We have a 3D fat client interface for rendering the location of moving objects. We would like to prototype how to recreate this in google maps. The prototype would:

1) Have initial viewport in satellite mode

2) Allow user to fly around the UI and place 2 landmarks. The first landmark denotes the world center point for our 3D location data. The second landmark would then inform the rotation of our world space.

3) Once that is established it should be savable

4) The system would feed an array of objects. A Type (say Person or Truck) a 3D location aka x,y,z. X is forward when starting at Landmark 1 and going towards landmark 2. Y would be the perpendicular access on the ground and Z is obviously how high up. Prototype must render an object. To start just a colored sphere with an Info card above it for extra information.

5) The prototype should support periodic updates of data wherein the given Object would move to the new location.

Presume that no backend integration is needed and that the data can be hardcoded in the client. Pure javascript w/ as little framework as possible. Ideally it's a single html page we can run from a local webserver. The demo modes would be A) Initial view port render B) a timer that fires 2 seconds later w/ hardcoded data that would render Objects based on the location and C) a timer that fires every 2 seconds after that would randomly move those objects around.

Basic Object json would be

{ "id": 10, "type": "Person", "locX": 500, "locY": -100, "locZ": 50}

This "Person" object would be 500 cm forward from landmark 1 towards landmark 2. 100 cm to the LEFT (aka negative is left) and 50 cm up off the ground.  
  
  
I think you have it right I was just kind of testing you. I imagine that the user would click on Google maps satellite to place and save the landmarks. As such those would have lag lng. Now with those established if I say an object is 100,-50,10 that would be 100 feet forward starting at landmark 1 facing landmark2. Then travel 50 meters perpendicular left. Then up 10 meters. Does that make sense?

In general this first milestone would just be proof that you can get the basics done. It isn't going to be "used" per se. 1) Page loads w/ specific location in satelite mode. 2) Allow user to mouse wheel zoom into an area and choose 2 landmarks. When the first one is picked place a sphere on the ground. When the 2nd one is placed put another sphere on the ground and make a red line with an arrow from the 1st to the second. 3) Take an array of 3, 3D points w/ labels. id, x, y, z where x,y,z are in centimeters. Place a different sphere with some kind of label over each point in 3D space based on the landmarks. 4) Some kind of grid or input where I can add objects or manipulate the array of points/labels and have it commit and change the location to prove that it works. That's it for Milestone 1