

Notes about the practical part of the exam:

- Name the file containing your code ***Surname_your-Unipi-badge-number.html***
- You can use the teaching material provided by the instructor.
- You can use the manuals of the languages.
- Available time: 2 hours

Use HTML, CSS, and JavaScript to implement the following client-side application.

The application is a variation of the “scratch and win” game. The goal is to find the treasure within 5 attempts. The game initially appears as illustrated in Figure 1. The upper part of the interface shows the map containing the treasure. The map is represented as a 10x10 grid. The lower part contains the 5 attempts available to the player. The treasure is initially hidden. When the player clicks the “Scopri” (“Show”) button, the treasure is shown onto the map as a green cell (Figure 2). The player can now “scratch” the cells containing the available attempts. Each attempt is characterized by its coordinates and the amount of money associated with such an attempt. When the user clicks on the “Gratta” (“Scratch”) button, a new column is revealed. Each column contains the coordinates and the prize. In addition to revealing the column content, the map shows the carried-out attempt as an orange cell (Figure 3). If the player finds the treasure, a message is shown (Figure 4) and the cell of the map that contains the treasure flashes for 5 seconds. After the 5 seconds, the game goes back to its initial state and the user can play again. Flashing must be implemented by alternating red and green colors with a period of 200 ms. On the contrary, if the user does not find the treasure in 5 attempts, another message is shown (Figure 5) and after 5 seconds the game goes back to its initial state. The prizes associated to the attempts can be 10, 50, or 100 euros. Buttons must be enabled/disabled as shown in the figures.

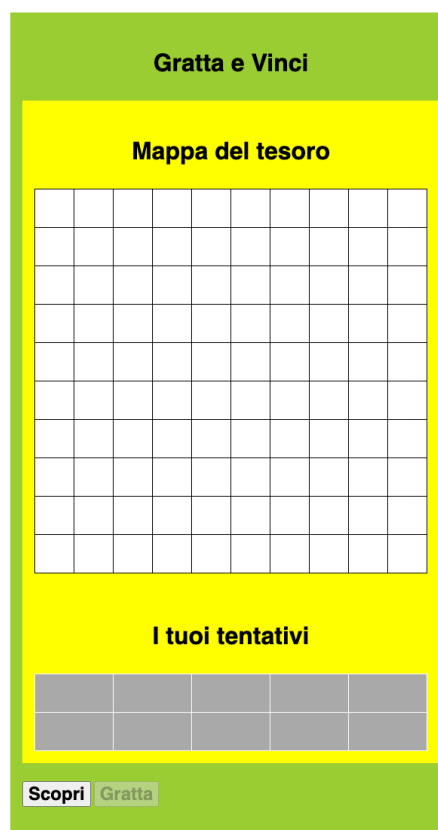


Figura 1

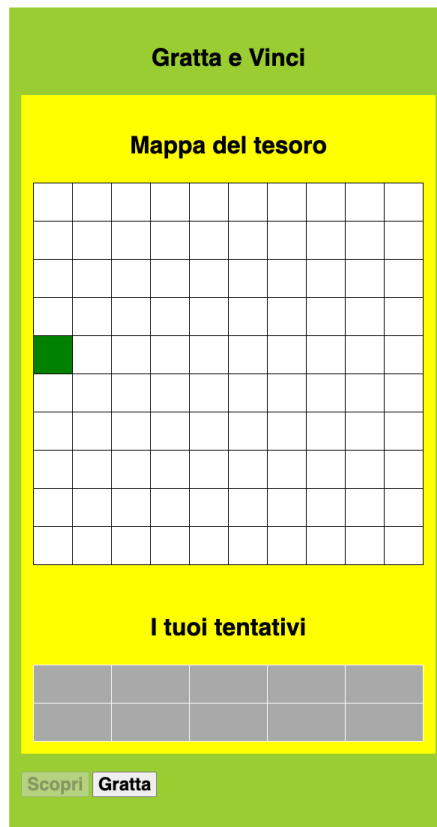


Figura 2

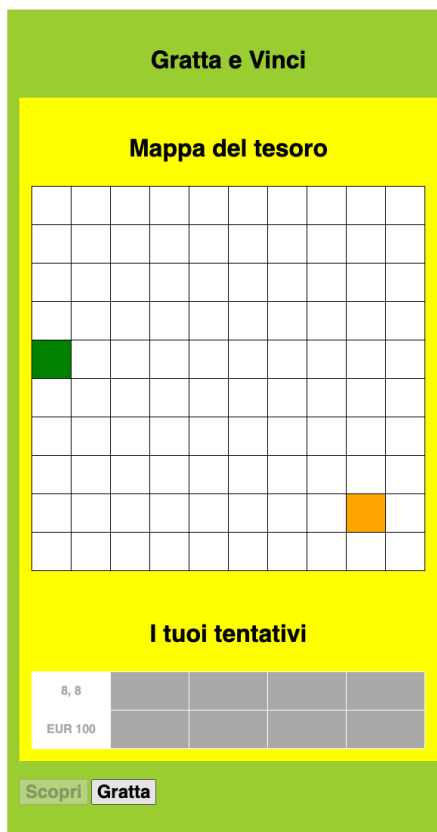


Figura 3



Figura 4

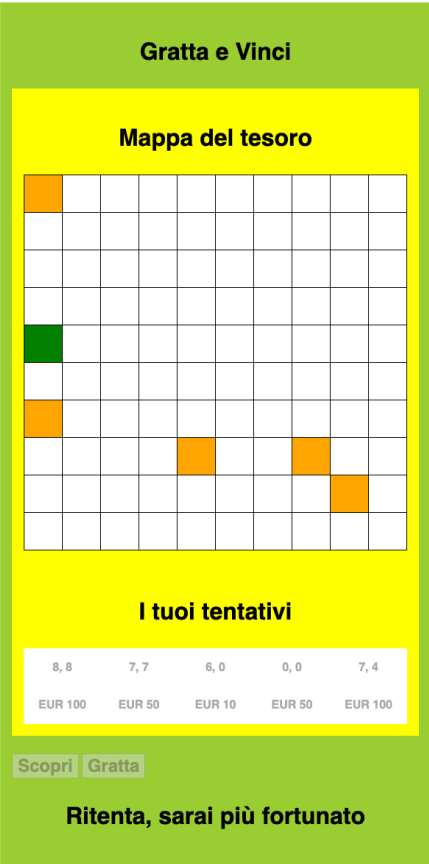


Figura 5