Assignment 1 – JavaScript Card Game

Objectives:

Develop the skills of manipulating DOM using JavaScript and CSS

You are asked to design and develop a simple memory training game that asks the players to find all triples in a set of cards. The gameplay is as follows:

- 1. A set of cards with numbers on them are placed face down at start.
- 2. In each turn, the player can click on <u>three cards</u> to turn them over, revealing their numbers.
- 3. If the three cards are with the same number, a triple is found.
- 4. If the three cards are with different numbers, the cards will be covered again to hide their number.
- 5. The game continues until all cards are revealed.

Basic Requirements:

- 1. A user interface displaying the game title and instructions.
- 2. The number of cards can be set to any multiple of 3 by the players.
- 3. The set of cards should be shuffled on each round of the game.
- 4. The game should be visually appealing by using CSS. The cards should animate when they are selected or flipped.
- 5. The game should be developed using only JavaScript. No other programming languages or libraries are allowed.
- 6. The game should run in a web browser and should be accessible to all users, regardless of the device or screen size.
- 7. The programs should have proper comments, explaining the code.

Advanced Requirements:

- 1. A scoring system that keeps track of the player's progress and displays the current score on the user interface. The player should earn points for each successful match and lose points for each incorrect guess.
- 2. A timer that keeps track of the time elapsed and ends the game when a specified time limit is reached.

Submission and Evaluation:

- 1. The game will be evaluated based on its functionality, user experience, and the quality of the code and documentation.
- 2. The game should be submitted as a zip archive to Canvas, along with a brief explanation (readme.txt) of how to run the game.