Number guessing game:

Source code:

package intern;

import javax.swing.\*;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

import java.util.Random;

public class GuessTheNumber {

private JFrame frame;

private JTextField guessField;

private JButton guessButton;

private JLabel messageLabel;

private int numberToGuess;

private int numberOfTries;

public GuessTheNumber() {

// Set up the frame

frame = new JFrame("Guess the Number Game");

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

frame.setSize(400, 200);

frame.setLayout(null);

// Generate the random number

Random random = new Random();

numberToGuess = random.nextInt(100) + 1;

numberOfTries = 0;

// Set up the guess input field

guessField = new JTextField();

guessField.setBounds(50, 50, 100, 30);

frame.add(guessField);

// Set up the guess button

guessButton = new JButton("Guess");

guessButton.setBounds(160, 50, 80, 30);

frame.add(guessButton);

// Set up the message label

messageLabel = new JLabel("Enter a number between 1 and 100");

messageLabel.setBounds(50, 100, 300, 30);

frame.add(messageLabel);

// Add action listener to the button

guessButton.addActionListener(new ActionListener() {

@Override

public void actionPerformed(ActionEvent e) {

handleGuess();

}

});

// Display the frame

frame.setVisible(true);

}

private void handleGuess() {

try {

int guess = Integer.parseInt(guessField.getText());

numberOfTries++;

if (guess < 1 || guess > 100) {

messageLabel.setText("Please enter a number between 1 and 100.");

} else if (guess < numberToGuess) {

messageLabel.setText("Higher! Attempts: " + numberOfTries);

} else if (guess > numberToGuess) {

messageLabel.setText("Lower! Attempts: " + numberOfTries);

} else {

messageLabel.setText("Congratulations! You've guessed the number in " + numberOfTries + " tries.");

guessButton.setEnabled(false);

}

} catch (NumberFormatException ex) {

messageLabel.setText("Please enter a valid number.");

}

}

public static void main(String[] args) {

new GuessTheNumber();

}

}