

# Weekly Events

## Monday



**JUL 16** UX & UI Design For Entrepreneurs  
Mon, Jul 16, 7:00pm  
Factory Berlin, Berlin  
Free • on Eventbrite

## Tuesday



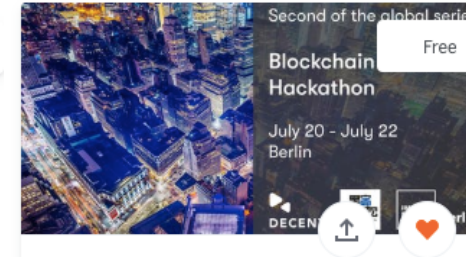
**JUL 17** ThingsCon Salon Berlin: Trustmark Edition  
Tue, Jul 17, 6:30pm  
Mozilla Berlin office, Berlin  
Free • on Eventbrite

## Thursday



**JUL 15** Flawsome YOGA - Sunset Thursdays in Volkspark Friedrichshain  
Sun, Jul 15, 6:45pm  
Volkspark Friedrichshain, Berlin  
Free • on Eventbrite

## Friday

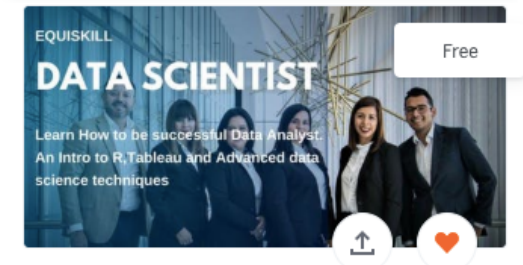


**JUL 20** Blockchain4Good: Shaping Smart Sustainable Cities for the Future  
Fri, Jul 20, 2:30pm  
Impact Hub Berlin, Berlin, Deutschland  
Free • on Eventbrite

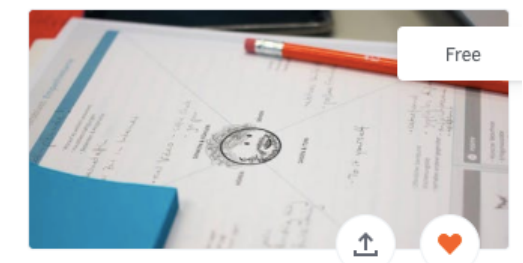
## Saturday



**JUL 21** Design Jam: Design for People in Crisis  
Sat, Jul 21, 10:00am  
Berlin, Berlin  
Free • on Eventbrite



**JUL 21** Become A Data Scientist  
Sat, Jul 21, 4:00pm  
Berlin, Berlin  
Free • on Eventbrite



**JUL 21** 7. Crowdfunding Workshop Berlin  
Sat, Jul 21, 1:00pm  
Booster Space, Berlin  
Free • on Eventbrite

# Journaling

I feel good about:

I need more work on:

Today, I am feeling:

arrays!

objects  
:(

invigorated!

# Sets

# **Deliverables**

- **Understand the difference between sets and arrays**
- **Learn the methods and ways to iterate on sets**
- **Learn about Weaksets**
- **PRACTICE, PRACTICE, PRACTICE**

# Sets



**\*abstract data type** which contains **only distinct** elements/objects **without** *the need of being allocated orderly by index.*

# Set

# Array



VS



Keyed collection

Indexed collection

**Distinct** (avoid saving duplicate data)

**Duplicatable**

How do we build them?

Can we access the index of them?

# Adding and removing elements

## Set



VS

## Array



`setName.add()`

`setName.delete()`

`setName.clear()`

`arrayName.push()`

`arrayName.unshift()`

`arrayName.pop()`

`arrayName.shift()`

`arrayName.splice(0,1)`

# Other methods

## Set

{ 😊, 😞, 😮 }

VS

## Array

[ 😊, 😞, 😮, 😮 ]

`setName.has()`

`setName.size()`



# Iterating

## Set

## Array

{ 😊, 😞, 😮 } VS [ 😊, 😞, 😮, 😮 ]

```
for (let item of setName) console.log(item);  
setName.forEach(item => console.log(item));
```

# Weaksets

**\*Only contains objects {name: "John Jones"}**  
**-- no {1, 2, "John Jones"}**

```
var ws = new WeakSet();  
var window = {};  
var foo = {};
```

```
ws.add(window);  
ws.add(obj);
```

```
ws.has(window); // true  
ws.has(foo);    // false, foo has not been added to the set
```

```
ws.delete(window); // removes window from the set  
ws.has(window);    // false, window has been removed
```

# Let's play with Sets and Weaksets {}

- 1) Let's brainstorm some cases when data should be non-repeating and distinct (and doesn't necessarily need to be orderly)
- 2) CODEPEN EXERCISES
- 3) Choose an example and make a *Set* of >10 items
- 4) Practice using some of the Set methods (add items to your set, delete items, check the number of items in your set, etc.) Also try using some of the Array methods and see what happens.
- 5) Convert your Set to an Array and play with some Array methods.
- 6) Iterate over your Set in two different ways (print to console please)!