

## Fifth practice – event handling

At this laboratory practice you will try to handle events:

- Keyboard event handling
- Mouse event handling

For work at this practice, use already programmed tasks from third and fourth laboratory practices.

### Task 1:

This task is focused on work with keyboard event handling. Extend your controller in program in the way, that player will be controlled by keyboard in these directions – up, down, left, right. Player must be animated in HTML Canvas element. You can use keys in ASCII range from 0 to 127 – this is standard ASCII range, which is working at all PC, strongly recommendation is to use numeric keys, arrow keys or alphabet keys.

### Task 2:

This task is focused on work with mouse event handling. Extend you program in the way, that after mouse click at some object in HTML Canvas will write basic object attributes to HTML element (you can choose HTML element – *p*, *ul*, *title*...). In case object are overlapping and you choose the place of object overlap, you will write to HTML element attributes of both objects. In this task, you extend Controller part and View part of MVC. In Controller you define mouse event handling. In View you will write attributes of marked (clicked) object into user interface).

### Extension

As an extension, you will extend player control in this way – after mouse click at enemy object you can attack enemy object. Attack will be triggered by pressing key (you can choose which key will trigger attack). You can attack picked (clicked) object only in case, that object is in attack range. Enemy object can attack back after your attack – enemy object needs to have player in attack range to attack player.

**RECOMMENDATION TO BACK-UP JAVASCRIPT PROGRAM. AT NEXT LABORATORY PRACTICES YOU WILL EXTENDS THIS PROGRAM WITH NEW FUNCTIONALITIES.**