CS111 - Spring 2017 > 📦 🛓 Manual Submissions

Manual Submissions

Title Science 4 CS111 Project Milestone 4

Due May 1, 2017 5:00 pm

Grade Scale Points (max 40.00)

Modified by instructor Apr 17, 2017 3:52 pm

Instructions

Milestone 4 (autograded on autolab)

In this milestone, you will create a Class representing the extension of a Picture. To accomplish this, create a class called MyPicture. Ensure you have at least one field of type Picture. This field or instance variable will be the basis for your extension. You will necessarily need to define other fields to accomplish the required instance methods. Implement the following instance methods in MyPicture.

```
//Constructor. Takes as a parameter, the name of the file //to load and a
description of the picture
public MyPicture(String filename, String description) {}

//Returns the string representation for a MyPicture object. // The string's format
should match the following EXACTLY.

// <imagename>.<extension> <width> x <length> <description>

// Replace <xxx> with the respective data about this image
public String toString() {}

// Returns true of the parameter MyPicture object is equal // to the current
instance, false otherwise. MyPicture
// objects are considered equal if and only if their
// filenames are the same AND their descriptions are the
// same.
public boolean equals(MyPicture p) {}
```

```
// Returns a new Picture object representing the 'negative'
// image of this MyPicture object. The negative of a pixel
// is defined by taking each pixel's red, blue, and green value and
// subtracting that value from 255.
public Picture negative(){}

// Returns the redness score of this image. The redness
// score is defined by the total number of pixels that have
// a red value that is greater than both the blue and green
// pixels divided by the total number of pixels
public double redness() {}

// Lastly, convert flipHorizontal and flipVertical to instance methods:
public void flipHorizontal() {}
```

Testing:

To test your code, create a main() method that creates 2 MyPicture objects. Call each of the instance methods to see if the results are what you expect them to be.

Submission

This assignment does not accept online submissions. Contact your instructor for additional instructions.

Done

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