Project Report

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Project outline :-

The goal is to make a game using canvas ,the name of the game is jelly volleyball the ,basic description is that we have a volleyball court and two players and the main aim of the game is to send the ball to other side of the court ,both the players are controlled by us .

Steps taken to complete the project:-

1>First understand the basic function provided by canvas.

2>Now make the stationary objects of the game like boundaries and net,(these can be made using the canvas.drawRectangle and other similar function)

3>For the moving objects give them an initial position and then in another function update the variables corresponding to the movement of the particles there.

4>Now make the players ,they are nothing but a circle on top of a rectangle. And

4>Now by using isKeyPressed give the gamer(user) controls.

5>The next step is to give the game the basic physics required like the ball should pass through the ground , through the balls etc;

6>Now create a ball and and to checks for the collision of the player and ball (collision means that the player hit the ball) the idea behind this is to first find the distance between the centre of the player and check if it is less than the sum of radius of the circle and ball . If it is less it means that there Is a collision.if there is a collision first step is to find the angle made with –axis and then find the new components using the velocity of the ball and the angle at which it strikes the ball (e is considered to be 1 ) ,In this way the game progresses and the game ends when the ball drops onto the floor and if this happens the game restarts.

7>TO overcome the glitches and to make the game to work precisely and smoothly ,the boundaries are made a little less strict while checking the if conditions which result in actions affecting the movable objects of the game.

Future Scope:

1>Gifs or pngs can be used for a better gaming experience.

2>Also the gameplay can be improved by adjusting the values given to variable affecting the speed of the game like velocity of player and gravity

3-> Instead of making a 1v1 game ,a computer player can be made who on this calculates the position of the place where the ball is going top land and move according and depending on the levels ,the efficiency can be set accordingly.

4>A background can be put and also instead o restarting it every time a scoreboard can be made and the game will end after one of the players reach the set amount of points.