

## Course JavaScript Programming Language and jQuery

### Module 2

TOPIC: OBJECT. ARRAYS. ARRAY OBJECT. STRINGS.  
STRING OBJECT. DATE OBJECT. MATH OBJECT.  
INTRODUCTION TO OOP

### Task

Create an object that describes the rectangle (stores coordinates of the upper left and lower right points), and write the following functions to work with such an object.

1. The function takes a rectangle object and displays information about it (where each point is located).
2. The function takes a rectangle object and returns its width.
3. The function takes a rectangle object and returns its height.
4. The function takes a rectangle object and returns its area.
5. The function takes a rectangle object and returns its perimeter.
6. Function of changing the width of the rectangle. It takes a rectangle object and the number of units to change the width by.
7. The function of changing the height of the rectangle. It takes a rectangle object and the number of units to change the height by.
8. Function of changing the width and height of the rectangle. It takes a rectangle object and two values to change the width and height by.
9. The function of the rectangle's shift along the X axis. It takes a rectangle object and shifts it by this many units.

10. The function of the rectangle's shift along the Y axis. It takes a rectangle object and shifts it by this many units.
11. The function of the rectangle shift along both the X axis and the Y axis. It takes a rectangle object and two values: X-axis shift and Y-axis shift.
12. Function to check whether the point is inside the rectangle. It takes a rectangle object and coordinates of the point.