# LIVE ART CUBE

The Live Art Cube allows museum visitors to explore the difference between reality and digital art. The cube's main goal can be easily described as it follows:

01  Visitors come in and watch the pieces of live art on the cube's walls.
02  Visistors can get inside the cube and be the users of the augmented reality enviroment.
03  Visitors, now called users, come out of the cube as the artists of the final pieces they created which are being shown outside the cube.

Those visitors chosen to be user/artists will enter a central room, and be presented a set of glasses. The glasses will act as a see-through screen, allowing the user/artists to see three virtual workstations: spray painting a wall, modelling a house, and tailoring a set of clothes. The camera place on the glasses will detect where the user/artist's hands are, allowing them to change the virtual world. Visitors outside the central cube will be able to see the combined worlds projected on three of the outside walls, while the fourth wall will remain transparent.

The graffiti workstation is a simple paint game that allows visitors to explore graffiti as an art form. Visitors may spray anything they wish on the far wall. The tools will be several standard spray paint cans filled with compressed air and a sponge. Spraying a can will cause the paint to come out in the virtual world. Can location will be detected through a camera on the bridge of the glasses. Visitors may also erase sections of their painting by using a dry sponge provided nearby.

The architecture workstation allows visitors to create their own virtual house on a flat tablet. Visitors can retrieve house components (Such as walls, windows and doors) from a table on the right wall. They can then add these components to the house. All house components will be virtual, allowing them to be distorted, resized and coloured as their creator sees fit. When the tablet is moved or rotated the house adheres to it allowing the user/artist to look at his model from different views.

Tailoring your own set of virtual clothes is another art exploration that our presentation offers. Using some template clothes as a base, visitors may stretch, distort or cut the clothing as they wish. The clothes will be tailored on a mannequin to give a realistic experience. If users turn around, they can look into a mirror, which will show them in their virtual clothing on themselves. Users will be able to access photoshop-like tools on the side of the glasses display, by tapping on their icons in midair.

From the outside of the room, patrons or other visitors can see the user/artists through the glass entrance wall, but they would only see the user/artists with some glasses on and making movements, like creating invisble "art".  The LCD TVs on each wall will show the user/artists point of view, and when they are finished, they will show their work.

We feel that our cube works well with the Surrey Art Gallery. It is a highly technical piece which emphasizes visitors interaction and development. Visitors enter as viewers, experience the design as users, and exit the cube as artists. It allows people to experience the world around them in a new and unique way.