The Brief. The Build.

So I was first contacted to get involved with this project – it’s been a couple of months ago now – and I was asked to help design and build an app that would allow people to find out what area of London would be the best place to live based on their own personal preferences. So it had to be able to account for what things they cared about – for example house prices, schools, how much stuff was going on in the area – and it had to then help them make their decisions. So show them which of the boroughs, let’s say, were the best ones for them to live in. And also give you a bit more detailed information about how their decision was reached so they could also absorb it themselves. Not just take, say, a one off bit information and say right okay that’s the...that’s the right answer. But to give them some stuff to just help it...help them augment their decisions, so to speak.

So they wanted to build this app in about four days. So there are a number of challenges associated with that. So in terms of initially getting the tooling set up, getting your data organised, getting all the smart bits of the outworking – thing that would normally take quite a while. But, so when we discussed it we said “okay, let’s use Bluemix to build this app”. Hopefully we can get things done really quickly, and... and we did.

So at the beginning obviously there’s a... there’s a step where you take all what people have asked for and try to work out “okay, what on earth should I use to actually start building this”. What tools do I have available, what stuff’s going to be useful. So the beginning of that for me was going on Bluemix and looking at what we had there. I mean I’m not, you know, a great developer with years of experience, but looking at that and what was available made it very easy to then work out “okay what’s the right tool for the job, what bit can do what” for example. So settled very quickly on a couple of tools that Bluemix has available: So one of those was a... a boiler plate, a package called Node-RED, which is a fantastically useful tool built within IBM but now open sourced and included something on Bluemix for everyone to go and use. The way that works is you sort of you onto
Bluemix and create an instance of it and then it gives you a graphical interface for connecting together different services, so to speak. So it’s a touted as sort of a visual tool for wiring together the internet for things but you can also use for any backend service. So yeah in the web services, APIs, whatever you like and you can throw together there very quickly. So I’ve decided that was the first thing to use to sort of glue the whole thing together.

Then the next one we needed something else to store the data. So that data about different boroughs, about hose prices etc. We then needed somewhere we could put that, store it, pull it back when we needed to, and also update it, so other people could go in, who weren’t me, you know, packing this thing together, could go in and change what was on there. So say if you wanted to look at where to live in Manchester or Edinburgh for example, you could just pull out some data, throw it in there for the new area and then it would just work straight away. So I used Cloudant for that as the database backing there.

And the other next...the next bit...Arguably the most important bit of the whole app was ‘what do we use to actually help you make the decision’. What’s the brain behind the whole system that is taking this data out and working out basically what people care about, which bits are actually important. So for that I used a couple of... a combination of a couple of Watson APIs. So Tradeoff Analytics, which is arguably the most important part, you know, it’s kind of the core of this whole puzzle, which takes in a number of different options, in this case your options would be, you know, Camden, Hackney, City of London example... for example. It takes in a number of different parameters that you care about, say things like house prices, schooling, etc., all these different metrics, and it goes away in the background, does a very clever stuff and then pulls back your top few choices. So these would normally be choices where based on the things you said you care about they are sort of head and shoulders above other boroughs. But yeah as I said it’s not a complete “this is definitely the one for you” it’s just a “here’s some more information to sort of help you make your decision”.
The other Watson API we used was the Alchemy API, the news API from there, which lets us go away and gives some extra information for the person using the app to work out where they should live. So it gives you a number of recent news headlines for example that mentioned the borough or have been published near the borough and yeah, just throws that back to the users. So okay there’s been a story about XYZ, just to kind of give a little bit more... a little bit more colour to help them make their decision.