Project Report

Introduction:

My project is built on canvas element of HTML5 using the API provided by Zense. The canvas element requires Javascript to draw graphics.

Problem Description:

The main motivation was to encapsulate 3D animation using canvas tools. The basic idea has been taken from the game “In to the dead”. In this game the enemy charges onto you where you should either escape or shoot the enemy.

Solution Proposed/Implementation:

As one the main objectives was to picturise 3D simulation on 2D plane. Basic idea was to change the size of the object as it moves towards the screen. However due to additional requirements a depth parameter had to me maintained to handle deals with collision while maintaining the spirit of 3D collision.

Further into the implementation which involves classes at every stage:

* A gradient was made by manipulating rgb colour criteria in fillColor feature in canvas.
* The background frame consisted of grass generated at random, which increased in size as the move forwards (this causes actor in the game to get a forward moving notion).
* Similarly, there were enemy objects moving towards the actor with similar implantation but with speeds that cause the sense that they not only move with the grass but move ahead of towards the actor.
* There was a gun to shoot down enemies. And the collision detection required the notion of depth.

Conclusion:

The project gave a notion of visualising 3D using 2D objects.

Future scope:

* The random generator of generating enemies can be improved.
* Opacity for images could improve the animation, which was missing feature in canvas.
* The basic objects weren’t being drawn onto images that were imported which surely would have improved the animation.
* Rotation at the actor object would have helped can help in more flexibility for playing.