

## CS101: Lab #12

### Writing Classes II

In this lab you will write three classes: `Die`, `PairOfDice`, and `Player`.

The `Die` class mimics the rolling of a die. Specifically, this class will implement the following methods:

- A default constructor initializing the number of sides of a die to 6.
- An overloaded constructor that takes an integer number of sides (assume greater than 1).
- `roll` which generates and returns a random number between 1 and the number of sides (inclusive).
- An accessor method to read the value of the face on the die.
- A `toString` method returning the string representation of the face value.

The maximum number of sides should be stored as a private constant in the `Die` class. Also use the `Random` class for the random number generator.

The `PairOfDice` class mimics the rolling of two dice. Specifically, this class will implement the following methods:

- A default constructor that creates and initializes the number of sides of each die to 6.
- An overloaded constructor that creates and takes two integer number of sides, one for each die.
- `roll` rolls each die and returns the sum.
- An accessor method to read the sum of the dice.

The `Player` class implements the `main` method which creates the dice pair and rolls them several times reporting the results.