



Internals of Vue

On Twitter, Github, and Instagram as

@nshntarora

The obligatory introduction to Reactivity



Pull-based Reactivity

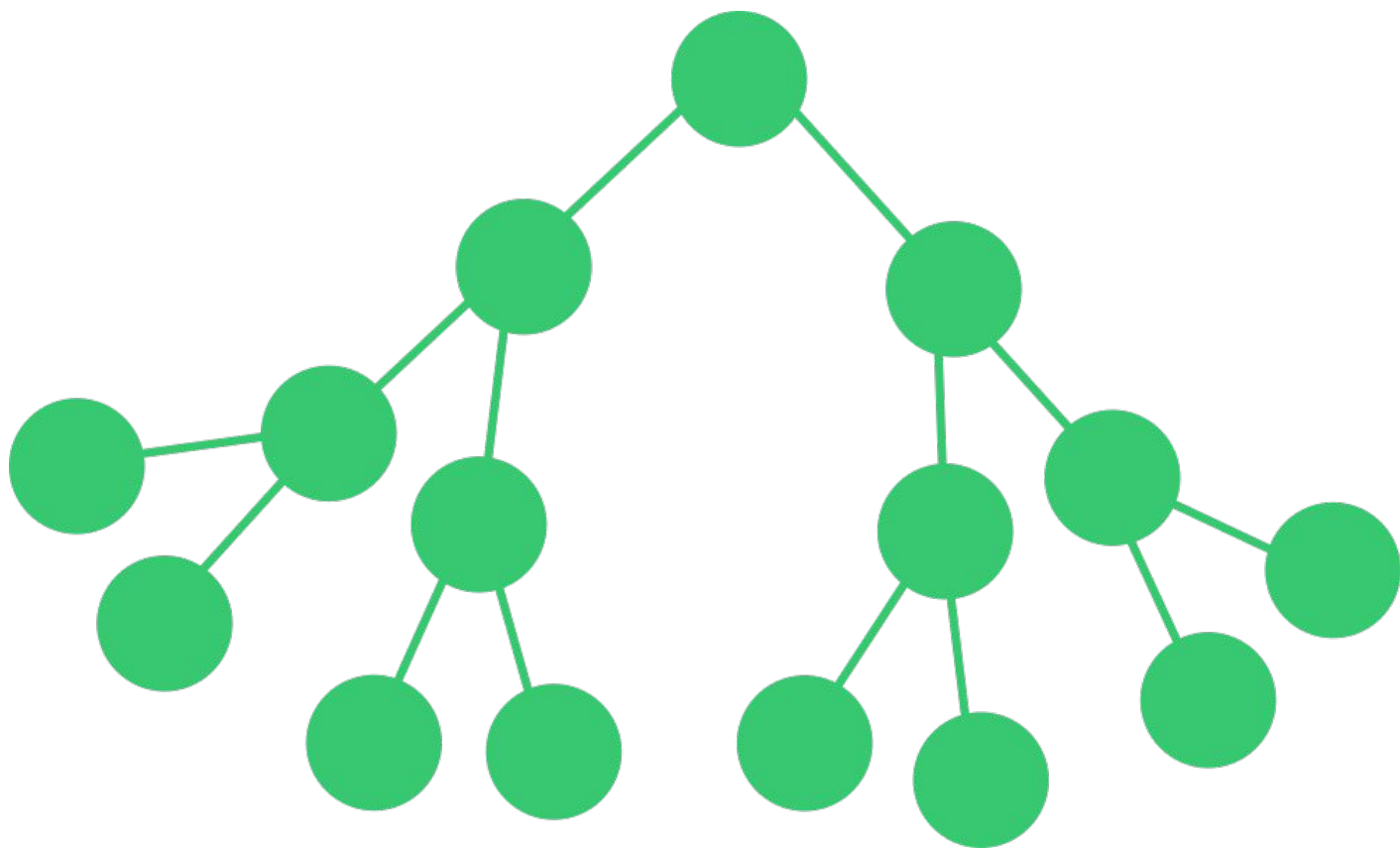


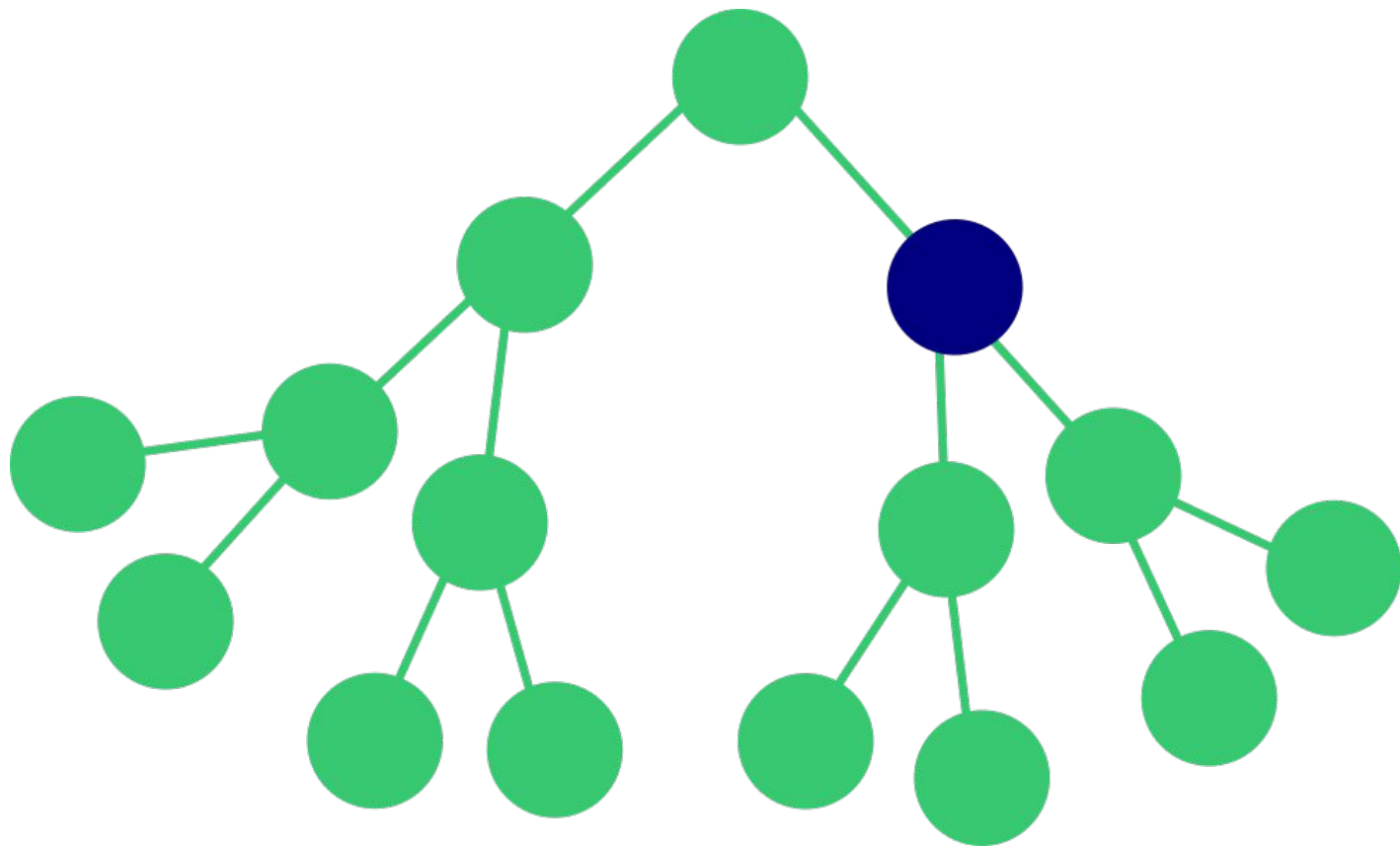
Pull-based Reactivity

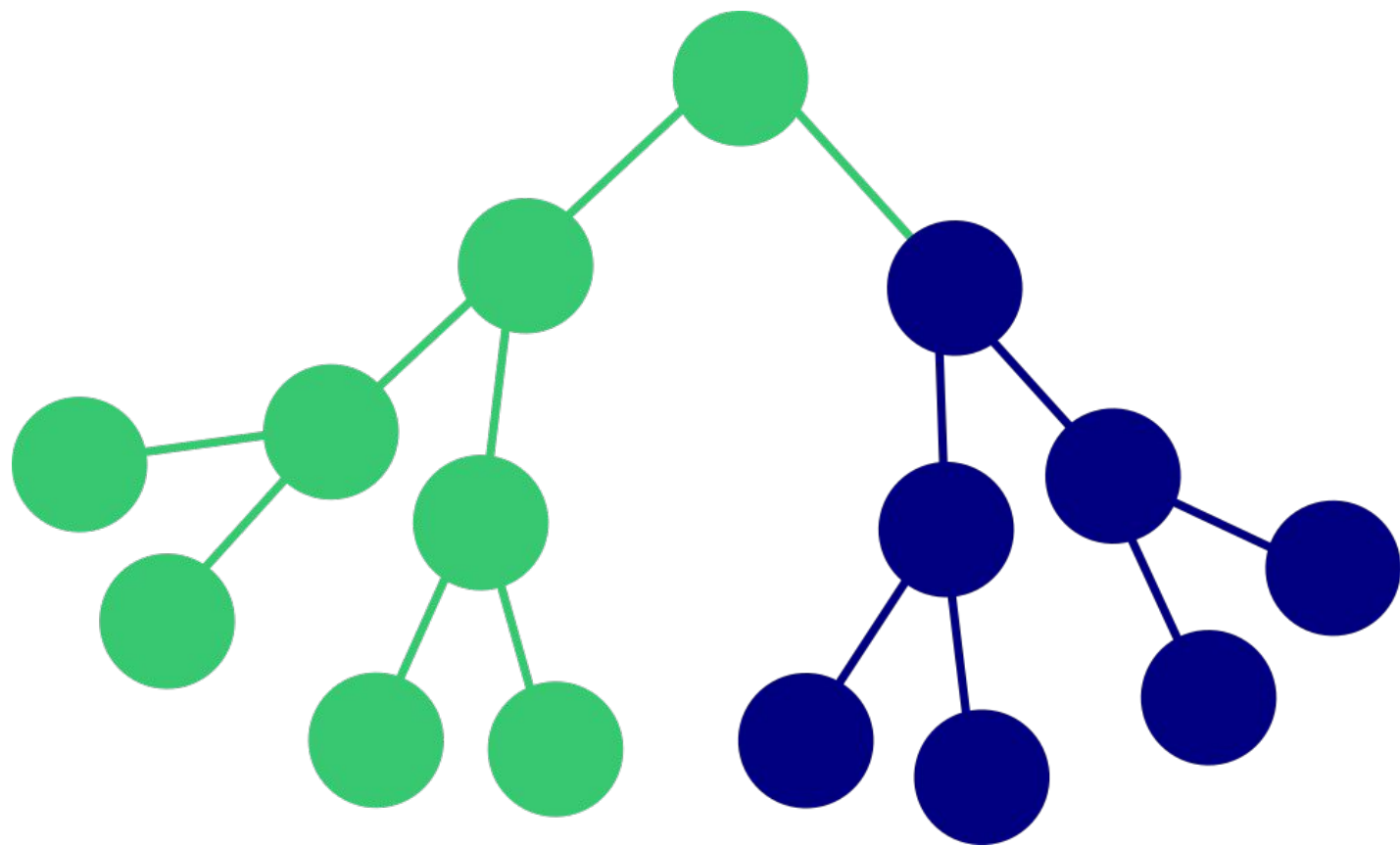
```
setState({ a: 1 })
```

```
// takes care of re-rendering. Probably calls render()
```

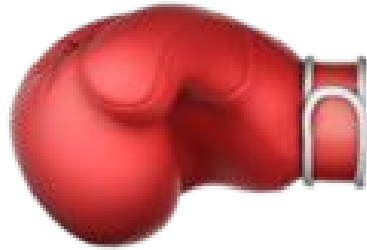
```
handleChanges()
```







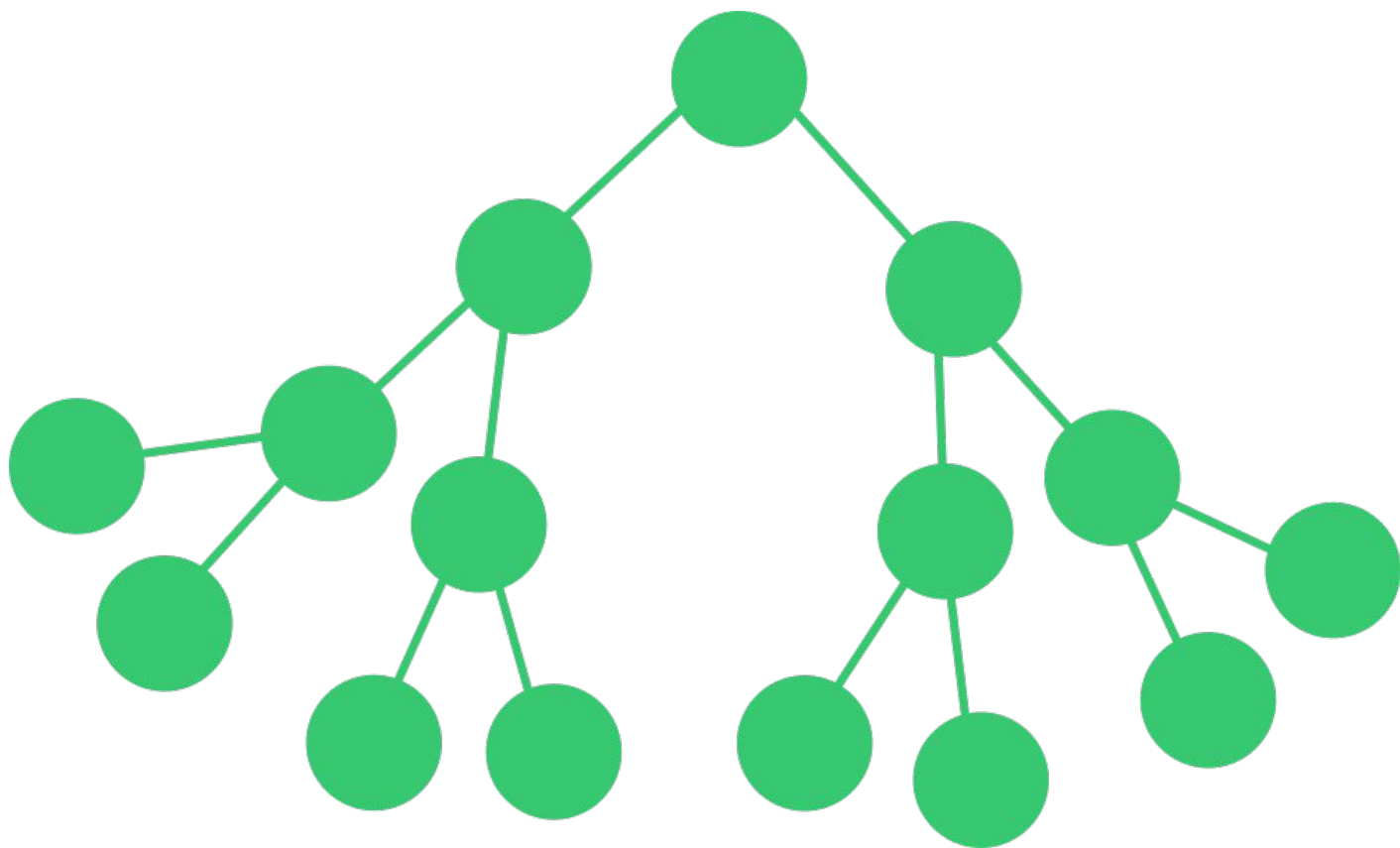
Push-based Reactivity

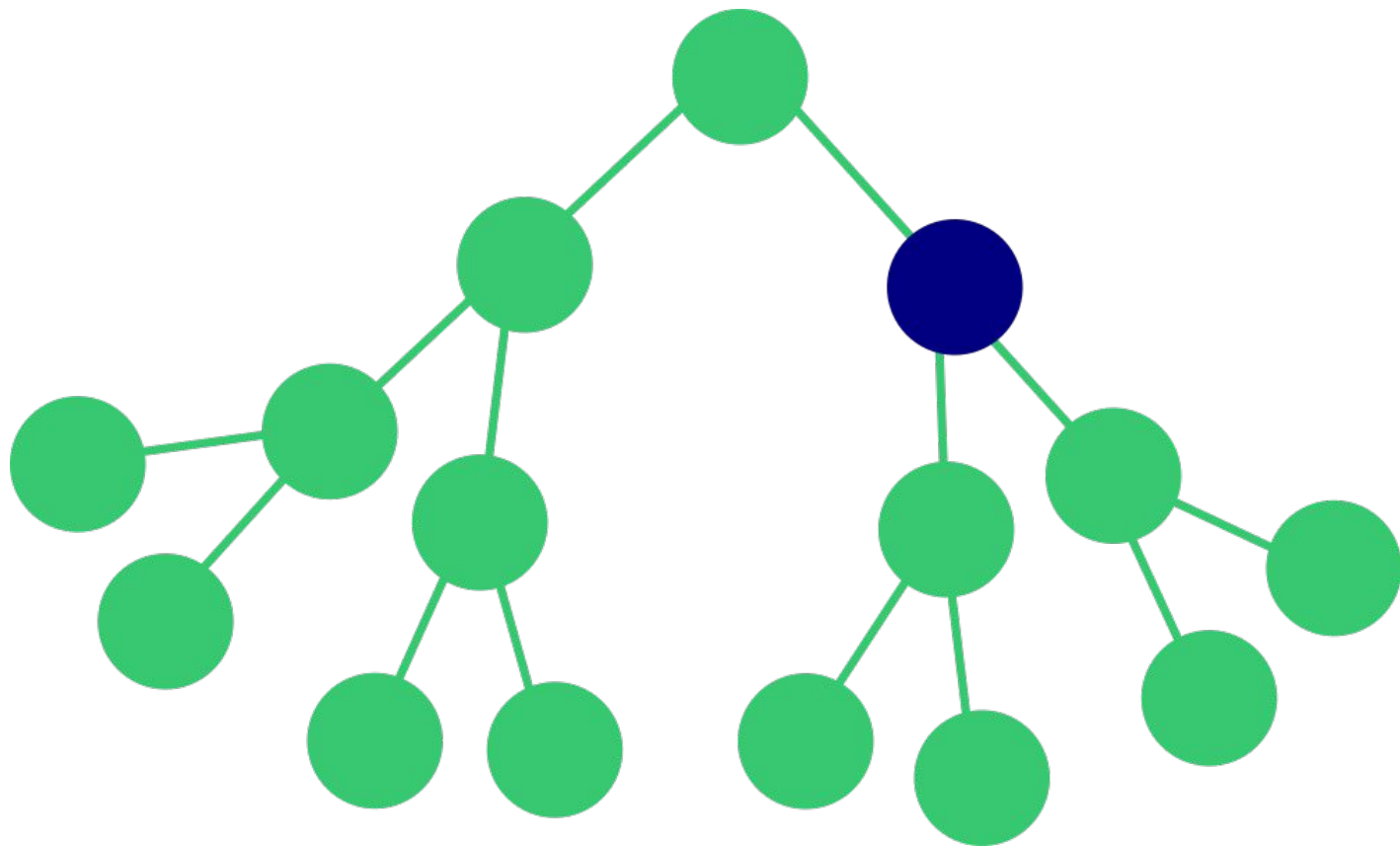


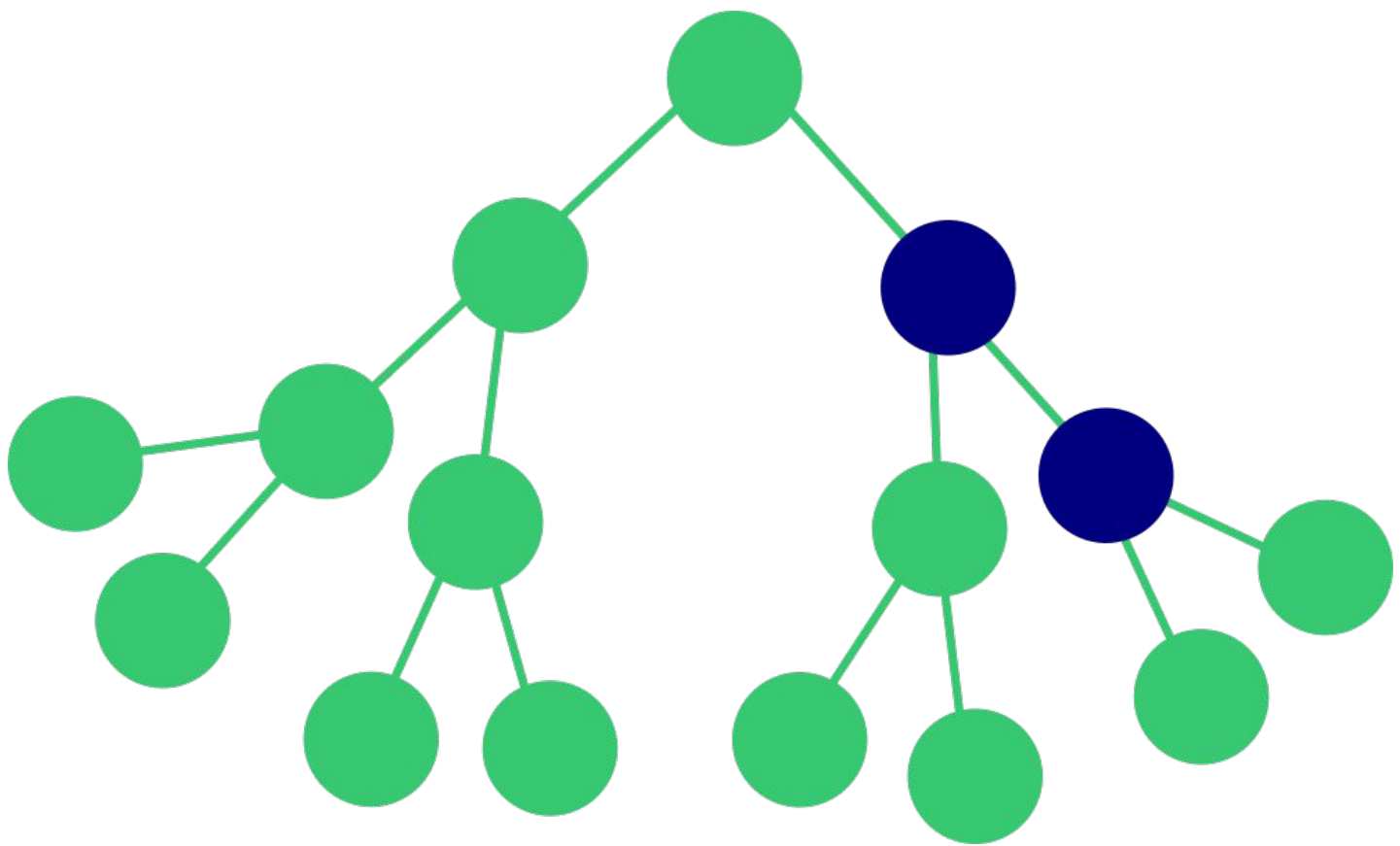
Push-based Reactivity

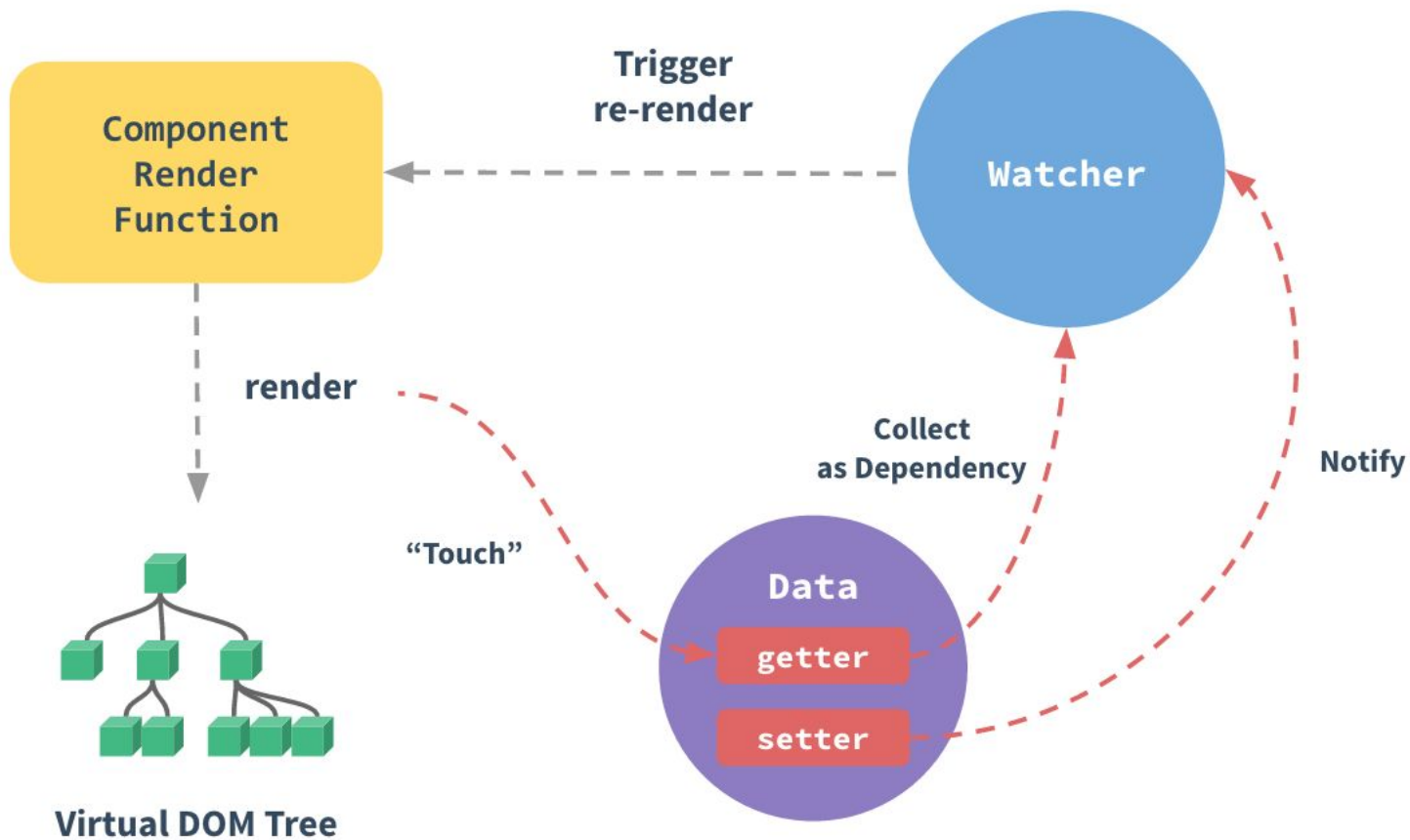
```
state.a = “Hi VueBLR”;
```

```
updateAllDependents();
```

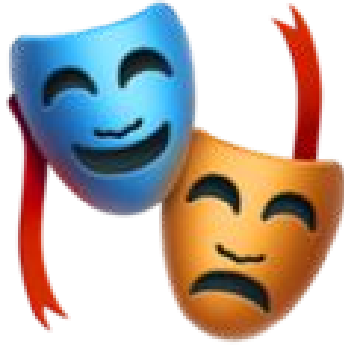








Component State



Component State

1. What the component renders?
2. How it behaves?

The data property

1. Component Level State.
2. Triggers a re-render when changed.

```
new Vue({...});
```

1. Looks up the data property.
2. Makes it reactive.

Getters and Setters



```
let features = {  
  list: [ "payments", "shopping" ],  
  get latest() {  
    return this.list[this.list.length - 1];  
  },  
  set latest(feature) {  
    this.list.push(feature);  
  }  
}
```

The watcher



The watcher

1. Collects dependencies.
2. Fires callback when value changes.

The Virtual DOM



The Virtual DOM

1. Representation of the DOM tree.
2. Inexpensive to update.



```
{  
  el: "p",  
  attributes: { align: "left" },  
  children: ["Hello VueBLR"]  
}
```




```
<p align="left">  
  Hello VueBLR  
</p>
```