

## **SCC240 Presentation Script**

**Slide 1/2- Project Introduction**

**Jake**

**Slide 3- System Overview**

**Luke**

**Slide 4- Technology Overview**

**Jake**

This slide displays all of the sensors that are present in the final version of our scarecrow. We have successfully implemented 6 different variations to the idle image. This is done by the use of the 5 sensors seen on the screen:

**Microphone:** The microphone will pick up sound and a variable will turn to true. When true the system will play a loud noise.

**Proximity sensor:** The proximity sensor is used to calculate whether or not a user is close to the scarecrow. If the user is close the scarecrows eyes will light up red.

**Light sensor:** The light sensor detects if light is present in the vicinity. We have programmed that when there is no light the strip across the scarecrows chest will light up. This is done so that it is clearly visible when there is limited or no light in the area.

**Motion sensor:** This will be done by using two different sensors. One of the sensors, positioned on the left, will move the left arm on the screen. The same will be done using a sensor on the right. This is done so that the user will be able feel as though the scarecrow knows where in the room they are.

**Touch sensor:** The touch sensor will switch from true to false and vice versa when it is touched. When true; the whole system will be turned on. This is only available to the owner as the user does not need the ability to turn the scare crow on and off.

**Slide 5- Our Development Process**

**Luke**

**Slide 6- Phase 1 (Research Techniques) /User Profile**

**Luke**

**Slide 7- Phase 2 (User Requirements)**

**Sam**

### **Slide 9 – Project theme**

From the outset, we had decided that the theme for our scarecrow needed to be entertaining. After some deliberation we decided on Star wars as a do-able theme. It is both topical with the release of the new film and grips all age groups. We also believe that it would stick out at a fayre or event as many of the scarecrows we found during research were rather mundane or dull. From this theme we decided to select a Wookiee/Chewbacca as this is a different but noticeable character of the star wars universe. The character also has many different features that would work well with sensors.

### **Slide 10 – Ideas – Kids**

With the rise of the new Star Wars film kids seemed like the best option for capturing as many admirers as possible. Although kids will be entertained by many of the features that can be created by sensors such as motion and light. It would be poor to not try and include older users who still admire the theme.

### **Slide 11 – Ideas – Hobbyists**

With Star Wars being a huge fan favourite with thousands of avid followers. These as well as the hundreds of scarecrow hobbyists give the basis for a very technical scarecrow that can be admired by these users. This was ruled out as it is very limited and would need some sort of viral campaign to get the right users not to mention the numbers needed for it to be worthwhile. Whilst many users would still admire the scarecrow too much emphasis would need to spent on the technical side and many users would not be interacted with appropriately for it to be more than a show piece.

### **Slide 12 – Ideas – Families**

This is the audience we decided to go for. The decision really came from that it allowed for us to incorporate features that can span across users from all ages. The scarecrow, when targeted at these users, can incorporate both complex features that can be admired by adults and more simplistic features that can be enjoyed by children. The theme would also be wasted if it didn't allow for the nostalgia element by reminding adults of the magic of star wars.

I created the designs in Fireworks by using an idle image and saving tweaks of the images as GIFs that can then be looped to show a moving image. I chose to use this method as during our original testing of methods we implemented it very quickly and easily. The looping of the images will be initiated and change an idle image on screen when certain requirements are met by the sensors.

### **Slide 18- Usability Testing**

**Sam**

After the completion of our project we conducted a series of user tests on 6 participants. The questions that were posed involved how easy the system was to interact with. This can be seen in the graph. All six responses were reasonably positive and showed that our system can easily be used by users who have never interacted with it before. The users enjoyed how the proximity sensor lit up the eyes of the scarecrow brighter based on how close they were.

### **Slide 19-20 Conclusion**

**Jake**