

## SimpleCanvas API

A SimpleCanvas represents a window on the computer screen where lines and shapes can be drawn.

### Constructors

- `SimpleCanvas(int width, int height)`
  - Creates a canvas in a new window on the screen of the given width and height.
- `SimpleCanvas(int width, int height, String title)`
  - Same as above, but lets you specify the title of the window.

### Instance Methods

- `void drawCircle(int centerX, int centerY, int radius)`
  - Draws a circle centered at (centerX, centerY) of the given radius.
- `void drawOval(int centerX, int centerY, int radiusX, int radiusY)`
  - Draws an oval centered at (centerX, centerY) with the given x-radius and y-radius.
- `void drawRectangle(int topLeftX, int topLeftY, int width, int height)`
  - Draws a rectangle with the top left corner at (topLeftX, topLeftY) and the given width and height.
- `void drawFilledCircle(int centerX, int centerY, int radius)`
- `void drawFilledOval(int centerX, int centerY, int radiusX, int radiusY)`
- `void drawFilledRectangle(int topLeftX, int topLeftY, int width, int height)`
- `void drawLine(int x1, int y1, int x2, int y2)`
  - Draws a line from the point (x1, y1) to (x2, y2).
- `void drawString(int x, int y, String text)`
  - Writes the specified text on the screen at the coordinates (x, y).
- `void setLineThickness(int size)`
  - Sets the thickness of the lines used for drawing lines and non-filled shapes.
- `void drawImage(int x, int y, String filename)`
  - Draws an image on the canvas with the top-left corner at (x, y). Supports JPG or PNG (maybe others too).
- `void setPenColor(Color c)`
  - Sets the color of the "pen" used for drawing lines and shapes.
- `void show()`
  - Show the canvas window on the screen. Automatically draws all shapes since the last update.

- void hide()
  - Hide the canvas window on the screen (make it invisible).
- void update()
  - Update the canvas drawing to draw everything since the last update.
- int getHeight()
  - Get the height on the canvas in pixels.
- int getWidth()
  - Get the width of the canvas in pixels.
- Color getColor(int x, int y)
  - Get the color of a specific pixel on the canvas.
- void setColor(int x, int y, Color c)
  - Set the color of a specific pixel on the canvas.

## Color API

The Color class represents a red-green-blue color that can be displayed on the screen.

### Constructors

- Color(int r, int g, int b)
  - Creates a new RGB color with the specified values. Each value should be between 0 and 255, inclusive.

### Instance Methods

- int getRed()
  - Returns the red component of this color (0-255).
- int getGreen()
  - Returns the green component of this color (0-255).
- int getBlue()
  - Returns the blue component of this color (0-255).
- Color brighter()
  - Returns a color of the same hue that is brighter than this color.
- Color darker()
  - Returns a color of the same hue that is darker than this color.
- boolean equals(Color otherColor)
  - Returns true if this color is the same color as otherColor.