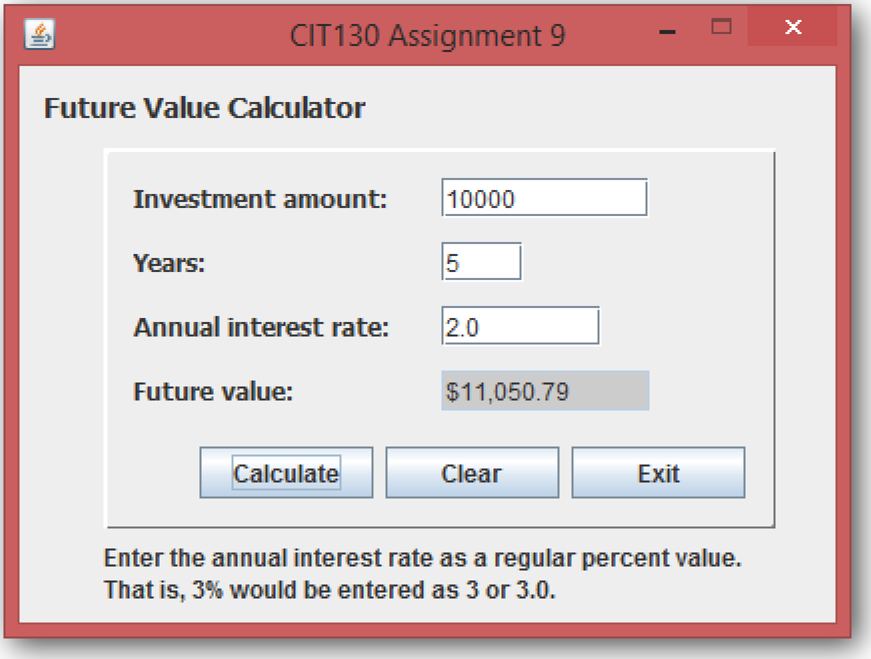
CIT130 Object Oriented Programming/Java
Fall 2015

Assignment 9 (35 points)
Due Date: Week of 11/02/2015

Creating an Investment Value Calculator

Complete the following exercise.

Develop a Java framed application that resembles the figure below.



Future Value Calculator

Investment amount: 10000

Years: 5

Annual interest rate: 2.0

Future value: $11,050.79

Enter the annual interest rate as a regular percent value.
That is, 3% would be entered as 3 or 3.0.

When the calculate button is clicked, the future value will be computed and displayed in the appropriate field. Use the following formula (substituting the variable names you have chosen for your application):

```
futureValue = investmentAmount * Math.pow(1.0 + interestRate/12.0,years * 12.0);
```

Your application should watch for bad user input in the form of no value (empty text control) or non-numeric inputs. Any thrown exceptions should be caught.

If a bad value is encountered when the calculate button is clicked, a message box should be displayed indicating to the user the nature of the error, and the calculation should then be abandoned and control returned back to the form.

Submit a zipped file containing *all* files associated with the NetBeans project.

Assignment 9 Grading Rubric

Grading Item	Points	Comment
Form meets requirements	10	The application contains all of the controls required. Good naming conventions are used for the form controls.
Calculation is correct	5	The application computes the correct investment value.
User input validated	5	The application checks for bad values in all of the input fields.
Form appearance and settings	10	The form is nicely laid out, has the title set, does not allow resizing, and restricts data entry into the future value field.
Comments and program header	2	Use of comments, as well as a program header comment block, is considered to be a standard best practice for programming.
Clean compile and run	1	Students are expected to deliver all files necessary to cleanly compile and run the application.
Code appearance	2	Students are expected to adopt a well-formatted coding style.
Total	35	