Eric Wallace

Chapter 3 Excercises

3.2- A class diagram will change when the overall scope of the program is changing. Adding, removing, updating of the objects, classes or relationships.

3.3- Object diagrams change occurs anytime during the execution of the program.

3.4- private Instructor tutor;

3.5- Did it.

3.6- Create an if-statement that calls the method to increment the hours when the rollover occurs.

3.7- Did it.

3.8- Error: non-static method getValue() cannot be referenced from a static context

3.9- '.class' expected

3.10- the if-statement handles the error. It works so I would say yes but maybe add a message to print that says what to enter.

3.11- same result

3.12- it allows negative inputs

3.13- ! false, (34 != 33) && ! false

3.14- (a == b)

3.15- (a == true && b == false) || (a == false && b == true)

3.16- !(!a || !b)

3.17- It will not work correctly using a limit that is 3 or more digits as it will no longer make sense as a clock.

3.18- it would not affect the display

3.19- it seems when entering a string in the equation first it will concatenate what follows as string but when leading with integer it will perform the math and then concatenate when it hits the string.

3.20- The modulo calculates the remainder of division between two numbers. It is used to roll back to the beginning of an array or list or to check if a number is even or odd.

3.21- Calculates the remainder.

3.22- calculates and returns a negative number

3.23- 0,1,2,3,4

3.24- all non-negative integers less than m including 0

3.25- it increments the value by 1 then computes the remainder of the value divided by the limit and reassigned back to the variable.

3.26- if(value + 1 >= limit{

value = 0;

}

else {

value += 1;

}

3.27- Default is zero until it is set or incremented up to the limits

3.28- Did it

3.29- 60 times

3.30- Rectangle window;

window = new Rectangle(int1, int2)

3.31- this constructor creates a new clock object set by the parameters entered through the setTime method.

3.32- updateDisplay would set back to 00:00 instead of setting to the parameters entered.

3.33- print.getStatus();

3.34- circle, triangle, and squares.

3.35- .moveVertical, .moveHorizontal, .makeVisible, .changeSize

3.36- No

3.37-

public void draw() {

setColor("black");

setColor("yellow");

sun.draw();

}

private void setColor(String color) {

window.changeColor(color);

sun.changeColor(color);

}

}

3.38- Did it

3.39- I could not get this to work

3.40- Did it.

3.42- Did it

3.43-

3.44- Did it

3.45- Did it

3.47- I guessed right, it moved one line down. It stopped at the next line because the line in the if statement was true.

3.48- The same thing happens, cycles through one step at a time.

3.49- Not sure if I am doing it correct but, it just cycles through steps same as before.

3.50- Did it.

3.51- the MailClient class calls the MailItem class into it when the method sendMailItem executes setting the parameters entered into the new item and stores into the MailServer.

3.52- It behaved as I thought it would.

3.53- Did it.

3.54- I added it and now it is bot working. I can't figure out how to fix it.

3.55-

screen = newScreen(int xRes, int yRes);

if(screen.numberOfPixels() > 2000000)

{

screen.clear(false);

}

3.56- First add the field, next add the constructor, then update the methods and it would have three objects.

3.57-

public void timeTick()

{

seconds.increment();

if(seconds.getValue() == 0) { // it just rolled over!

minutes.increment();

}

updateDisplay();

}

3.58- I could not get it to work. I keep getting errors.

3.59- I believe so. the timeTick method would interact with the seconds. Hours, minutes, and seconds. The hours should restart at zero.