

# Functional Programming

Chapter 3. 자료 구조는 적게, 일은 더 많이

map

## Example

```
Observers.map(observer: Observer) =>  
  observer.triggerAction(actionType, this.state));
```

## Example

```
// markers
Array.from(this.$base.find(".item"))
.map((item, index) => ({
  index,
  lat: Number($(item).data("lat")),
  lng: Number($(item).data("lng")),
  title: $(item).data("title"),
  subTitle: $(item).data("subtitle"),
  icon: $(item).data("icon"),
}))
.map(({ index, lat, lng, title, subTitle, icon }: Marker) {
  new Marker({
    map: this.map.getMap(),
    markerOption: {index, lat, lng, title, subTitle, icon},
    template: this.$markerTemplate.html(),
    state: this.state,
  })
});
```

reduce

## mergeObjects

```
export const mergeObjects = <T>(base: T, ...targets: any [
  return targets.reduce((prev, next) => ({
    ...prev,
    ...next,
  }), base);
};
```

## flatten

```
export const flatMerge =  
(params: object[]): object => {  
  return params.reduce((reduced: object, param: object) =>  
    {...param,  
     ...reduced,  
     }), {});  
};
```

## pipe

```
export function pipe(...fns) {  
  return param => fns.reduce(  
    (result, fn) => fn(result),  
    param  
  )  
}
```

## getPairWithInitialValue

객체를 순회하며, 객체의 key 에 initialValue 를 덮어씌운다

```
/**  
 * @param base key: value 쌍으로 이루어진 객체  
 * @param initialValue 각 key 에 할당할 값  
 */  
export const getPairWithInitialValue =  
  (base: object, initialValue: any): object => {  
    return Object.keys(base).reduce((acc, key) => {  
      acc[key] = initialValue;  
  
      return acc;  
    }, {});  
};
```

filter

## includes

```
export const includes = (array: any[], target: any): boolean {
  return array.filter((item) => item === target).length > 0;
}
```

# Recursive

## DeepFlatten

```
function flatten(arr) {
  return function f(arr, newArr) {
    arr.forEach(function(v)) {
      Array.isArray(v) ? f(v, newArr) : newArr.push(v);
    });
    return newArr;
  }(arr, []);
}
```

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끝.