#17 – WEB TECHNOLOGIES

**TEST PROJECT**

1. **INTRODUCTION**

A School wants to improve the cognitive capacity of its students with the help of children's games. To do so, it decided to implement the famous game Simon Says in its computer labs.

Your task is to develop the game using Javascript.

1. **INSTRUCTIONS FOR THE COMPETITOR**

To assist you in your work, the information on the games and sounds that are important guidelines for building the project has been made available. This material can be found in the folder "assets".

* 1. **BRIEFING**

You have been asked to develop a game for the a school, where students will be able to play to improve their cognitive and logical thinking skills. In addition, they will also be able to see the best players through a ranking that will be available on each computer.

1. **PROJECT REQUIREMENTS**

The requirements of this game are as follows:

* The "board" will possess four colors. Being: Red, green, yellow and blue. A model can be found in "medias/ example.png".
* Each color has a corresponding sound that can be found in "media/sounds".
* When loading the game a field should appear for the player to put his or her name, which should be stored so that when logging in again from the browser the user information is not lost. **(local storage)**
* The start screen of the game will have two buttons
  + Play
  + Ranking
* Clicking on play button will start the game.
* Clicking on "Ranking" will show the top 3 players of a given browser.
* When the "Play" button is clicked, the game will start, and in the first round a random color will light up and a sound will be emitted corresponding to the color it has lit up. The user must click on the correct color to continue the game. When clicking on the color, the corresponding sound should also be emitted.
* In the second round, it will light up the color that was lit in the first round, and a new random color will follow, also emitting the corresponding sound. The user must click on the color of the first round, and then on the color of the second round, in the correct sequence. And the game will go on like this, always increasing a color in the random sequence, until the player makes a mistake.
* In the corner of the screen, the player's current score should be shown.
* When the player misses the color, a message indicating the end of the game and a button to start over should be shown. When you click on start again, the game begins again with a random color.

Remember, you have **2 hours and 30 minutes** to perform this task, so have a good test.