

CST 338 Homework 3

Jitter — A Microblogging Service

Define a class called `Jeet` to store microblog text entries (*jeets*). The class should have instance variables to store the poster's emoticon, full name, username, verification status, text of the entry, and the date and time of the entry. Use the provided `JitterDate` class to handle times and dates. Please carefully analyze the `JitterDate` class and make sure you understand it. (Don't change the `JitterDate` class.)

Each text entry may contain a maximum of 140 characters. If a user enters more than 140 characters, truncate the text to 137 characters and add on an ellipsis ("..."). As with other competing services, *Jitter* verifies users. If a user is verified, a checkmark ✓ appears in between their full name and their username. Also, the username should be prefaced by an @ symbol.

Unfortunately, as in real life, plagiarism is an issue on *Jitter*. You should have a method to compare an original *jeet* with a subsequent *jeet*. If the subsequent *jeet* has the same text **and** is *jeeted* on the same date, this is considered plagiarism. If plagiarism is detected, the text of the latter *jeet* should be replaced with [Plagiarism detected. Text removed.]

Your program should also keep track of valid *jeets* delivered and plagiarized *jeets*.

Demo Program

The following code (also [available here](#)) presents a demo program that uses the class:

```
public class JitterDemo {
    public static void main(String[] args) {

        Jeet shakeJeet = new Jeet("(7:^[", "William Shakespeare", "shakespeare", true);
        Jeet fakeShakeJeet = new Jeet("o_O", "Wilhelm Shakespeare", "fakeShake", false);
        Jeet jadenJeet = new Jeet(":-|", "Jaden Smith", "officialJaden", true);
        System.out.println("\n==== Welcome to Jitter! ==== \n");

        shakeJeet.setDate(new JitterDate("November", 1, 1611, 3, 37, true));

        String shakeText = "Our revels now are ended. These our actors,"
            + " as I foretold you, were all spirits and are melted into air,"
            + " into thin air. And, like the baseless fabric of this vision,"
            + " The cloud-capp'd towers, the gorgeous palaces,"
            + " The solemn temples, the great globe itself,"
            + " Yea, all which it inherit, shall dissolve...";

        shakeJeet.setJeet(shakeText);
    }
}
```

```

fakeShakeJeet.setDate(new JitterDate("November", 1, 1611, 6, 42, false));
fakeShakeJeet.setJeet(shakeText);

jadenJeet.setDate(new JitterDate("May", 1, 2013, 6, 23, false));
jadenJeet.setJeet("How Can Mirrors Be Real If Our Eyes Aren't Real");

fakeShakeJeet.plagiarismCheck(shakeJeet);
jadenJeet.plagiarismCheck(shakeJeet);

System.out.println(shakeJeet);
System.out.println(fakeShakeJeet);
System.out.println(jadenJeet);

System.out.println("==== End of Jitter feed ====\\n");
System.out.printf("Jitter has shipped a total of %d jeet(s)"
    + " and detected %d fake jeet(s).\\n", Jeet.getNumJeets(), Jeet.getNumFakeJeets());
}
}

```

Sample Run of the Demo Program

The following presents a sample result of the demo program. Read the result very carefully so you can identify the operations of the program.

==== Welcome to Jitter! ====

7:^ William Shakespeare ✓ @shakespeare
 Our revels now are ended. These our actors, as I foretold you, were all
 spirits and are melted into air, into thin air. And, like the bas...
 3:37 AM - Nov 1, 1611

o_0 Wilhelm Shakespeare @fakeShake
 [Plagiarism detected. Text removed.]
 6:42 PM - Nov 1, 1611

(:-|) Jaden Smith ✓ @officialJaden
 How Can Mirrors Be Real If Our Eyes Aren't Real
 6:23 PM - May 1, 2013

==== End of Jitter feed ====

Jitter has shipped a total of 2 jeet(s) and detected 1 fake jeet(s).

UML Design

Based on the demo program and sample run, you should identify instance variables and methods for the Jeet class and draw the class in a UML class diagram. In the UML diagram, you should include all instance variables and methods (including constructor(s)) that are

necessary to run the demo program. You can draw the diagram on paper and take a picture, or use text and save it as a PDF. You can also use an online tool such as Google Drawings and save as PDF. Do not submit Word documents.

Deliverable

Submit your Jeet . java file and UML diagram (JeetUML . pdf).

If your program does not run properly, please provide an explanation of where things went wrong (Issues . pdf).

If your program does run, please provide a screenshot of your entire screen with IntelliJ IDEA open, showing at least a portion of the demo file and the entire Run portion of the window.

Your source code file (Jeet . java) should provide the following four items:

1. Title: File Name
2. Abstract: Overall purpose (or functionality) of the program.
3. Author: Your name
4. Date: The date you wrote the program

Points will be deducted if the above documentation is missing.