JavaScript Array Methods Notes

Overview

- **Array Methods**: Manipulate arrays by adding, removing, or copying elements.

Methods

- `shift()`: Removes the first element.
  - Example: `pets.shift();` removes `"dog"` from `["dog", "cat", "bird"]`, leaving `["cat", "bird"]`.
- `unshift()`: Adds elements to the beginning.
  - Example: `pets.unshift("fish", "ferret");` adds `"fish"`, `"ferret"` to start.
- `splice()`: Inserts and/or removes elements at a specific index.
  - Syntax: `array.splice(start, deleteCount, item1, item2, ...)`
  - Example: `pets.splice(2, 2, "pig", "duck", "emu");` (from `["dog", "cat", "fly", "bug", "ox"]`, removes `"fly"`, `"bug"`, adds `"pig"`, `"duck"`, `"emu"`, results in `["dog", "cat", "pig", "duck", "emu", "ox"]`).
  - Add without removing: `pets.splice(2, 0, "pig", "duck");`.
  - Remove without adding: `pets.splice(3, 2);` removes `"bug"`, `"ox"`.
- `slice()`: Copies elements to a new array, leaving original unchanged.
  - Syntax: `array.slice(start, end)` (copies from `start` to `end-1`).
  - Example: `var noPets = pets.slice(2, 4);` copies `"fly"`, `"bug"` from `["dog", "cat", "fly", "bug", "ox"]` to `noPets`.

Key Points

- `splice`: First number is start index; second is number of elements to remove.
- `slice`: Second number is index after the last element to copy.
- Assign `slice` results to a new array; original array remains unchanged.