

# Web Applications Development: Javascript

21 XI 2017

Allotted time: 90 minut. You have to send the solution *before* 19:50.  
Points total: 25

## 1 Sending the solution

Pack all (.js i .css) files into zip and name it by replacing login with your lab login. .zip.

Send email:

To: jan.karwowski@mini.pw.edu.pl

Subject: [WebApp] JS1 2017

Attachments: .zip

Empty message body.

## 2 The task: celebrity circulation simulation

You wave to write an application that simulates circulation of celebrity in media. The browser window is divided into three parts like shown in Figure 1:

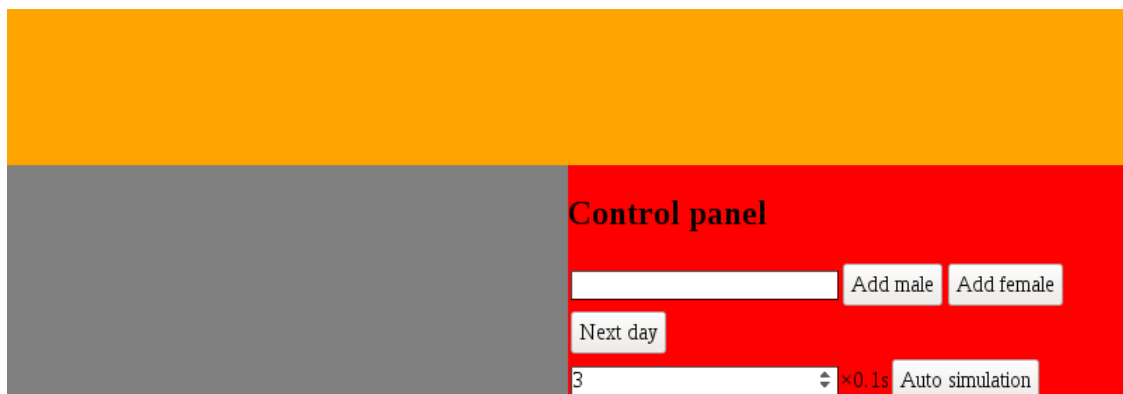
- upper part where currently popular celebrities are shown,
- bottom left, the shade, where not popular celebrities sit and
- bottom right, containing the control panel.

### 2.1 Common requirements

You have to send only your .css and .js files (no html, no jquery). Your solution will be checked against the original timers.html and has to work with it. If your solution will not work with the original html, it will be considered incorrect.

Creation of global variables in javascript code is strictly forbidden. **Use of global variables is strictly forbidden.**

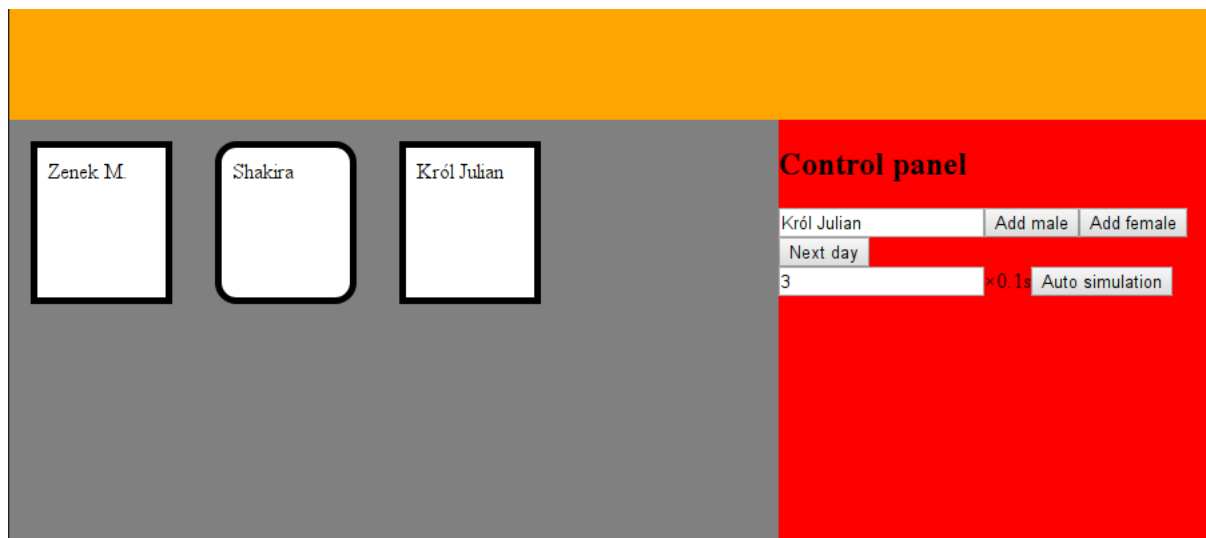
### 2.2 Detailed requirements



Rysunek 1: The page after loading

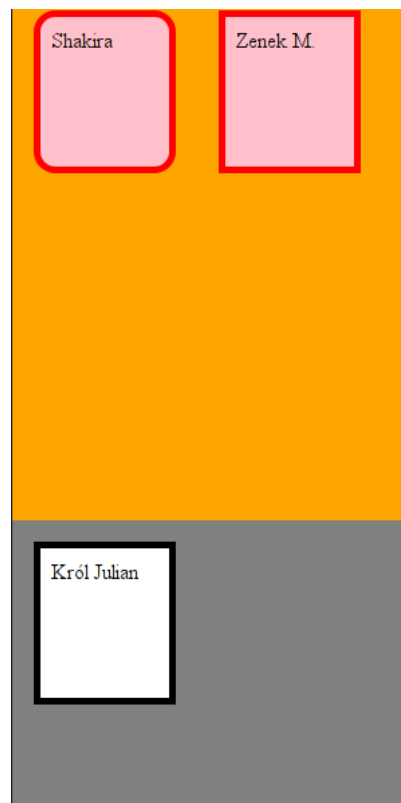
1.  Page area is divided into three parts. The top is orange, all page wide and has height of 40% of the page. Bottom left — gray, 60% height, 50% width. Bottom right — red background.
2.  After loading the page the buttons like in the figure are created in the red area.

3. 3 points Clicking on *add male* i *add female* buttons causes adding a new celebrity into the gray area. The celebrity has name given in the input field next to the buttons. Male celebrities have sharp corners and female ones — rounded corners. Page state after adding three celebrities is depicted in Figure 2.



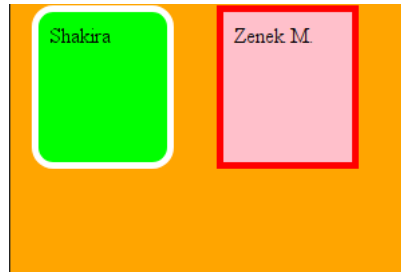
Rysunek 2: Adding three celebrities: Zenek M.(♂), Shakira(♀), Król Julian(♂).

4. 3 points Clicking on a celebrity simulates a scandal that makes him extremely popular – he is moved to the orange area and changes his background to red and border to pink like depicted in Figure 3.

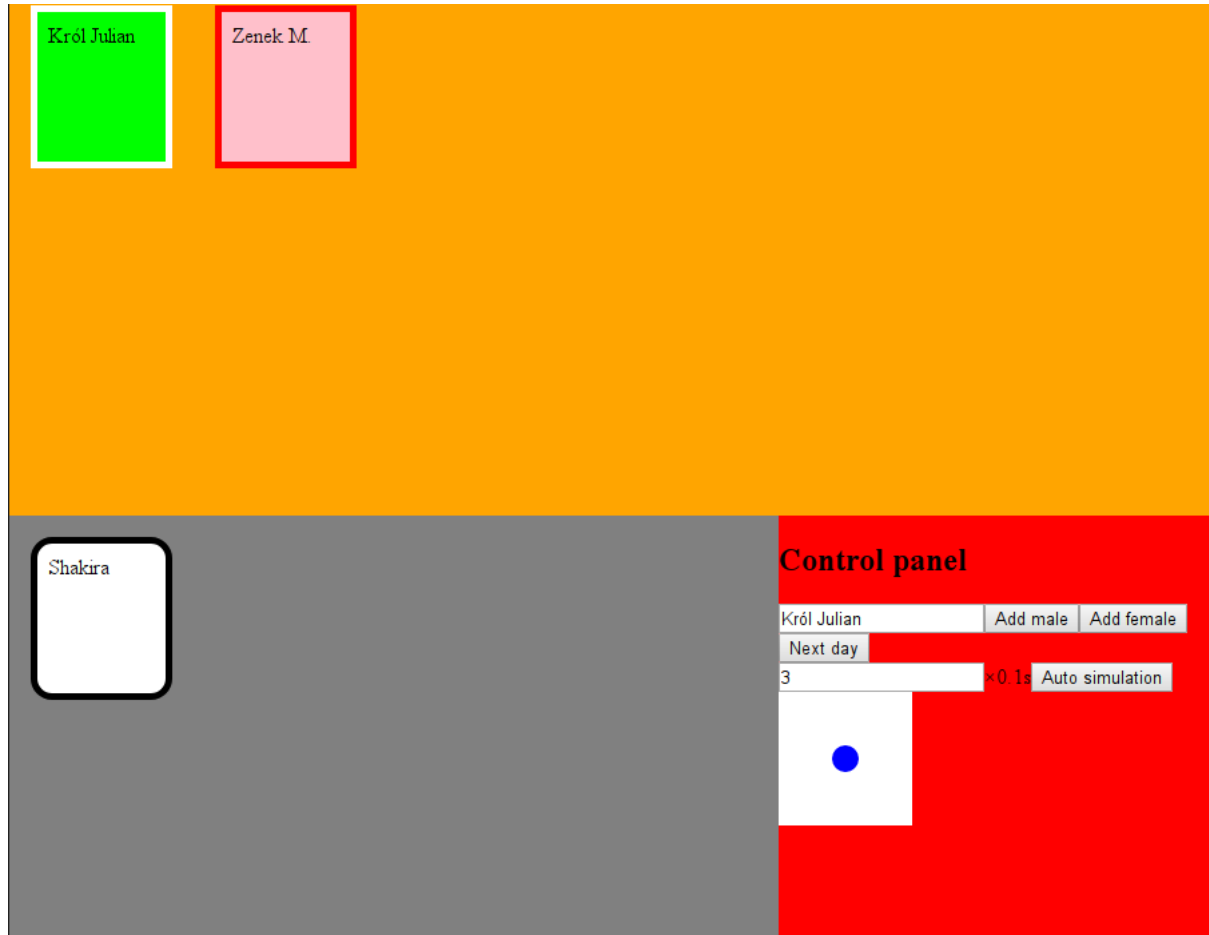


Rysunek 3: Celebrities after being clicked.

5. 3 points *Next day* button increases time by one day. Celebrities are forgotten: One day after scandal the background of celebrity becomes white and border green. After two days celebrity goes back to the gray area. See Figure 4. Celebrity can be clicked and become popular while being both on gray and orange area.
6. 4 points A canvas is added under the buttons. A blue circle is drawn on the canvas. Circle radius is proportional to the number of celebrities in the orange area. When there are 10 celebrities in the orange field the circle has diameter equal to canvas dimension. Example situation is shown in Figure 5.

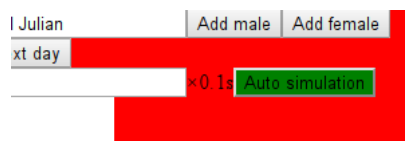


Rysunek 4: One celebrity just after being clicked, another one one day after.



Rysunek 5: A circle when there are 2 celebrities in the orange field.

7. 3 points *Auto simulation* button causes next day action to be executed every 1 second. When automatic repetition is started, the button becomes green, Figure 6.
8. 2 points Latter clicks on *Auto simulation* toggle simulation state. When simulation is stopped, the button is normal again.
9. 2 points Input field before *Auto simulation* sets the delay between subsequent next day actions. Changes are applied automatically to the interval that comes after the current one.



Rysunek 6: The button when auto simulation is running.