

# Laboratory Exercise

## Guessing Game

### Objective:

At the end of the exercise, the students should be able to:

- Create a simple game that handles exceptions.

### Software Requirements:

- Latest version of NetBeans IDE
- Java Development Kit (JDK) 8

### Procedure:

1. Create a folder named *LastName\_FirstName* (ex. Reyes\_Mark) in your local drive.
2. Create a new project named **LabExer5A**. Set the project location to your own folder.
3. The program shall:
  - generate a random number from 1 to 50 for a player to guess;
  - display a message that indicates whether the player's guess is correct, too low, or too high; and
  - prompt the user to keep on guessing until the correct value is entered
4. Create a try-catch structure that will handle two (2) exceptions. These are when the user inputs the following:
  - a number that is out of range (1 – 50)
  - a letter or any non-numeric character
5. Prompt the user so that he can guess again if an exception is thrown.
6. Display the number of total guesses.

**Note:** An invalid input (when an exception is thrown) is not considered a valid guess or attempt.

### Sample Output:

```
Guess a number from 1 to 50!
30
Too high. Try again.
15
Too high. Try again.
10
Too high. Try again.
5
Too low. Try again.
qwerty
Invalid input.
Guess a number from 1 to 50!
51
Out of range.
Guess a number from 1 to 50!
7
Too low. Try again.
8
Too low. Try again.
9
You got it in 7 attempt(s)!
```

### GRADING RUBRIC (100 points):

Criterion	Description	Max Points
Correctness	The code produces the expected result.	40
Logic	The code meets the specifications of the problem.	40
Efficiency	The code is concise without sacrificing correctness and logic.	10
Syntax	The code adheres to the rules of the programming language.	10