# Webinar 6B : MultiClass Falling Game

### Previous Topics

* Using PImage
* Designing and implementing a Class
* Writing methods
* Writing constructor

## Learning Objectives

* Designing & Implementing Multiple Classes for a more complex problem
  + Constructors & methods
* Creating instance objects and using them for a simple game
* Use of **null**

Today’s exercise will be useful for your Game assignment

## Resources

* Lecture Notes – Multiple Classes
* Tutorial <https://processing.org/tutorials/objects/>
* Processing website – reference

Quick demo of Falling game

Ex1. Design – how many classes, what would they be? What members, methods would we minimally need?

Ex2. Development Strategy – Implement a basic Class, test it, and repeat for each class

Below we have some code to help us implement these classes.

//reduce y value and if off the top, appear at the bottom of screen

this.y--;

if (this.y<0)

this.y = height + 50;

//draw red circle - simple at first, add PImages later

fill(255,0,0); //red

circle(x,y,50);

//collision between two objects

int distanceX = abs(this.x-other.x); //difference in x positions

int distanceY = abs(this.y-other.y); //difference in y positions

return distanceX<20 && distanceY<20;

Let’s complete a basic version of the Game,

3 obstacles which are removed from the program on crashing.

Design?

We want to get the obstacles to intelligently follow the player – how?