PROG 1103 Software Development

Assignment

Write a program to perform BMI calculation. This BMI system requires user to enter their name, weight, height and gender in the provided fields.

You need to complete the following specifications:
a) Create a user interface as show in Figure 1. Male option is the default selection.
b) Complete the **Calculate** button. The system will calculate the BMI value and display messages based on the bmi value. Table 1 show the status based on the BMI value. Figure 2 shows the output of BMI system. You need to use the formula below to compute the BMI value:

   BMI = weight in kg/ (height in meter x height in meter)
c) This BMI system requires user to enter decimal values in weight and height text fields. If weight and height that entered by user is not decimal values, the program will throw a NumberFormatException. If height is zero, the program would throw an ArithmeticException. In addition, the name text field should not be empty.
d) Complete the **Exit** button function. A confirm message will be displayed when user click on the **Exit** button. The system will be end only when user selects yes option.

You can redesign the user interface and add more functions to this application in order to get higher marks.
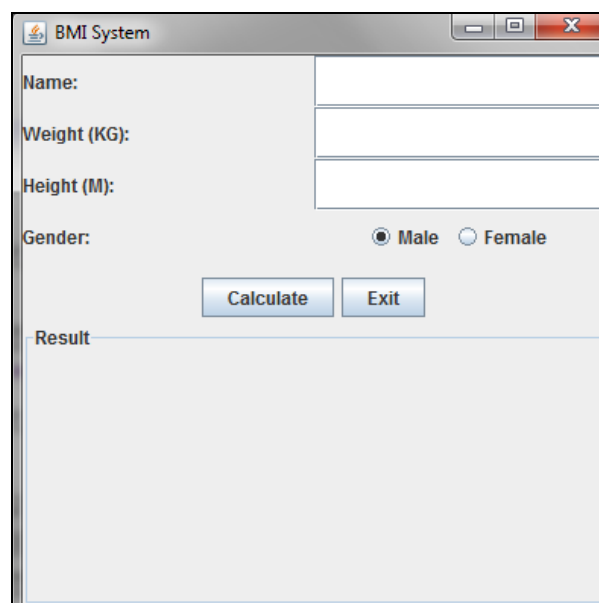

Figure 1: User interface

Figure 2: Output for BMI calculation

Table 1: BMI weight status categories

Male		Female	
BMI	**Weight Status**	**BMI**	**Weight Status**
Below 20	Underweight	Below 18.5	Underweight
20-24.9	Normal	18.5-21.9	Normal
25-31.9	Overweight	22-27.9	Overweight
32 and Above	Obese	28 and Above	Obese