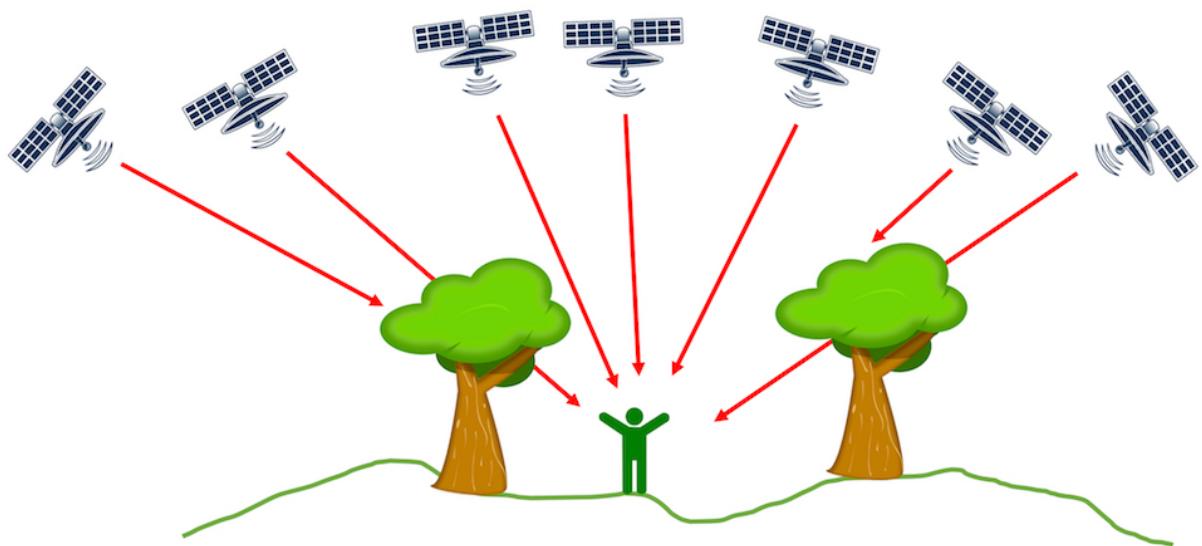


# OFFLINE GPS TRACKING

The Global Positioning System (GPS) has now become a widely used aid to navigation and it is commonly used in many navigational applications such as land surveying, shipping, piloting, route guidance, map making, study of earthquakes, precise time reference, and hobbies and games such as geocaching. One of the problems with the early GPS system was its low accuracy which prevented it to be used in applications requiring high accuracy, such as piloting and street-level route guidance. With the recent introduction of the sophisticated error correction techniques such as the WAAS/EGNOS, the horizontal accuracy of a GPS system is nowadays around 10 m. This prototype describes the design of a microcontroller based GPS data logger device with USB storage and Google Map mapping interface. The device collects the user co-ordinates in a file on an USB Storage device, and then the Google Map software is used to draw the track of the user on a street-level map.

Data logging is the process where a physical quantity such as the temperature, pressure, force, voltage, etc. are captured continuously at pre-defined intervals and then stored on some form of storage device, usually for future analysis. Variables captured and stored in data logging applications happen in real-time and change over time. Various data logging techniques are used in many fields of science, engineering, medicine, and health care. GPS data loggers are commonly used in tracking the movements of people, objects, or animals.



# Report

Basically what this prototype does is when the user carries this device it records the geolocation of the user and stores as a data in USB Storage(Pen-Drive, etc) then this data is imported into Google Earth. Then Google Earth outputs the path followed by the user. Hence there is clearly there is no need of any means of communication such as cellular network, Wi-Fi ,etc.

