Help to complete the tasks of this exercise can be found on the chapter 13 ” JavaScript and the browser” ,chapter 14 “The Document Object Model” and chapter 15 “Handling events” of our course book “Eloquent JavaScript” (3rd edition) by Marijin Haverbeke. The aims of the exercise are to become familiar with DOM and how JavaScript events are handled and used.

Embed your theory answers, drawings, codes and screenshots directly into this document. Always immediately after the relevant question. Return the document into your return box in the Optima platform by the deadline.

It’s also recommendable to use Internet sources to supplement the information provided by the course book.

The maximum number of points you can earn from this exercise is 10.

Tasks:

1. HTML DOM (2 points)
   1. What is HTML DOM? (0,5 points)
   2. What JavaScript can do to web pages by utilizing HTML DOM? (0,5 points)
   3. List and shortly explain at least three different kind of HTML Node types? (0,5 points)
   4. Criticize HTML DOM. (0,5 points)
2. List and explain different ways to attach event handlers in JavaScript. What are the pros and cons of each of them? (1 point)
3. Create an application that makes it possible to add messages on the web page. The web page displays a text area into which a new message can be written. The web page also displays a button “Add a new message!” that can be used to add a new message on the page. The message is added as a new paragraph on the page below the text area and the button when the button is clicked. The new message doesn’t replace the old ones already on the page. (2 points)

We’ll do this together during the lesson.

1. Create a page with 3 buttons. Layout is not important. When button 1 is pressed, background of a page should change to blue, button 2 changes it to gray and button 3 resets background to white (2 pts)
2. Related to event handlers, answer 2 out of the following 3 questions. (1 point)
   1. Why would you sometimes like to control event propagation? (0,5 points)
   2. Why would you sometimes like prevent a default action? (0,5 points)
   3. What is debouncing an event? (0,5 points)
3. Make exercise “Balloon” from book (Exercises, chapter 15). (2 pts)