Abstract :

Problem Statement :

Autism Spectrum Disorder(ASD) is defined as a condition or disorder that begins in childhood and that causes problems in communication. They also face problems with hand eye coordination because of which the child may experience issues and challenges on a day to day basis.

Proposed Solution:

Our application is a personalised learning method where children interact with the characters in the game with hand and body gestures. This natural way of interaction in a computer-based gaming environment increases children's attention, communication and skills. We are planning to use a gesture based interface like Microsoft Kinect so that the child can find it easier to interact in the real world environment. The child can be given few scenarios based on day -to-day activities and the kinect will detect the movement in the child's body which is reflected in the game and used to solve the scenario. These games can also be used to improve mathematical and thinking skills.

Outcomes:

Since the application used gesture based interface, an autistic child feels more connected to the application and assumes the application on the screen to be a real life scenario. Upon trying to interact with similar scenarios, eventually the child will get used to interacting with other individuals and develop better communication skills.

Architecture Flow Diagram :

