

COP 290 Assignment 1

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Abstract

Problem Statement : [Assignment Link](#)

The project was written in C++ using OpenGL, pthreads, mutex locks and it is aimed at ubuntu operating system. The collisions between the balls were considered to be perfectly elastic and the table was considered to be frictionless.

1 Overall Design

In the project three classes have been used namely Ball, Table and Screensaver. The user enters the number of balls and the radius and velocity corresponding to each ball. Every ball runs on a thread and collisions between two balls and between the balls and the boundary were handled.

2 Sub Components

GUI : Display functions

Physics : The Equation .. etc.

3 Testing

4 Sub-component Interaction

5 Interthread Communication

6 Ball Speed