

Immutable.js



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Topics



Overview

Strengths / Weaknesses

Getting Started

Documentation

Common Operations





<http://facebook.github.io/immutable-js/>
Immutable collections for JavaScript



Documentation

<http://facebook.github.io/immutable-js/docs/#/>



<http://untangled.io/the-missing-immutable-js-manual/>



Immutable

Strengths

Guarantees immutability

Performance

Great for state management
(Redux/ngRx)

Weaknesses

Converting structures to/from
JavaScript structures

Learning curve

Non-standard syntax (get/set)

Documentation



Can't access Immutable
structures with dot-notation
or brackets



```
const names = new Map({surname : 'Ford', givenName : 'Henry'});
```

```
out = names.surname;
```

```
out = names.get('surname');
```



Structural Sharing

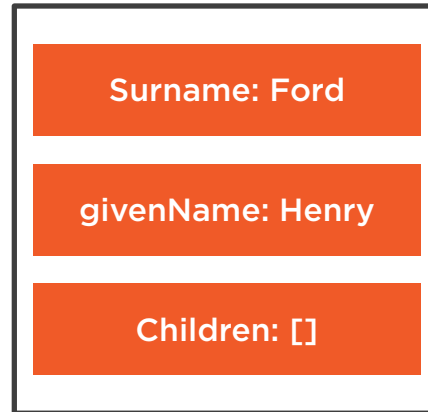


Reuse

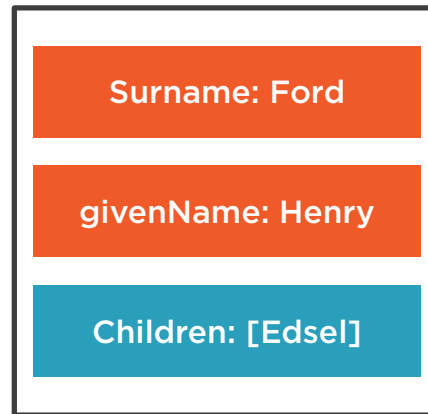


Structural Sharing

```
{  
  surname: Ford,  
  givenName: Henry  
  children: []  
}
```

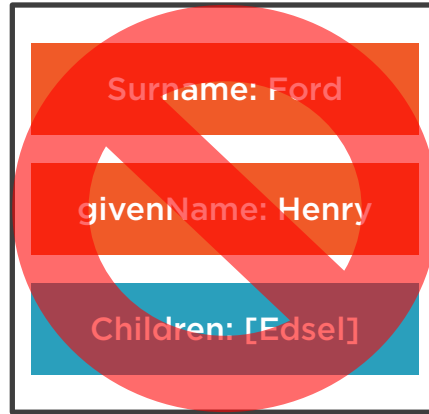


```
{  
  surname: Ford,  
  givenName: Henry  
  children: [  
    name: Edsel  
  ]  
}
```



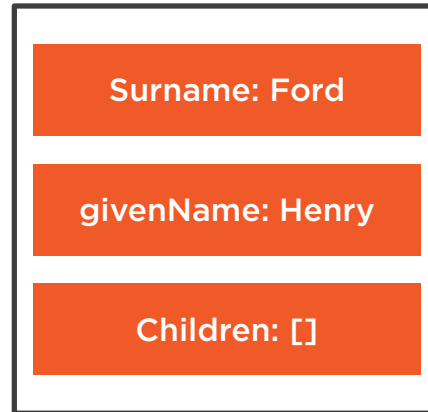
Structural Sharing

```
{  
  surname: Ford,  
  givenName: Henry  
  children:[  
    name: Edsel  
  ]  
}
```

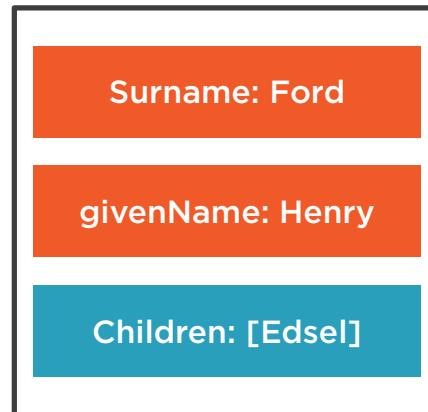


Without Structural Sharing

```
{  
  surname: Ford,  
  givenName: Henry  
  children: []  
}
```



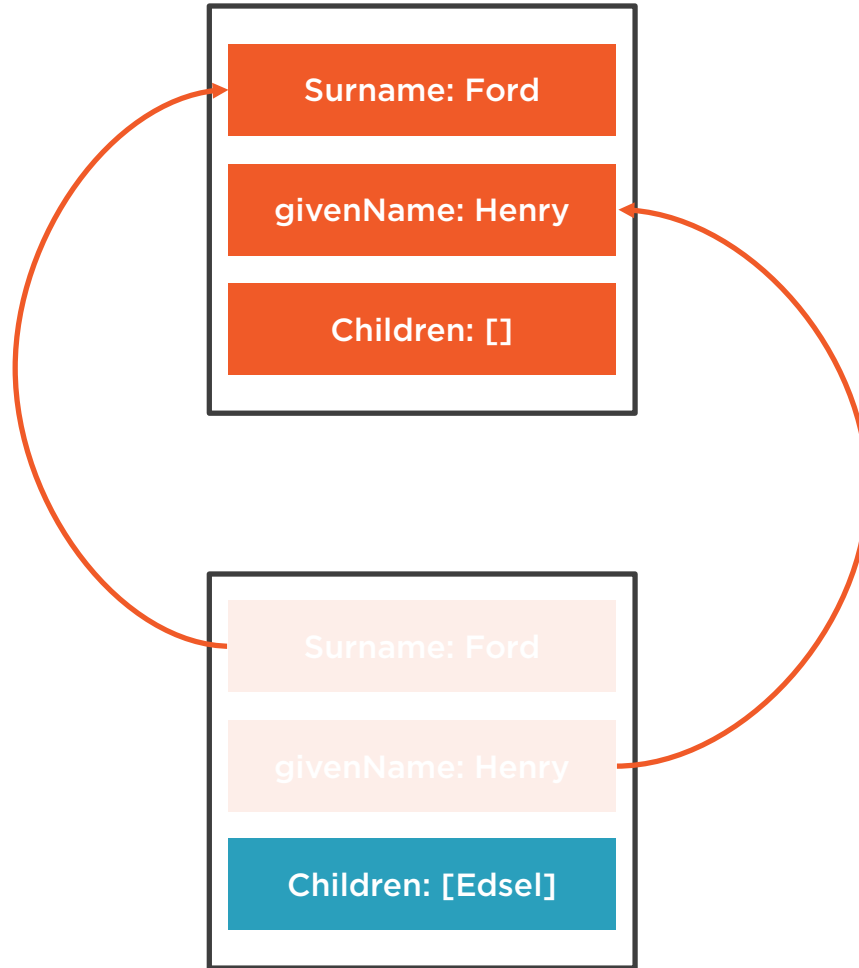
```
{  
  surname: Ford,  
  givenName: Henry  
  children:[  
    name: Edsel  
  ]  
}
```



With Structural Sharing

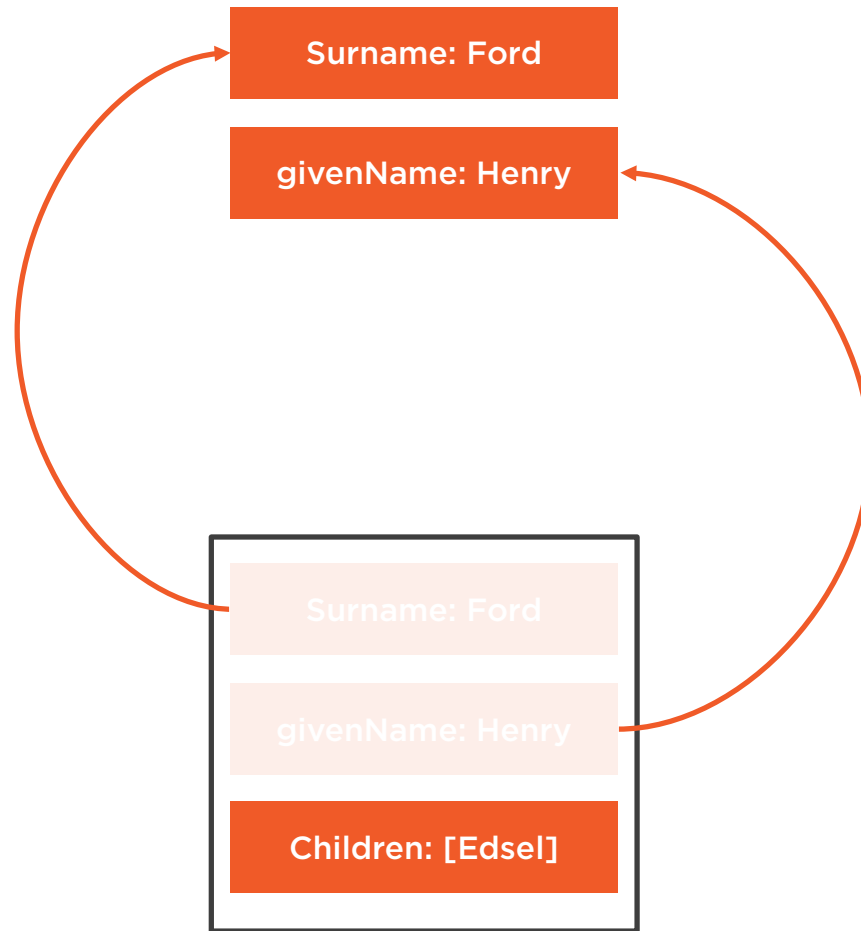
```
{  
  surname: Ford,  
  givenName: Henry  
  children: []  
}
```

```
{  
  surname: Ford,  
  givenName: Henry  
  children: [  
    name: Edsel  
  ]  
}
```



With Structural Sharing

```
{  
  surname: Ford,  
  givenName: Henry  
  children:[  
    name: Edsel  
  ]  
}
```



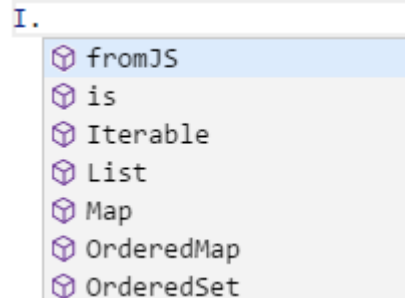
Getting Started



```
yarn add immutable (or npm i immutable)
```



```
const I = require('immutable');
```



Immutable Data Structures

List

Map

Nested

