Our World

A project for the Oslo BarneMuseum

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Picture by NASA Goddard Space Flight Center

Introduction

A children's museum is a colourful, exciting environment with activity-based exhibits created to inspire active, educational play for children and their families. It is an institution full of energy and hands-on educational experiences for children. Instead of being part of a larger museum for adults, a children's museum is its own institution specially designed for young children of all backgrounds and abilities. It is an inspiring, fun place that helps children develop their creative thinking, self-confidence and understanding of the world around them[1].

Before starting the project, we studied the web pages describing Oslo Barnemuseum. We also studied the sketch that Pål Sundhell, a museum artist, has made for an initial plan for the museum; what it may look like. A suggestion is to have a wing called "Verdens barn", containing, among other activities, one wall with a large map of the world. We choose to design something in this particular area of the museum.

The Project

Project Description
We want to create a visual simulator for children, roughly in the age of 6 to12. The simulator will let the children explore the world, presented by a big globe. The globe will be placed in an oval-like room, in the center of the room, where the walls will consist of screens. The floor in the room will also be made of screens, covered by protecting glass.

The globe has to be maneuverable in all directions, placed on a stand. The axes, which are the North and the South Pole, there will be placed a red button, which will stall the simulator. The surface of the globe has to consist of touch-pads in order for the children to be able to make their choices. Each country will be represented in a real-life color and with animals, products, or people associated with the different areas of the globe. The oceans will, of course, be colored blue and the Poles white.

We would like to have, together with a video associated with the selected country or area on the globe, sound and – if possible – smell. Regarding the sound, this can be done by putting small speakers between the screens to provide a surrounding effect. The smell will probably be a little bit trickier to implement; then we also have to think about how to get the smell out from the oval-like room quickly and fast enough.

Conceptual Model
The simulator will provide an experience for the children, a kind of a world tour. The globe will be big enough for multiple participants; excluding the queue which may occur if there are many children present.

1. References: Oslo Barnemuseum, http://oslobarnemuseum.org

The children may move the globe to a selected continent and touch a country or an ocean. This action will trigger an event that will play of a video, around 30 sec. long, associated with the selected country. The video will be played on all the screens creating 3D experience; the children will feel that they are present in the video. Each video will have elements associated with the country in question. The sound and smell will make the experience more real.

In order to stop an ongoing video, they have to press one of the two red buttons, which will trigger a "screensaver", may be implemented by a night where stars are visual.

The children do not need any experience with similar simulators since the design is well explaining in itself; they only approach the globe and touch something.

Our Assumptions

We assume that the technologies to create the simulator exist. The simulator will consist of a PC inside the globe, for the logic of the touch-pads. It is also necessary to have flat-screens for covering the room and floor, and thin speakers between the screens.

We need to be aware of that children are easily frightened, so it's necessary to show a kind of a fairytale view of the world; that is not showing war situations, animals eating each other, starvation and other things that children can be offended of.

Our Claims

We claim that the simulator will be easy to use for the users intended. Also it will make geographical associations where the children both will learn geography, and get an experience about cultural differences which exist in the real world. And most of all, we claim that the simulator will be fun and encouraging to use.

Children learn through interaction – through playing and exploring. They quickly loose their patience, and does not like to be bored. To see that they can influence their surroundings/world around them engage them; then they think its fun to learn new things and motivates them to learn and participate more in the activities. Children see the world and other cultures as exiting; they are interested in things that are different.

Our challenge is to make the world available for the children in a way that they understand and from witch they can learn; a way in witch they can be engaged.

Is the Project Achievable?

If the simulator is constructed the way we have specified, we have strong beliefs that it will achieve what we wanted. By putting together sound and visual elements in a something different room, crating a real life simulator, we believe we will create enough interest in the user group, and in this way we achieve our main goal, satisfied users.