Designing Kinect based games for children with Autism

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Faculty Mentors: Dr. Agata Rozga, Dr. Brian Magerko, Dr. Gregory Abowd
Student Collaborators: Mirko Gelsomini, Patricia Perez

These games are a fun interactions with one and two player modes to encourage social and motor skills in children with Autism.

Designing: The games are prototyped based on user centered design process with the teachers at the Lionheart School, Alpharetta. The prototypes are iterated based on their requirements and feedback. There are two modes of representation of the child - 2 D Skeleton figures, Green Screen Image.

Evaluation: The requirement data is qualitatively analyzed using affinity modelling and the impact of the games on social and motor behavior is quantitatively and qualitatively analyzed by video-coding the childrens’ game play sessions.
Other technology probes included: A *freeform interactions* that also mapped the Kinect’s skeleton joints to 2D characters like iron man, princess and Mr. Bean.

A *story telling application* with simple 2D animations for various movements of animals like flying, jumping and hopping and also explored gesture-detection with Kinect.

**Technology:** The front end application was a web application designed using Html, css, javascript and jquery. The Kinect joints were detected by a C# application which sent the skeleton information to the web application using socket communication.