

Basketball Random

Period 7

Nathaniel Chae, Orlin Dyankov, Turbold Gereltod

The Basketting Basketballers

Description

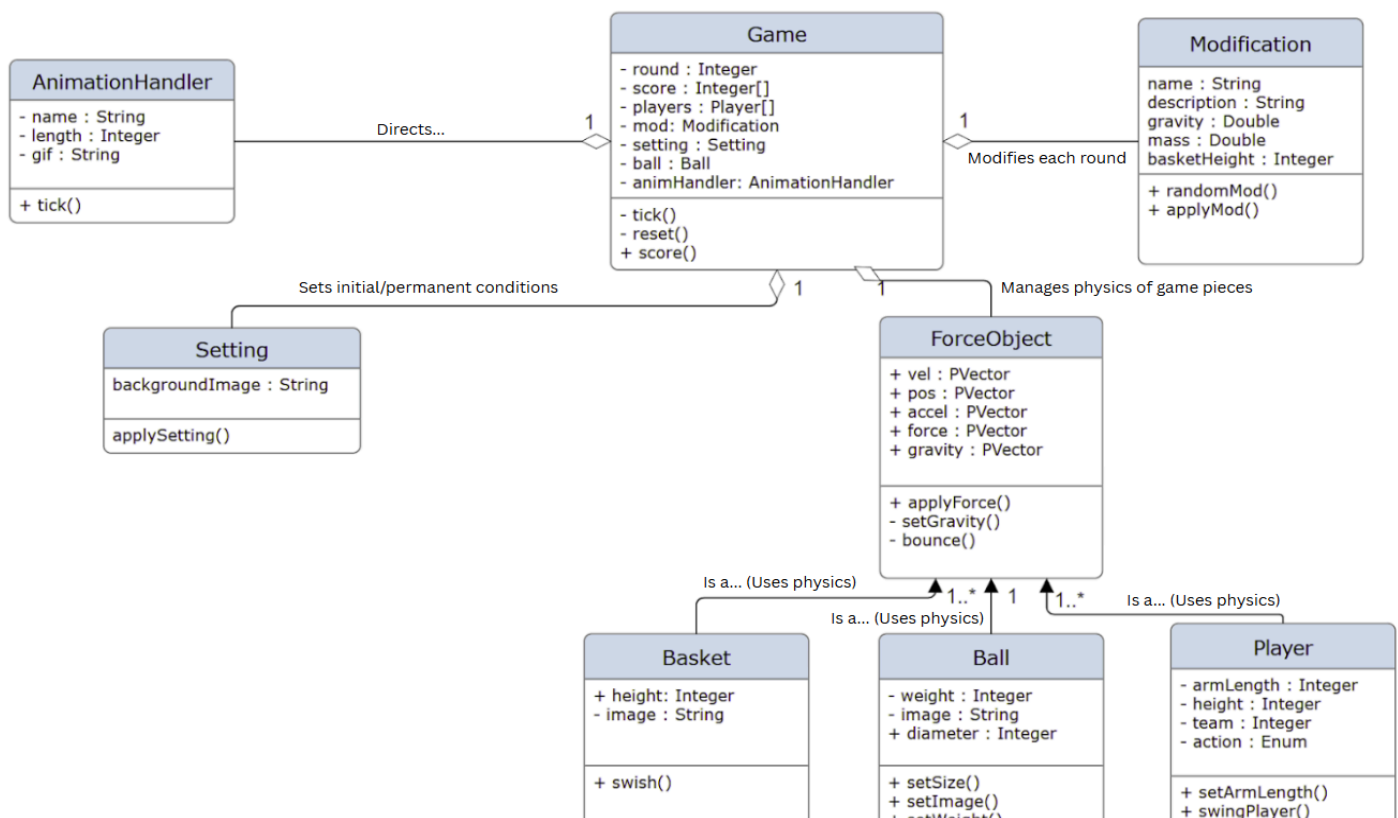
A 2D 2-player chaotic basketball game with one input for each player: W and UP ARROW.

- User Input
 - W and Up Arrow command jumping, shooting, and arm swinging for **2 in-game** players simultaneously.
- Randomized Rounds
 - Modifications are randomly generated and applied each round.
- Randomized Physics
 - PVectors used to control components of force are slightly and constantly randomized.
- Ball stealing, shooting, jumping
 - Collisions and physics are used to detect stealing and scoring.

Requisite Libraries:

- PImage (built-in, background images, and GIFs)
- keyPressed (built-in, processing user inputs)

UML Diagram



How does it work?

Main Objective: Score 5 or more points before the other player.

The game will begin with four in-game players standing upright in front of their baskets. **Two players** will be under each basket, controlled by **one real player's** input.

The left-hand player uses the **W key**, the right-hand player uses the **up arrow**.

Early Visual Cue: for the **first 2 seconds** of the game, a slightly opaque W key and up arrow will appear on the respective players' sides of the screen..

Input Response:

When the player holds down their input, both players on their team move their arms backward relative to where their head is facing.

If they have had the ball for over 1 second, letting go of the input after holding it down for more than 0.1 seconds will throw the ball with varying power.

If the player is **on the ground** while pressing their input, their player will jump regardless of possession.

If the ball is in possession and the **opposing team's hand touches the ball**, they gain possession of the ball.

If the ball is outside of the court, the game resets and pauses for 1 second.