



# Reactivity in Depth

Vue.js 2

Reactive ?

# Imperative

$$a := b + c$$

# Imperative

$b, c := 1, 2$

$a := b + c$

$b := 10$

$a == ?$

Reactive ?

# Reactive Programming

Data Flow

+

Propagation of Change

# Propagation of Change in JavaScript

# Change Detection



Angular 1

```
    {{ vm.count }}  
<button ng-click="vm.add()">Add</button>
```

```
function MyController ($scope) {  
    const vm = this
```

```
    vm.count = 0  
    vm.add = function () {  
        vm.count++  
    }  
}
```

```
    ng-click  
    $scope.$apply(callback)
```

Angular 2

# Angular 2

Zone.js from Dart

## Angular 1

```
$timeout(() => { }, 1000)
```

```
setTimeout(() => {  
    $scope.$apply(() => { })  
}, 1000)
```

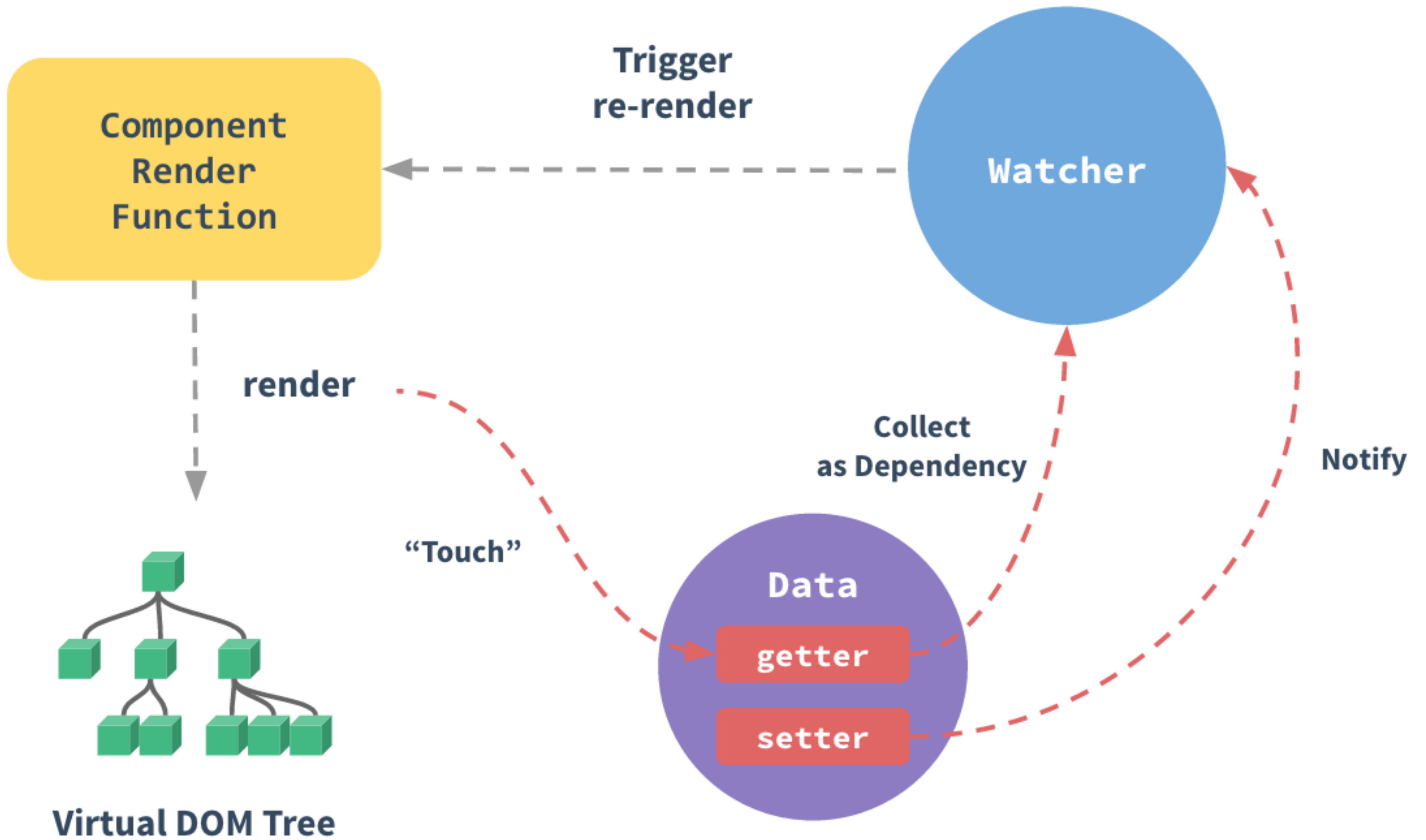
## Angular 2

```
setTimeout(() => { }, 1000)
```

Vue.js

```
function reactiveSetter (property, value) {  
  this.$data[property] = value  
  console.log(`${property} change to ${value}`)  
}
```

```
function reactiveGetter (property) {  
  console.log(`get ${property}`)  
  return this.$data[property]  
}
```





Vue.js

Computed

Vue.js

Reactive Filter

Vue.js

State Management

using

Reactive Object

Welcome to  
Reactive Programming