Equality in Javascript

Relevant Links

- Flanagan's book, "Relational Expressions" section of chapter 4
- MDN's description of equality rules¹. In particular check the table for loose equality cases.
- The official description of strict equality, from the standard²

Equality

- Javascript has two different "equality" operations, == (loose equality) and === (strict equality).
- You should almost never use ==.
- Stick to ===, which is a more strict equality test.
- Essentially == does a "type conversion" before comparing. This leads to some weird behavior (for instance it is no longer transitive). Some examples:

 js 0 == "0" // true 0 == "" // true "" == "0" // false 0 === "0" // false false == "false" // false 0 == false // true "" == "0" // false 0 == "0" // false 0 == "false" // false 0 == false // true "" == "0" // false 0 == "false" // false 0 == false // true "" == "0" // false 0 == "false" // false 0 == false // true "" == "0" // false 0 == "false" // false 0 == false // true "" == "0" // false 0 == "false" // false 0 == false // true "" == "0" // false 0 == "false" // false 0 == false // true "" == "false" // false 0 == false // true "" == "0" // false 0 == "false" // false 0 == false // true "" == "false" // false 0 == false // true // true // false // true // false // true //
- Two objects are only equal if they are literally the same object: js var o = { foo: 2 }; var o2 = { foo

Exception: There is one case where using loose equality works well: If you want to capture both "undefined" and "null". So o == null is going be true both when o is undefined and when it is null.

 $^{^1}https://developer.mozilla.org/en-US/docs/Web/JavaScript/Equality_comparisons_and_sameness$

²http://ecma-international.org/ecma-262/5.1/#sec-11.9.6