

JavaScript Concepts Learned from Typing Speed Game Project

1. Variables & Constants

- Use of let and const
- Understanding scope and data types (string, number, boolean)

2. DOM Manipulation

- Selecting elements with document.querySelector()
- Changing element content and properties with innerHTML, value, disabled

3. Async / Await + Fetch API

- Using async functions and await
- Fetching data from external API using fetch()
- Parsing JSON with response.json()

4. Event Handling

- Listening to user actions with addEventListener (input, click)
- Using arrow functions (() => {}) as callbacks

5. Timers

- setInterval() for countdown
- clearInterval() to stop the timer

6. Conditional Statements

- Using if and else for logic control
- Using string methods like endsWith(), trim()

7. String & Array Methods

- Using `split()` and `trim()` for word comparison
- Regular expressions (e.g. `\s+/\`) for splitting by spaces

8. Logical Flow & Game Logic

- Tracking game state using boolean flags
- Word-by-word accuracy checking
- Detecting end of quote and loading new quote

9. Popup Handling & Styling

- Manipulating element styles with JavaScript
- Showing and hiding result popups
- Using template literals (``${}``) for dynamic messages

10. Reusability and Modular Code

- Organizing code into reusable functions like `startGame()`, `stopGame()`, `endGame()`

11. Real-Time App Thinking

- Handling live user input and tracking performance
- Designing a complete flow: Start -> Play -> End
- Providing live feedback and results

This project gave hands-on experience with frontend JavaScript, real-world API usage, and live game interactivity.