8/23/18

* 1.1 I created another circle and a square
* 1.2 I called moveDown twice and thrice. The circle moved 20 pixels down when I called it twice and moved 3 pixels down when I called it thrice. I called makeInvisible twice. The circle became invisible after I called it once and remained invisible after I called it twice. I experimented with other methods as well (makeVisible, moveRight, moveLeft, moveUp)
* 1.3 I invoked the moveHorizontal, moveVertical, slowMoveVertical, and changeSize methods. I moved the circle 70 pixels to the left by calling moveHorizontal and specifying the distance as -70.
* 1.4 I invoked the changeColor method on circle1 and entered “red” as the parameter. I also tried setting different colors, such as magenta and green, as the parameters.
* 1.5 I invoked the changeColor method and specified an invalid color, such as pink or navy. When the color specified is unknown, the color just becomes black.
* 1.6 I invoked the changeColor method and entered the color red into the parameter without quotes. An error message popped up that said “Error: cannot find symbol – variable red”.
* 1.7 I created 2 circle objects, moved them around the screen, and made one big and yellow and the other small and green. I made 2 triangles, 2 squares, and 1 person. I changed the positions, color, and size of each.
* 1.8 I inspected each of the objects on the object bench. I tried calling the moveLeft method while the object inspector was open. When I called the method once, the object moved 20 pixels to the left, which changed the xPosition attribute to 20 less than it originally was.
* 1.9 I recreated the house image using the shapes from the figures project. I first created a circle, 2 squares, and a triangle on the object bench. I then called makeVisible for each one. After, I invoked the changeColor method and set the parameter as “yellow”. I changed the size of the circle by invoking changeSize. Then I invoked moveHorizontal and moveVertical and messed around with the parameters until the circle was in the position I wanted. Then I made rectangle1 (the larger rectangle making up the house) much larger using changeSize. I invoked moveHorizontal and moveVertical and tried different parameters until it was in the desired position. I changed the color of rectangle2 (the window) by invoking changeColor and setting the parameter as “black”. Then I moved it to the correct place using moveHorizontal and moveVertical. I changed the height and width of the triangle using changeSize. I moved the triangle to the correct place above rectangle1 using moveHorizontal and moveVertical. I don’t think there really are any other ways to recreate this image, though you could obviously do things in a different order than I did.
* 1.10 I selected Show Terminal and then Record method calls. I created a circle, a square, and a triangle and called a few of their methods, such as changeColor, changeSize, moveUp, makeVisible, and makeInvisible. On the terminal window, it shows every method that I am calling. For instance, when I created a circle, it showed: “Circle circle2 = new Circle()” and when I changed the color of the circle, it showed: “circle2.changeColor(“green”)”.
* 1.11 I selected Show Code Pad from the View menu.
* 1.12 In the Code Pad I typed the code given in the book to create a Person object and called it s makeVisible and moveRight methods. I also created a Square object and called its makeVisible and changeColor methods. Finally, I created a Triangle object and called its makeVisible, changeSize, and changeColor methods.
* 1.13 I opened the house project. I created an instance of class Picture and invoked its draw method. Then I invoked the setBlackAndWhite and setColor methods.
* 1.14 I think the Picture class draws the picture because it is programmed to create 2 squares, 1 triangle, and 1 circle. Then when you call the draw method, it changes the colors, sizes, and positions of all the objects by invoking the changeColor, changeSize, and moveHorizontal/moveVertical methods. In other words, objects can create other objects and they can call each other’s methods.
* 1.15 I displayed the source code for the class Picture by selecting Open Editor from the pop-up menu of class Picture.
* 1.16 I changed the source code of class Picture so that the sun is now blue instead of yellow.
* 1.17 I added a second sun (sun2) to the class Picture.
* 1.18 I added a sunset to the single-sun version of Picture. I did this by invoking slowMoveVertical to the end of the draw method.
* 1.19 I made my sunset a separate method called sunset. I did this by typing

public void sunset()

{

sun.slowMoveVertical(300);

}

This allowed for me to call draw and see the picture with the sun up, and then call sunset to make the sun go down.