

## Objectives:

As a programmer, you will be expected to understand good coding practice and logical structures. For this project **you**

**must show mastery of:**

- Proper code layout
- Variable declaration and initialization
- Proper library importing
- Constant declaration and initialization
- Collections (arrays)
- Method overloading
- Anonymous object
- Modularization
- Dispatching
- Program sequence, selection, & looping
- Cohesion
- UML
- JavaDoc
- Input validation/sanitization
- Good programming practices

## Lab 6

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*All of the chapter exercises plus:*

Create a tic-tac-toe class that will enable you to write a program to play tic-tac-toe. The class contains a private 3 by 3 two-dimensional array. Use an enumeration to represent the value in each cell of the array. The enumeration's constants should be named X, O, & EMPTY. The constructor should initialize the board elements to EMPTY. Allow two players. Whenever the first player moves, place an X in the specified square, and place an O for 2nd player moves. Each move must be to an empty square. After each move, determine whether the game has been won and whether it's a draw.

