Projections

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Introduction:

In many games of today, pathing and projected paths are needed to lessen some of the guess work that the player may have to do and calculate. In this projections lab, the different types of calculations are done between a bee and a pole. The projections range from calculating the perpendicular projections and parallel projections in its top-most form to needing the steps inbetween like finding the angle between two vectors, the dot product, normalization, scalar multiplication, and the adding and subtraction of two vectors.

Methods:

In the +(plus) operator, the equation of the a vector V is added to each point of the second Vector T. So the addition of v.getX() + t.getX(); is repeated within a newSetRect function for the rest of the y and z coordinates.

In the –(minus) operator the process is copied exactly except by replacing the + with a -. It goes as follows v.getX() - t.getX\*();

In scalar multiplication of a vector, I used the & sign to take the first vector and multiply it to the second vector. It took each coordinate and multiplied it to its match and returned the temporary new answer that the problem solved. Each multiplication was done in a new setRect with each coordinate set such as v.getX() \* t.getX();

My understanding of the further equations were severely lacking as I didn’t understand them so providing the equations for such don’t exist.

Results:

Since my understanding of the equations themselves was lacking, I couldn’t fill out the code correctly, in turn no results were produced.

Conclusion:

The model for this does not work since the equation understanding didn’t exist. Following up, the code doesn’t exist for any that wasn’t understood.