

Roll the dice game web app

Development
process

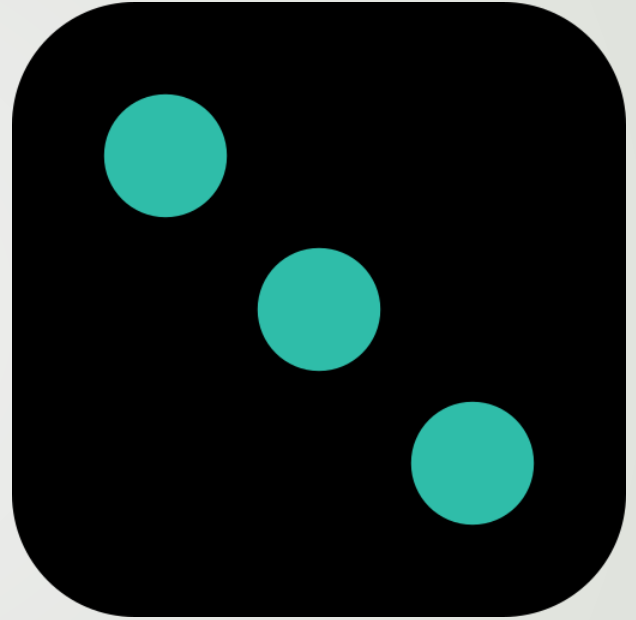


TABLE OF CONTENTS

01

Implementing the web app
basic/initial structure

02

Adding JavaScript logics to
manipulate the DOM dynamically

03

Making the final adjustments for the
visual

04

Finalizing code refactoring and
running final tests

05

Deploying the web app online

06

Completing the README document



Implementing the web app
basic/initial structure

Skills used

Code writing

WHY WAS THIS STEP IMPORTANT

This step was important to ensure that the initial structure of the web app was properly established (structure on which JavaScript would then be able to work with).

WHAT WAS THE GOAL

Ensure that all static content for the web app is present in the HTML and CSS documents, with appropriate class names and ids to allow easy reference to it later using JavaScript.

A yellow square containing the letters 'JS' in a bold, dark grey, sans-serif font, representing JavaScript.

JS

Adding JavaScript logics to
manipulate the DOM
dynamically

Skills used

Research
Problem solving
Code writing
Debugging

WHY WAS THIS STEP IMPORTANT

Implementing all the code to transform the previously static web app into an interactive and dynamic one was important to ensure it responds correctly to user actions.

WHAT WAS THE GOAL

- Create event listeners
- Create the function associated with each event listener
- Create conditional logics and supporting codes to handle every possible case users may face while playing

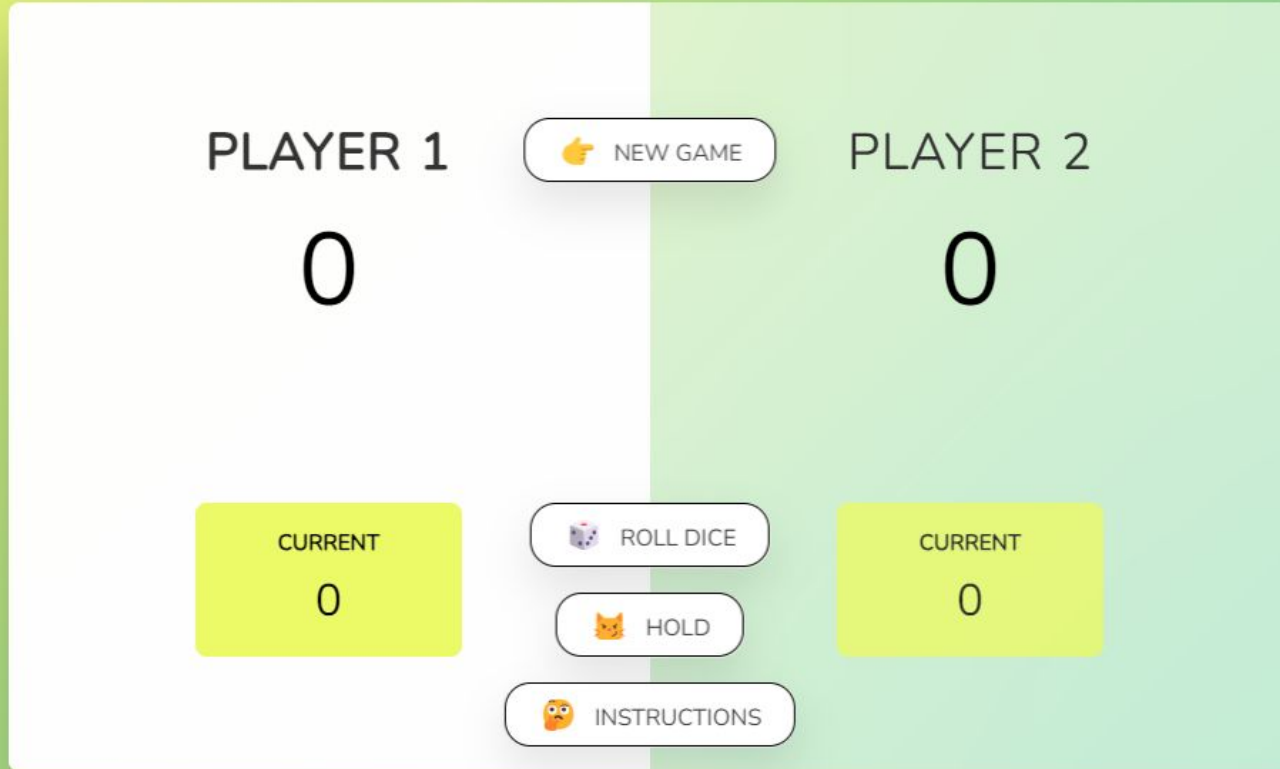
WHAT WAS THE GOAL (SUITE)

Among the main code blocks to be implemented, there were the logics for:

- Generate, for each die roll, a random number between 1 and 6 and display it on the screen using the image of a die
- Display in real time the points earned by each player over each die roll, as long as they obtain a result other than 1
- Reset, to zero, the points accumulated by a player during a round if a 1 is obtained from a die roll, and then automatically switch focus on the other player to change turn
- Allow players to save their points earned during a round, add this total in real time to their points accumulated during the game, and then switch focus on the other player to change turn
- When a player reaches a total of 100 points, change its screen section and display a victory message
- Allow players to reset the game at any time

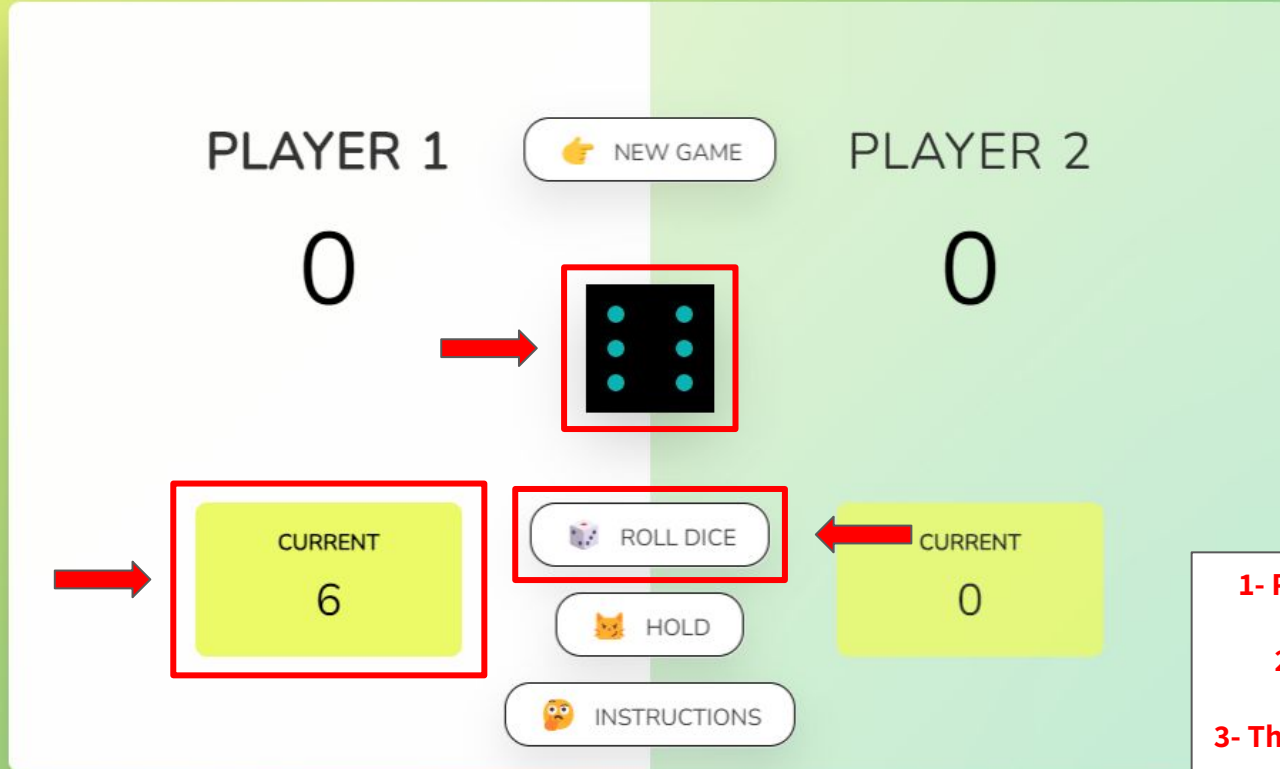
LANDING VIEW

(focus on player 1)



LANDING VIEW

(game start - focus on player 1)



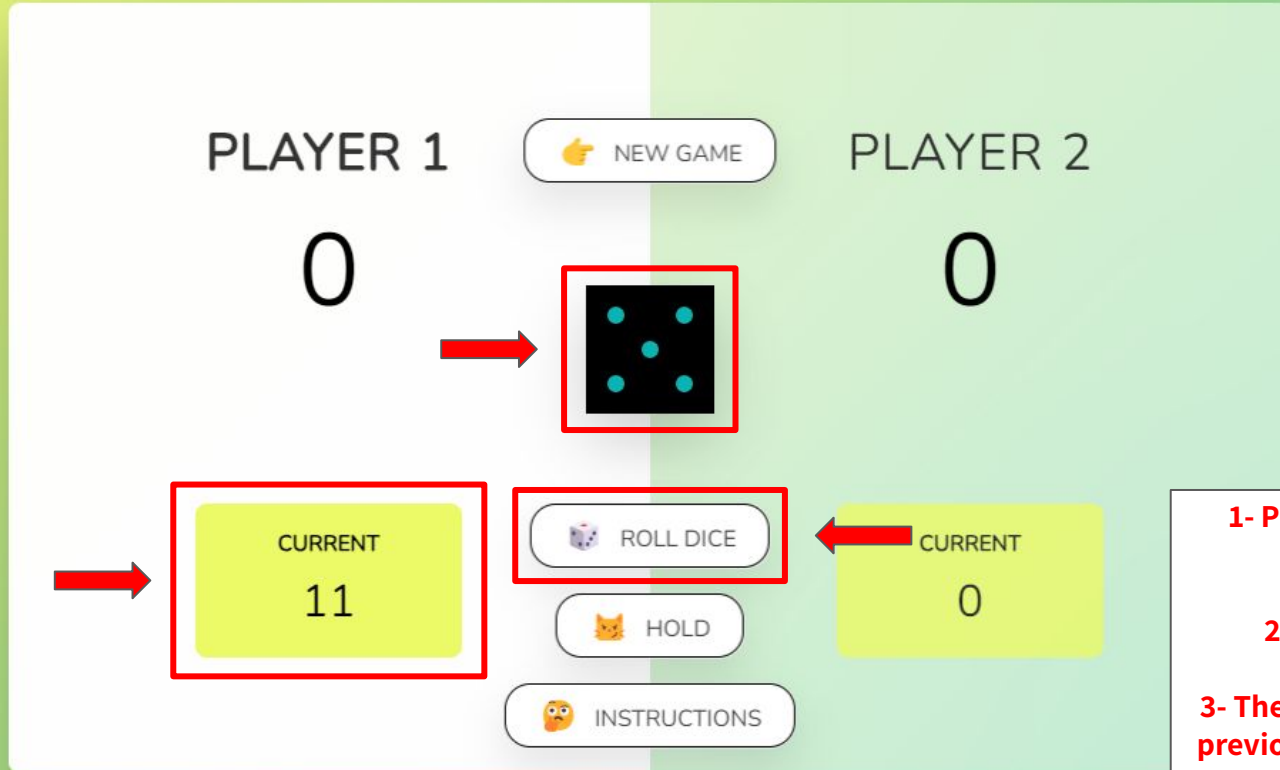
1- Player 1 rolls the die

2- Die is displayed

3- The score is stored in the yellow box

LANDING VIEW

(focus on player 1)



1- Player 1 rolls the die again

2- Die is displayed

3- The score is added to the previous score stored in the yellow box

LANDING VIEW

(focus on player 2)



1- Player 1 clicks on **HOLD** button to save the points

2- Points earned are shown below player 1 name (11)

3- Player 1 current score yellow box is set back to zero

4- The focus goes on player 2

LANDING VIEW

(focus on player 2)



1- Player 2 rolls the die

2- Die is displayed

3- The score is stored in the yellow box

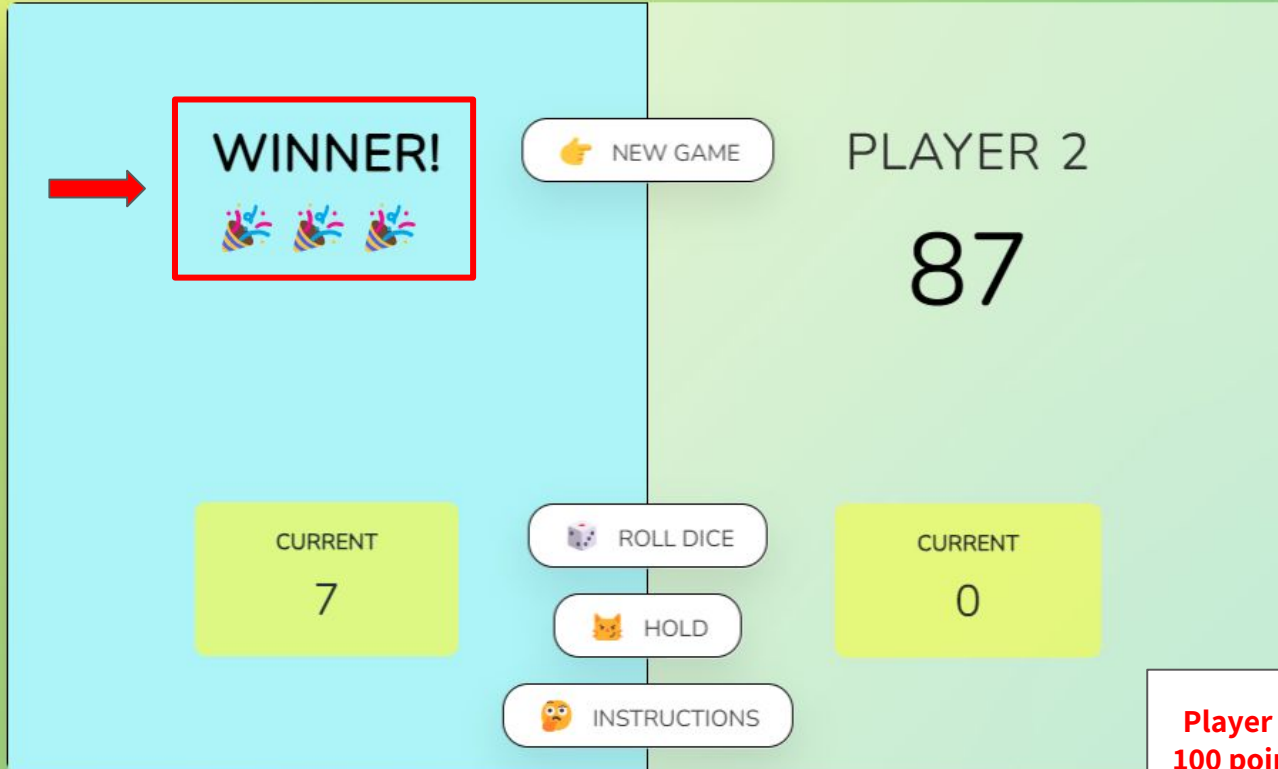
LANDING VIEW

(focus on player 1)



LANDING VIEW

(focus on player 1)



Player 1 eventually reaches 100 points, and win the game

LANDING VIEW

(focus on player 1)



The 'New game' button is clicked, and the interface and the game are reset to the initial/default state

GAME INSTRUCTIONS



Instructions



Objectives

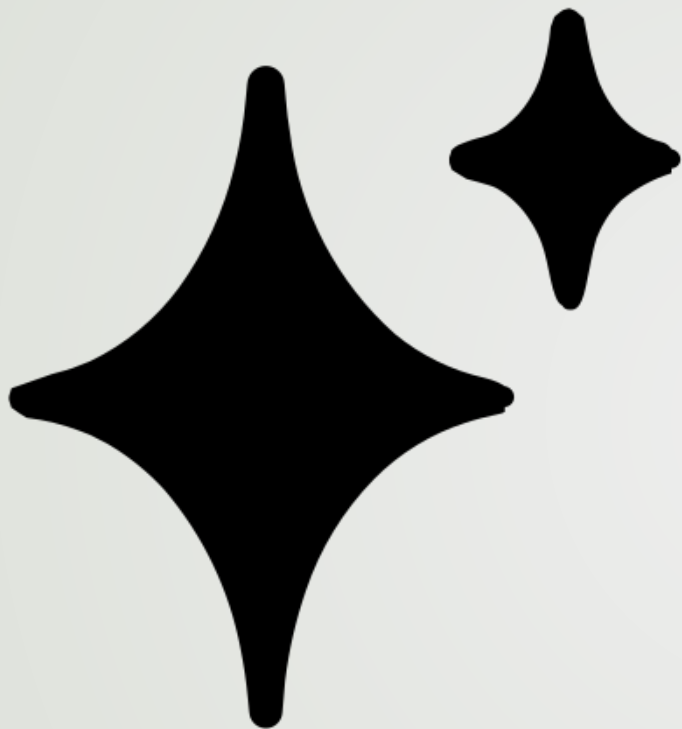
- Each player must accumulate as many points as possible.
- The first player to reach a total of 100 points wins the game.



Gameplay

- During their turn, each player can roll the dice as many times as desired, and accumulate points accordingly, as long as the number obtained is superior to 1.
- The points are calculated by adding the result obtained on each dice roll to the previous amount of points cumulated.
- If a player rolls a 1, all the points accumulated by this player in the round are lost and the turn passes to the next player.
- When players wish to save their points because they believe they will roll a 1 shortly, they can stop their turn, keep their accumulated points, and pass the dice to the next player.

[Back to the game](#)



Making the final adjustments
for the visual

Skills used

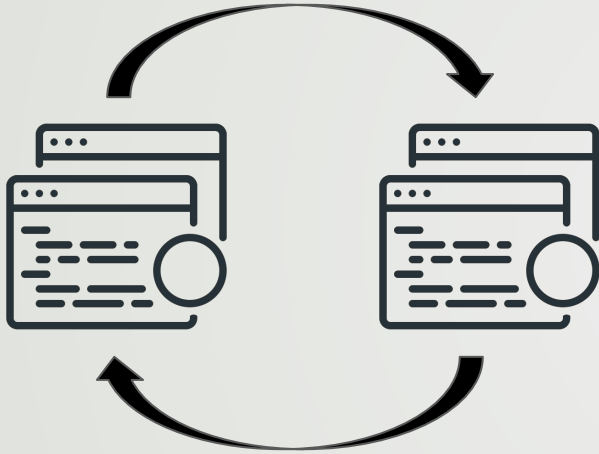
Research
Code writing

WHY WAS THIS STEP IMPORTANT

This step was important to provide the web app a more engaging and dynamic visual, and to create a more finished and visually attractive product.

WHAT WAS THE GOAL

Implementing different color combinations, with special attention given to finding the right balance between a visually appealing UI that is however not disturbing for users. Some emojis were also used to make their visual more friendly.



Finalizing code refactoring
and **running** final tests

Skills used

Code writing
Debugging

WHY WAS THIS STEP IMPORTANT

When possible, it is good practice to refactor codes. When there are a lot of duplicate codes, and some functionalities need to be changed for example, multiple identical updates may be necessary across various locations and files, leading to a potentially lengthy and error-prone process. Code refactoring helps prevent this by making the code cleaner, more logical, and more concise.

WHAT WAS THE GOAL

Replacing the numerous and previously duplicated lines of code to accomplish the same actions, but with fewer code lines, thus significantly reducing the length of the code. To do this, different functions were created.

Testing the game with all possible scenarios that users might encounter to ensure everything works as expected.

Fixing bugs as needed.



github-pages

Deploying the web app online

Skills used

N.O.

WHY WAS THIS STEP IMPORTANT

This step was important to make the *Roll the dice* web app publicly available by hosting it on GitHub Pages (gh-pages).



README .

md

Completing the README document

Skills used

Communication
Content writing

WHY WAS THIS STEP IMPORTANT


Ensure the project is well documented and easily accessible by anyone interested.



WHAT WAS THE GOAL

Updating and completing the README file located in the *Roll-dice-game* Github repository. The goal was to ensure that all relevant information regarding this project is accessible under these three categories:

- Project description
- User interface
- Technical aspects

README SAMPLE - FULL VERSION ON GITHUB

 README

Roll the dice web app

Table of content

- [Project description](#)
- [User interface](#)
- [Technical aspects](#)

Project description

This game web app was created to allow users to compete in a simple two-players game.

Objectives:

- Each player must accumulate as many points as possible.
- The first player to reach a total of 100 points wins the game.

Specific rules:

- During their turn, each player can roll the dice as many times as desired, and accumulate points accordingly, as long as the number obtained is superior to 1.