Chapter 10 of Exploring ES6

Destructuring is a convenient way of extracting multiple values from data stored in (possibly nested) object and Arrays. It can be used in locations that receive data

Const obj = {first: ‘Jane’, last

That’s what destructuring is – it lets you extract multiple properties from an object via an object pattern.

Patterns for destructuring

The following two parties are involved in destructuring

* Destructuring source – data to be destructured
* Destructuring target – pattern used for destructuring
  + One of three patterns:
    - Assignment target – usually a variable, but can also be:
    - Object pattern – parts of an object pattern are properties, the property values are again patterns (recursively)
    - Array pattern – parts of an array pattern are elements, and the elements are again patterns
  + You can combine these patterns

A nice feature of object destructuring is that you just mention the properties that you are wanting

You can do this with arrays as well

Array destructuring uses an iterator to get to the elements of asource. Therefore, you can Array destructure any value that is iterable

Const [x,…y] = ‘abc’ //x=’a’; y=[‘b’,’c’]

Array destructuring works on anything iterable

Const [x,y] = new Set([‘a’,’b’])

//x=’a’; y=’b’;

You can check whether something is iterable by doing array destructuring on it. Because the TypeError is thrown even before accessing elements of the iterable, you can use the empty Array pattern [] to check whether a value is iterable

[] = {} //TypeError, not iterable

Default values are an optional feature of patterns

They provide a fallback if no match is found in the source

If no match is found, it is matched against its default value, or otherwise, it will be set to undefined

Consider things in terms of patterns

For instance, a pattern from

const {prop: x} = [];

would be prop: x

it is more easily seen how the default values fit in by replacing the pattern with a variable pattern

const {prop: x = []} = [];

becomes

const {pattern = []} = [];