Assignment 6_1:
Due 9:00 AM Thursday 18 Dec 2008
Submit: file zip of your source code.

Objectives: In this assignment, you familiarize yourself with designing GUI.

Note: You can discuss the assignment with your friends or your tutor but you have to complete by yourself. Copying other’s work is not permitted and you will get F grade.

1. Design GUI to match with sample GUI.
   - Window’s width is 400
   - Window’s height is 200
   - The Data Grid is build from GridLayout(3,3). Each cell holds a button.

2. Write code to respond to the user’s actions. Try to handle as much event as you can.

Look at the sample run below to understand CORRECTLY the requirements.

Hint: This exercise is very similar to the example of “The Brandi’s Bagel House Application” in textbook (page 406).

Initial Screen:  

Data Grid

Requirement1: Handle Data Grid
Clicking on any cell on Data Grid will generate a random integer number (<100).
**Requirement2:** Handle “Generate Number” button
Clicking on “Generate Number” button will randomly create numbers on the Data Grid. There’re 4 cases:

- **Case 1:** The user didn’t check any checkbox (Odd or Even) on the right panel before click on “Generate Number” button. Show error message as follows:

- **Case 2:** The user selected “Odd Number” checkbox on the right panel before click on “Generate Number” button. Generate randomly odd numbers on data grid. There numbers must be less than 100.
- **Case 3**: The user selected “Even Number” checkbox on the right panel before click on “Generate Number” button. Generate randomly even numbers on data grid. There numbers must be less than 100.

- **Case 4**: The user selected both “Even Number” and “Odd Number” checkboxes on the right panel before click on “Generate Number” button. Generate random numbers on data grid. There numbers must be less than 100. In this case, the numbers on data grid may be Odd or Even.
**Requirement3:** Handle “Change color” button
Clicking on “Change color” button will change color of Data Grid. There’re 2 cases:
- **Case 1:** The user didn’t check any radio button (Red, Green, or Blue) on the left panel before click on “Change color” button. Show error message as follows:

![Error Message](image1.png)

- **Case 2:** The user checked on radio button (Red, Green, or Blue) on the left panel before click on “Change color” button. Your program will change color of the grid data to the color selected by the user.

![Application](image2.png)
**Requirement 4:** Handle “Exit” button
Clicking on “Exit” button will force the program to exit normally.