## Web-CAT and PA3 Hints

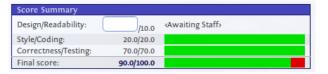
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### Web-CAT scores



## (10 pts) Design/Readability

Graded manually – comments, methods, variables, etc.

## (20 pts) Style/Coding

► Graded by Checkstyle – 1 or 2 points off per violation

## (70 pts) Correctness/Testing

- ➤ Your own tests should be 100% before submitting
- Code coverage how much of your code did you test?
- Problem coverage how many of my test cases passed?

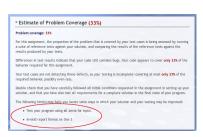
### Web-CAT results

### Click the filename for code coverage hints

Mouse over red lines for details

```
case CHANCE:
    score = dice.addValues();
    break;
default:
This line was never executed by your tests.
```

## Be sure to read the problem coverage hints



### Example feedback:

Test your program using all zeros for input.

Invalid report format on line 3.

# PA3 coverage hint

Your test cases must cover every statement

```
/**
  * Test default constructor and invalid category.
  */
public void testDefaults() {
    new Yahtzee();
    assertEquals(0, Yahtzee.calculateScore(-1, null));
}
```

- The first line tests the class definition
- ▶ The second line tests the default case

## DrJava auto-indent bug

### Put if under case, press Ctrl-A + Tab

### A better way to define your methods

```
case FULL_HOUSE:
    score = fullHouse(dice); // returns 0 or 25
    break;
```

## Indenting if statements

#### NO

```
if(category == LARGE_STRAIGHT) {
    score = 0;
}

OK
if (category == LARGE_STRAIGHT) {
    score = 0;
}
```

#### Notes

- if is not a method
  - Don't do: System.out.println ("extra space");
- Always use braces with if
  - Even if body is just one line!

## Indenting switch statements

#### NO

```
switch (category) {
    case FULL_HOUSE: System.out.println("Full house");
        break:
    default: System.out.println("Invalid");
        break;
}
OK
switch (category) {
    case FULL HOUSE:
        System.out.println("Full house");
        break:
    default:
        System.out.println("Invalid");
        break;
```

## Counting dice values

From now on, it's okay to combine declaration and initialization

```
public static int fullHouse(Dice dice) {
   int c1 = dice.countValues(1);
   int c2 = dice.countValues(2);
   int c3 = dice.countValues(3);
   int c4 = dice.countValues(4);
   int c5 = dice.countValues(5);
   int c6 = dice.countValues(6);
   int score = 0;
   // figure out if it's a full house
   return score;
}
```