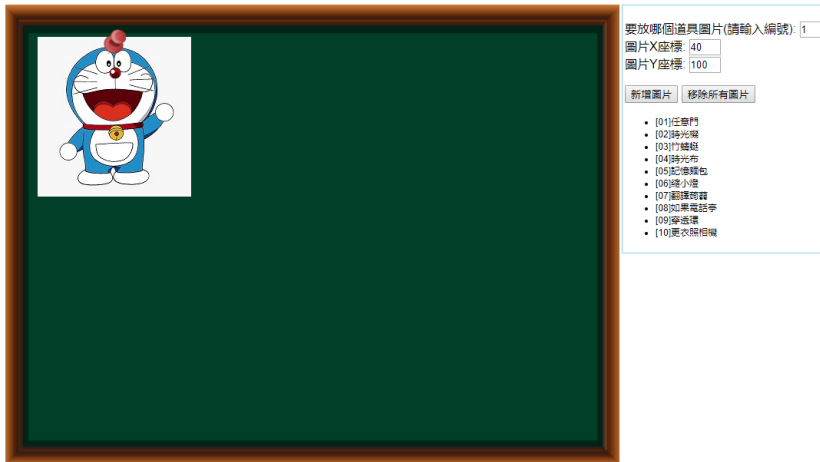
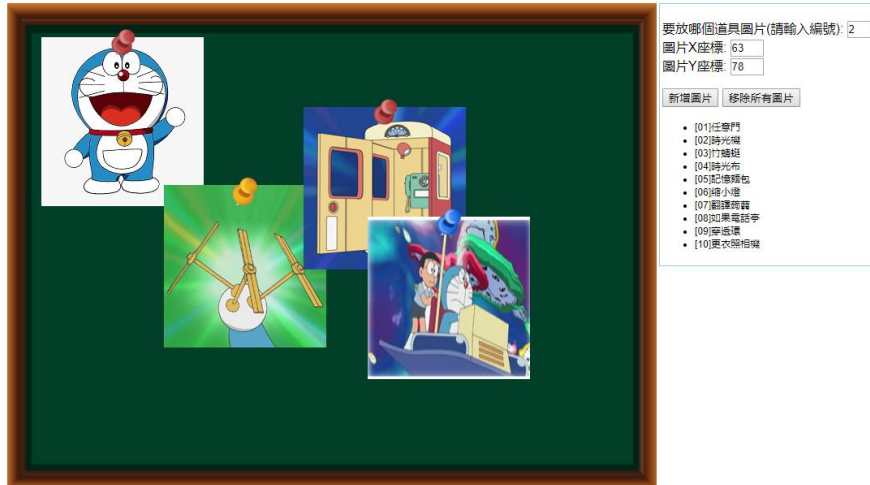


Exercise 9

1. Please develop a webpage to let a user to pin (釘) the pictures of Doraemon accessories to the blackboard.
 - Please refer to ex-9-1-partial.html to obtain the initial UI. Notice that a pin (大頭針) is shown atop each picture.
 - We have images of three kinds of pins: blue.png, red.png, and yellow.png.



- The user can select the picture number, input the coordinate of X and Y, and click the button "新增圖片". A corresponding picture will appear in the blackboard. A random pin will be shown atop the picture (亂數決定大頭針的顏色，並顯示於圖片上層). A newly-added picture should be displayed in front of old pictures.



- When the user clicks the button "移除所有圖片", all pictures should be removed.

Advanced:

- When the user closes the browser and reopens the browser, all posted pictures are still shown in the blackboard. (請留意移除所有圖片也要從本地端儲存中移除)

Bonus:

- The picture can be dragged and dropped (拖放功能) within the scope the blackboard. The new coordinate will be updated to the local storage.

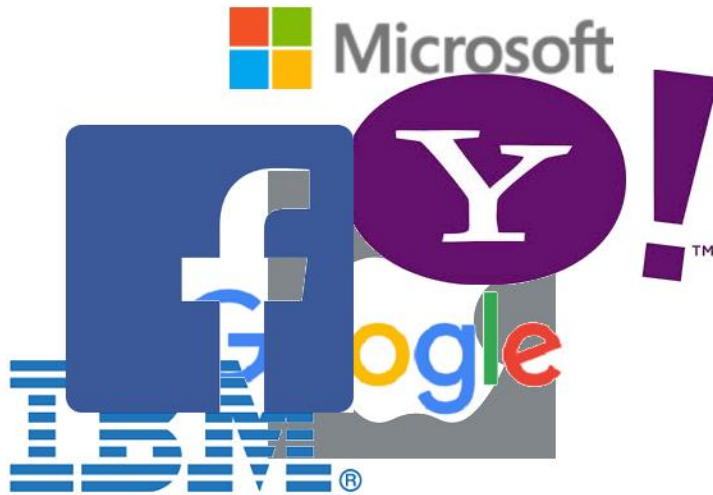
Hints:

- Be sure to understand the current HTML and CSS before coding JavaScript.
- Please use “z-index” appropriately.
- Please observe the relative position of the pin and the picture, and design the rules to set the coordinates of the pin every time a picture is added.
- Drag and drop: https://www.w3schools.com/html/html5_draganddrop.asp.

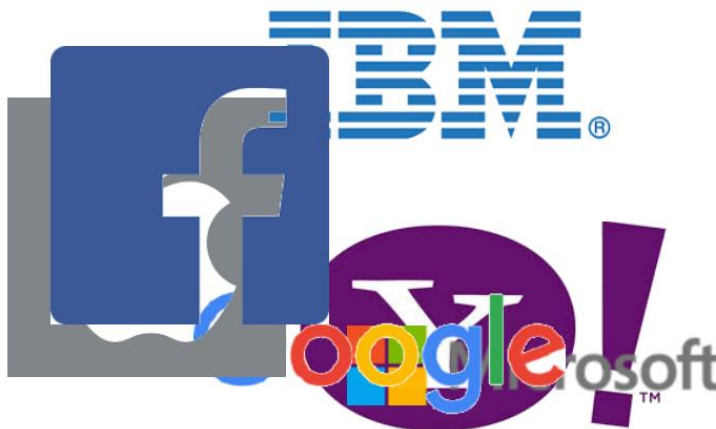
2. Please develop a logo show page:

- Show icons of six famous IT companies ("microsoft", "google", "yahoo", "facebook", "ibm", and "apple") in random orders and random coordinates (both X and Y should be larger than 100px and smaller than 400px).
- Shuffle these icons in random orders and random coordinates every 2 seconds (每 2 秒刷新畫面一次).

Initial view:



After two seconds:



Hint:

- The image file names can be stored in an array.
- Please set "absolute" position (top and left) for all pictures.
- Please update the page periodically by using "setInterval()".