

## 2048 Game

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Talent Sprint

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# Introduction

- ◀ 2048 is a popular tile-matching puzzle game. The game is played on a 4x4 grid, and the objective is to combine tiles with the same number to create a tile with the number 2048.
- ◀ With that, a login page was also developed, which will enable you to Signup or Login into the game.

# Tools Used

- 1 HTML: HTML (Hypertext Markup Language) is used to structure the basic layout of the game. In a 2048 game, HTML may be used to define the game board as a grid of cells. Each cell represents a tile in the game.
- 2 CSS: CSS (Cascading Style Sheets) is used for styling and layout. You can use CSS to make the game look visually appealing by customizing the colors, fonts, and overall design. It's also used for responsive design, ensuring that the game scales properly on different screen sizes.
- 3 JavaScript: JavaScript is the core technology used to implement the game's logic and functionality. Here are some key aspects of how JavaScript is used in a 2048 game:
  - Game Logic: JavaScript is used to handle the game's logic, including the movement of tiles when the player swipes or presses arrow keys. It manages the merging of tiles with the same values and calculates the player's score.

# Login Page - Tools

- ❶ Express.js: Express.js is a popular web application framework for Node.js.
- ❷ Handlebars (hbs): Handlebars is a templating engine for JavaScript. It allows you to create dynamic HTML templates.
- ❸ MongoDB: MongoDB is a NoSQL database that is used for storing and managing data of the people who logged in.

# Learning and References

- ◀ <https://www.youtube.com/watch?v=XM2n1gu4530ab>
- ◀ <https://www.freecodecamp.org/news/how-to-make-2048-game-in-react/>
- ◀ <https://projects.raspberrypi.org/en/projects/cd-beginner-javascript-sushi/7>
- ◀ <https://www.youtube.com/watch?v=V8dYGNfHjfkab>
- ◀ <https://github.com/kubowania/2048>