

To develop the Shah Jahan Mosque interactive 3D experience involved an immense amount of work.

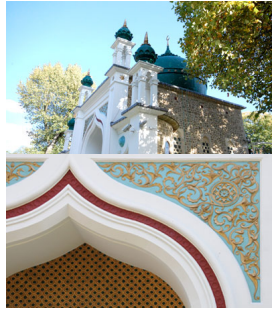
### Project Planning and Research

We chose Shah Jahan Mosque in Woking, as it is the first purpose built mosque in the UK built 1889. It is also a Grade II\* listed building. We went about researching it – we wanted answer - who built it, when was it built, why was it built, what's its significance? Then came to tricky part how could we put this information together in a way that would attract young people, Muslim and non-Muslim, interested and not interested in history and heritage. How could we attract this client group to become interested in it and actively want to learn more about their own heritage. Through consultation with young Muslims we developed this interactive 3d learning tool and made the mosque come alive, allowing the viewer to immerse themselves into the experience and explore the mosque without leaving their armchair.



### Measuring, Documenting, Photographing and Filming

We visited the mosque on several occasions measuring, sketching, filming and taking hundreds (if not thousands) of photos at varying angles, depths and times of day. This was to ensure we had enough information to reproduce the mosque in a 3d digital form. This was needed to provide vital reference material and later used to texture and map onto our 3d model and environment.



### 3D Modelling

As there were no CAD drawings and survey data to work from the 3d modelling was a complicated and arduous process. The 3D model was modelled entirely from scratch using the photographs, footage, sketches and measurements taken from our site visits. We used various graphic and 3d software at varying stages of this process.



### Web Deployment

Through the process for this project we looked at many different ways of sharing the 3d experience. We eventually opted for a real-time games engine that would allow us to share the 3d learning environment over the internet in a normal browser window. This is very rarely seen outside of the gaming industry and we are proud to be the first to use this technology in heritage work.

