GPS PROJECT:

BASIC METHODS:

1.Normal gps method.

2.a.Indoor positioning system:

- using device's wifi signal strength to locate the object within 100cms.

-a normal mobile with wifi feature can be used.

-the signal strength detetected is used to calcculate the distance from wifi access point.

2.b.wifi-networking chip:

-The chip can be used with gps for internal measurement.

-The future connections of device to new access points is automatically detected.

3.Near field of transmitter:

-This doesnt use signal strength of connected device.

-It also doesnt use the time taken by data to be sent or received.

-It is basd on the fact that at frequencies of 1Mhz ,the receiver operates in the near field of tranmitter.

-The multiple paths to locate is avoided and the direct path is achieved.

-it is a function of the distance from thevtransmittinf antenna.

4.Radio wave burst:

-Can be combined with any of the above 3.

-It is used to locate devices within 4cm range.

-The main advantage is that it is not affected by the surface reflection or absorption of signals.

-It can be done by altering the radio frequency of the object for a short span of time, to emit a suddent erratic increase in frequency,lasting for a few milliseconds.

-This change and its location can be determined by any station.

Features to be included:

1.Individual bus tracking and its stoppage and running time.

In case of emergency,

2.Determining alternative routes .

3.Traffic analysis possible if location of near by vehicles and device connectivity data is available.

4.Information and location notification to hospitals,mechanics,other bus drivers and college.

5.Creating a dashboard for guest and frequent users to keep track of their data.Travel history log and Route playback.

6.Can be integrated with vehicle management systems,student portfolio etc.