## Weak Maps

weak maps and their behavior in Javascript

Weak maps have object keys, and arbitrary values. When all strong references to a key are removed, the key is garbage collected, and the key-value pair is removed from the weak map.

Only the keys of weak maps are weak. Values placed in a weak map have strong references in the map.

Consider the following code:

```
let firstElement = { order: 1 }, secondElement = { order: 2 };
let wm = new WeakMap();

wm.set( firstElement, 1 );
wm.set( secondElement, {} );

console.log(wm.get( secondElement ));
//> {}

delete secondElement;
// secondElement is removed from the weak map
```

As soon as a key of the weak map is not referenced anymore, the key-value pair is removed from the weak map.

Check out Exercise 2 in the following lesson to experience a major use case of weak maps: storing private data.