

Interactive Environments

By Phillip Shakesby Interactive Multimedia Level 2

The brief for this assignment was to produce an Interactive installation using the BBC's Big Screen which is located within Hull City centre and also to build an accompanying website to run in conjunction with the theme of the interactive installation.

We were asked to build our idea around the BBC's Dig In Campaign which focuses on growing things.

We were placed into small groups my group consisted of myself, Sam Balyen, Sarah Imeson and Sam Scott. As a group we started to discuss and develop some possible ideas, there were a few disagreements on how ambitious we should be with the project, this was partially my fault as I am a fairly ambitious person and I believe in making the best product possible not the easiest. We all decided to develop an individual idea to present to the rest of the group and I came up with the idea of controlling a character on a screen by creating virtual buttons that would be activated using the webcam on the top of the big screen, by creating movement in certain areas. The aim of my game was to catch falling vegetables from the sky in order to gain points.

The other members of the group developed ideas and I particularly liked the idea put forward by Sarah Imeson that involved controlling sunlight and rain to grow carrots but the way in which her idea would have worked would have required a physical control placed near the big screen and we all agreed this would be inappropriate for the purpose of this assignment.

As a group the decision was taken to move forward with my idea and we presented this to our lecturer James Field who felt the idea had a good interaction model but it lacked the essence of the "Dig In" campaign which is growing things.

We went away frustrated from that meeting and re-evaluated our ideas, we felt we did not want to lose the things we liked about my game, in particular the interaction model and the point scoring elements. So we looked at incorporating Sarah Imeson's idea of growing carrots into my game and we came up with a workable although slightly more complicated idea.

We decided to remove the character element of my idea but keep the virtual button control idea and use this to control a cloud and the sun. We now needed four virtual buttons instead of two. The idea was approved by James Field although he did express concerns at the complexity of the task we were setting ourselves.

As a group we then worked on the branding, colour schemes and layout for our game and website. Sam Balyen and I had a meeting in which we decided on set colour schemes, fonts and layouts for our game and website. I then put these together into a proposal to present to Jeremy Buxton from the BBC.

Jeremy seemed very impressed with our idea and he said there might have been the possibility of Sara Cox the BBC radio presenter recording the audio for our instructions at the beginning of the game. I left that meeting with a slight sense of dread as I had no idea how we could actually make the piece work but Jeremy's positive attitude shone through and this gave me a huge boost of confidence to take into this project.

We decided to split the tasks we needed to do so that the group could work efficiently; Sarah Imeson and Sam Scott were given the responsibility of developing the website, Sam Balyen was given the job of creating the instructional animation and that left me with the task of actually making the thing work, so to speak.

I researched lots of online tutorials for webcam games and it became very clear early on that what we were attempting with this game was a lot more adventurous than the majority of webcam games out there, there was not going to be some easy tutorial to follow that would solve our problems. I developed an idea to try and take aspects from a webcam tutorial where a ball moves across a screen and registers hits when you move over it and combine this idea with various other aspects from the world of Flash gaming action script.

With lots of trial and error I managed to get the webcam registering movement in the relevant areas, this then gave me the ability to add an action that registered movement, I could make it control our movable objects the sun and the cloud.

I then had to develop a way of triggering an animation to make the carrots grow when they came into contact with both the sun and the rain cloud. This proved to be the hardest task of all, I tried lots of variations of code some of which partially worked, some did absolutely nothing and after I had pulled out most of my hair I finally managed to get this to work.

The next task was the timer element and score system which was quite easy to do as I found some tutorials online that helped me greatly.

I am very happy with our finished piece as I believe we have created something that has never been done before or at least that I have never seen before. The final piece works, has the desired feel and interactivity that we wanted when we started the project, so I could not have hoped for anything more.

During our project we were informed that this project that was designed for use on Hull City centre's big screen would no longer be being used in that format, due to the Hull City Council's decision to turn off the screen.

This was very demoralising and upsetting to me in particular and I have had to accept that the situation is out of my control but I am still very disappointed.

This project was set up in conjunction with the BBC's 'Diggin' initiative and our contact at the BBC was Jeremy Buxton. I would like to thank him and our tutor James Field for arranging this opportunity; it has given us a little glimpse of work in the big wide world, not only the highs but also now the lows.