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Determining Position By Interfacing A GPS To The Web

The goal of this project is to interface a GPS module to a PC and then display the current location's coordinates. This required selecting a GPS module, designing a circuit board using a microprocessor to direct the module's data to an USB interface, creating a printed circuit board, programming the microprocessor, and developing a hosted website using Google Maps to display the GPS's location. The Tyco A1035-C GPS Antenna module, which received information such as position, velocity, and time, was implemented on the board. To use the GPS, the circuit board was designed using Eagle Layout Editor. Once the board was designed, the components were soldered onto the board. Next, the board was programmed so the information from the GPS would be passed directly from it, through the microprocessor, and then through the USB to the PC. Tyco's GPS Cockpit was then used to easily display this information. A hosted website was built to show the location of the GPS using Google Maps. The circuit board was successful in passing the information from the GPS through the USB to GPS Cockpit where the data was displayed. The Google Maps webpage simulation was also successful, allowing the user to enter a set of coordinates that were then displayed on Google Maps. This device would be useful when property, such as a car, is stolen or when someone goes hiking and could be found by search and rescue. This device would be tracked on Google Maps so that officials could easily find the criminal or lost person.