Narrative

* Problem Analysed

The biggest problem is very difficult to tracks satellites, sometimes I can find the satellite when I use u-centre which is a Windows software, it can track the satellite and measure it by chart or table method.

I did some research about how to use u-centre

<https://www.u-blox.com/sites/default/files/u-center_UserGuide_%28UBX-13005250%29.pdf>

<https://www.youtube.com/watch?v=uJZHVKGrl6Y>

* Project design

The component lists

1. NEO-7M GPS module
2. 1575.42MHz Frequency antenna
3. 4\*AA Batteries
4. LED screen

In this project, I made a GPS tracker which can record the location and time.

Neo-7m easy to use GPS easy to use with a PC as it has the standard TTL TX and RX pins for use with the Arduino, also it has an onboard ceramic antenna attached to rear of module

supply voltage: 3.3 to 5 VDC (or by USB cable)

default baud rate: 9600 band

* Hardware choice

I bought the GPS module from TradeMe.

The NEO-7 series of standalone GNSS modules is built on the exceptional performance of the u-blox 7 GNSS (GPS, GLONASS, QZSS and SBAS) engine. The NEO-7 series delivers high sensitivity and minimal acquisition times

* Insights

I bought the GPS module is NEO-7m, actually it has an antenna on the board, however, it not enough to receive the satellite, after I got the antenna and link it to GPS module it can receive signal anywhere, it awesome.

After I confirm the GPS module work well, I found I need a SD card to save the tracker data, however, I do not have this…, so I change my mind that I want to link a LED screen in the breadboard which can show the location.

However, the LED screen does not work, I think my code is ok and the wire in the correct position. I will ask Vaughn when we meet again.

The next step, I will to buy a SD card reader module from somewhere and try to use it with my daughter.