

Interaction with virtual elements in a reality augmented environment

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1 Description

The goal of this programming project is to simulate the interaction between a user and virtual objects in an augmented reality context. The KinectTM technology and a 2D physics engine will be used to allow the user to project himself into a virtual world where he will be able to interact with 2-dimensional shapes.

The possible interactions will be as follows :

- Rotate, translate and resize an object by recognizing gestures.
- Draw shape in real time with simple hand gestures (as if the user was holding a paint brush in his hand). Created objects will be binded to the physics world and will be able to interact with other objects and the user himself (collisions).

The final presentation will also use the Kinect technology and gestures recognition (in a way inspired by the movie "Minority Report") to run the slides, zoom on important parts, etc.