JavaScript for Loops Enhancements Notes

Overview

- Enhance `for` loops with flags, Booleans, `break`, and `array.length` for efficiency and clarity.

Features

- **Flags**: Track conditions with a variable.
  - Example: `var matchFound = false;` set to `true` if match found, alert if still `false`.
- **Booleans**: Use `true`/`false` (no quotes) for flags.
  - Example: `if (matchFound === false) { alert("It's not on the list"); }`.
- **Breaking Loops**: Use `break` to exit early when condition is met.
  - Example: Stop after finding a match to save cycles.
- **Array Length**: Use `array.length` for dynamic loop limits.
  - Example: `var numElements = cleanestCities.length;`.

Example

```
var numElements = cleanestCities.length;
var matchFound = false;
for (var i = 0; i < numElements; i++) {
    if (cityToCheck === cleanestCities[i]) {
        matchFound = true;
        alert("It's one of the cleanest cities");
        break;
    }
}
if (!matchFound) { alert("It's not on the list"); }
```

Notes

- Use `< numElements` (not `<=`) as indices are 0-based, `length` is 1-based.
- `!matchFound` is shorthand for `matchFound === false`.