

JavaScript Array Manipulation Notes

Overview

- **Array Manipulation:** Arrays can be declared empty, assigned values, and modified.
- Declare empty array: `var pets = [];`
- Assign values: `pets[0] = "dog"; pets[1] = "cat";`.
- Leave gaps: `pets[3] = "lizard"; pets[6] = "snake";` (indices 0–2, 4–5 are undefined).

Adding Elements

- Assign to new indices: `pets[3] = "lizard";` adds "lizard" at index 3.
- Use `push()` to add to the end: `pets.push("fish", "ferret");` adds multiple elements.

Removing Elements

- Use `pop()` to remove the last element: `pets.pop();` removes "bird" from ["dog", "cat", "bird"].

Updating Elements

- Reassign an index: `pets[0] = "newDog";` replaces "dog".

Key Points

- Indices start at 0.
- Gaps in arrays are valid but return `undefined` when accessed.