When loading unity there were 4 main windows that appear, the hierarchy window, the scene/game window, the project/console window and inspector window. At first these seem quite daunting, but after a small tutorial they all make sense. Tutorials for using Unity can be found on their website or just by searching on YouTube or google. There are many tutorials that are easy to understand and very helpful for the beginner.

Unity did not work with Vuforia when I tried initially, I found out that I had to download the 32-bit version of Vuforia, as Vuforia 5 did not support the 64-bit version of Unity I had. After downloading the 32-bit version of Unity, Vuforia worked fine. For the little prototype that I created, I followed a tutorial on YouTube which showed how to implement Vuforia in Unity. It did not involve any type of coding, so was quite a basic application. The application that I created scans a marker and then displays a model that I downloaded from the Unity Asset store. The marker (target) that I created was done by using the online tools on the Vuforia Developer Portal. You can upload an image (something with greater detail, easily recognisable) to the portal, which will then convert the image to something that can be read by Unity/Vuforia. This image can then be scanned by a device's camera and display/do whatever is programmed. To be able to use the Vuforia plugin, a license key must be added in to the unity plugin, this can be found in the developer portal.

To get a license key and create targets, I had to make an account on the Vuforia developer portal, which is free. You are also able to find many helpful "how-to" articles on the Vuforia website. Unfortunately I was unable to find anything about using GPS/Geolocation services with Vuforia on the developer portal.

Luminary would like to create a "way finding" application which uses the device's camera to show the any points of interest (that have been added to a server, controlled by Luminary) that are nearby to the user. Doing some research it seems that Vuforia/Unity is not something that would do what is wanted by Luminary. Vuforia handles the detection of markers, tracking and augmentation of 3D models within an image database, it is not capable of using GPS or geolocation services to do what Luminary wants. Therefore another augmented reality SDK needs to be found.

A few SDK's which support GPS are:

- ARLAB
- BEYONDAR (open source)
- DROIDAR
- METAIO
- MIXARE
- WIKITUDE

http://socialcompare.com/en/comparison/augmented-reality-sdks

We will have to research each of these to see what is the best suited for our requirements.

Requirements that need to be defined:

- How will the server and client communicate?
    - If it is online through wifi/4g, how do we minimise data usage?
- How many POIs would be displayed to the user?
    - Will there be a “geofence”? ie. Only show POIs close to the user.
- How big will they appear on the client screen?
- How often will content be updated?
    - Will the user have to update the application to receive new content?
    - Will the user receive a push notification alerting them on new content?
    - Will the user’s device automatically download new content each time when the application is launched?
        - How much data would this take? How to minimise?
- On what platforms will this application be created on?
    - iOS?
    - Android?
    - Windows?
- What will be displayed to the user?
    - Images of markers?
    - Information about POIs