

# Participatory development of serious educational games with dynamic difficulty adjustment

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Year	Class	Type	CH
2017/18	IIS	Project	98,8
	ITW	Lab	48
		Project	56
		Exam	10,5
	WAP	Project	65
		SP	12
		BP	36
		Summary	326,3

Table: Teaching activities overview.

- Article presentation at WorldCIST'18 conference
- Collaboration on writing the project task and computer exercises for ITW
- Development of new gamified computer exercise for learning jQuery for ITW students
- Created presentation about grid layouts and CSS frameworks usage for ITW course
- Questionnaires studies about students satisfaction with the new exercises approach



Olena Pastushenko; Jiří Hynek; Tomáš Hruška. "Generation of Test Samples for Construction of Dashboard Design Guidelines: Impact of Color on Layout Balance". In: *Trends and Advances in Information Systems and Technologies*. 746 (2018), pp. 980–990. DOI: [https://doi.org/10.1007/978-3-319-77712-2\\_93](https://doi.org/10.1007/978-3-319-77712-2_93).



Olena Pastushenko. *bombsQuery - A game for learning basic jQuery*. (Computer Software). 2018. URL: <http://grouperexplorer.sourceforge.net>.



Olena Pastushenko. Generator of dashboards interfaces based on selected attributes and XML model. (Computer Software). 2017.

Type	Accepted	Rejected	Review	Total
Conference paper	1	0	0	1
Journal entry	0	0	0	0
Invited speech	0	0	0	0
Software	2	0	0	2
Poster	0	0	0	0
...	0	0	0	0

**Table:** Summary of overall publication activities.

## BOMBS QUERY

◀ Level 4 of 5 ▶

There are different jQuery methods. Full list is [here](#). You have seen `.addClass()` used in the previous levels already.

Here are some other methods which might be useful for you:

- `.addClass()`: Adds the specified class(es) to each element in the set of matched elements.
- `.append()`: Insert content, specified by the parameter, to the end of each element in the set of matched elements.
- `.hide()`: Hide the matched elements.
- `.length`: The number of elements in the jQuery object.
- `.remove()`: Remove the set of matched elements from the DOM.
- `.removeClass()`: Remove a single class, multiple classes, or all classes from each element in the set of matched elements.
- `.show()`: Display the matched elements.
- `.toggleClass()`: Add or remove one or more classes from each element in the set of matched elements, depending on either the class's presence or the value of the state argument.

Now, apply correct methods to `this` in order to remove existing `flag` class after user clicks on the cell.

```
1 $(''.flag').click(function() {  
2   $(this).removeClass('flag');  
3 });  
4  
5  
6  
7  
8  
9  
10
```

Reset

Run

Next

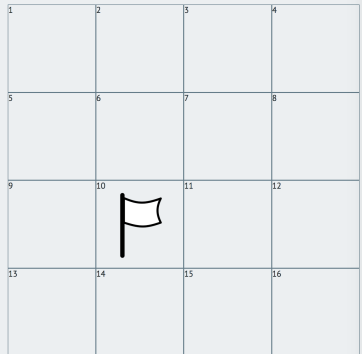


Figure: bombsQuery level example

- I am going to finish the article about the recognition of areas of significance on dashboards, in collaboration with Jiri Hynek
  - Studying the impact of Gestalt principles on the location and content of dashboards widgets
  - Using developed Generator to create a set of dashboards interfaces for testing purposes
  - Testing and evaluation
- I am going to finish the article about the impact of using gamification in higher education
  - Study the results of students questionnaires
  - Create participatory scheme for further gamified tasks development
  - Describe the use case of the bombsQuery game for teaching jQuery



Thank You for Your Attention !