**VISVESWARAYA TECHNOLOGICAL UNIVERSITY**

**BELAGAVI-590018**



##### COMPUTER GRAPHICS AND VISUALIZATION

##### MINI PROJECT SYNOPSIS

**On**

**DART GAME SIMULATION**

By

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**ABSTRACT**

The project entitled “DART GAME SIMULATION” is an implementation of the game of dart using OpenGL graphics application library.

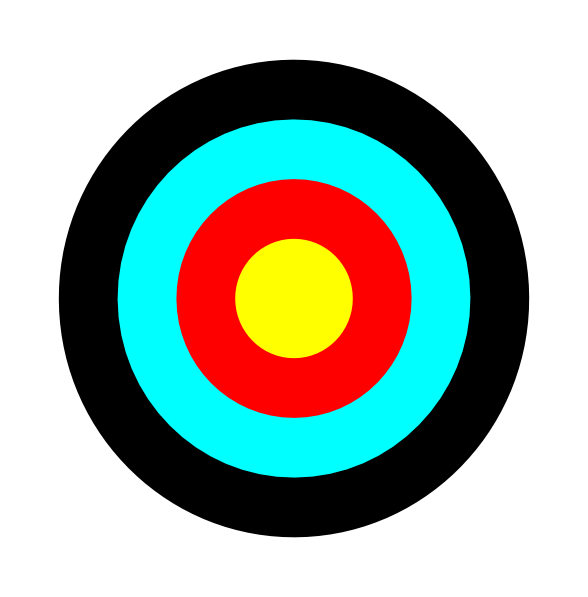
Our project is dart game simulation with a given dart board as target. Dart is used to shoot the target on the window screen. Player who shoots the target is awarded scores for each target shot in the dart board. The dart board continuously moves on the screen.

**INTRODUCTION**

Darts is a form of throwing game in which small missiles are thrown at a circular target (dartboard) fixed to a wall. As well as being a professional competitive sport, darts is a traditional pub game, commonly played in the United Kingdom, across the Commonwealth, the Netherlands, Germany, Belgium, Republic of Ireland, the Scandinavian countries, the United States, and elsewhere.

**The designed game will have following features:**

1. **A moving dart board**: The dart board (fig shown below), will be oscillating form one point to other point (along axis *y*) at a specified speed.



2. **Dart:** Darts are missile weapons (shown below), designed to fly such that a sharp, often weighted point will strike first. This will be placed at a random position in opposite side of the dart board.



3. **Game**: The user will be able to press a key, which does the action of focus on to dart board. One pressing the key to release the arrow, the dart moves towards the dart board. The chances of hitting the dart board is based on the time at which the user releases the dart and the position of the dart board.

On hitting the centre, specified points will be awarded. Similarly on hitting other region, few points will be specified. Hitting centre carries more weightage and reduces as it goes far.

If the dart hit fails, user will be asked to press a key, in order to restart the game.

4. **Help**: Necessary instructions and help for playing the game, will be provided at the bottom of the window (screen).

5. **Menu:** Options to **restart** the game and to **quit** at any point of the game, will be provided using a key functionality.

**PROJECT TEAM DETAILS**

1. Punith Gowda N 4MT13CS081 \_\_\_\_\_\_\_\_\_\_\_\_\_

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Status :

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