



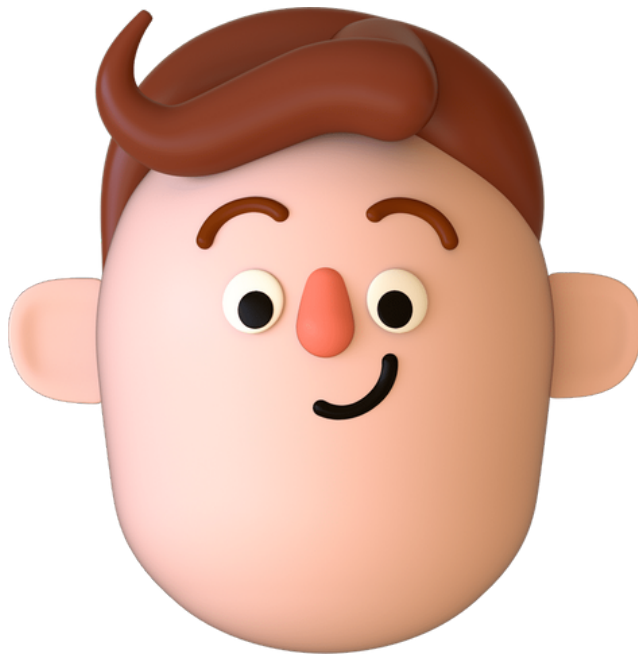
@coder\_aishya

# Observables

— **vs** —

# Promises





Both **Observables** and **Promises** help us work with asynchronous functionality in JavaScript and Angular.

**Promises** deal with **one asynchronous event at a time**, while **Observables** handle a **sequence of asynchronous events over a period of time**.

Lets understand more differences between them



## ABOUT

Observables are a part of **Rxjs** Javascript **library**. ie . we **need to import Observable** in an Angular app before using it

———— **VS** ————

Promises **are a part of Native javascript** (ES6 feature).

No import statement required



# OBSERVABLES

- Emit **multiple values** over a period of time.
- Are **lazy**: they're not executed until we subscribe to them using the `subscribe()` method.
- We can use **Rxjs Operators** (like `map`, `filter`, `retry`, `reduce`, etc) on observables to perform operation on complex data

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## VS

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# PROMISES

- Emit a **single value at a time**.
- Are **not lazy**: execute immediately after creation.
- **Don't provide any operators**.



## OBSERVABLES

- Have **subscriptions** that are **cancellable** using the **unsubscribe() method**, which stops the listener from receiving further values.
- **Deliver errors to the subscribers.**

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**VS**

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## PROMISES

- Are **not cancellable**.
- **Push errors to the child promises.**



# Observable Creation



```
const obs = new Observable((observer) => {  
  observer.next(10);  
});
```

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## VS

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# Promises Creation



```
const promise = new Promise(() => {  
  resolve(10);  
});
```

## Observable Transform Operation



```
Obs.pipe(map(value) => value * 2);
```

VS

## Promises Transform Operation



```
promise.then((value) => value * 2);
```

## Observable Subscribe Operation



```
const sub = obs.subscribe((value) => {  
  console.log(value)  
});
```

---

**VS**

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## Promises Subscribe Operation



```
promise.then((value) => {  
  console.log(value)  
});
```



## Observable Unsubscribe Operation



```
sub.unsubscribe( );
```

**VS**

## Promises Unsubscribe Operation

**Cannot Unsubscribe**



# FOLLOW ME FOR MORE



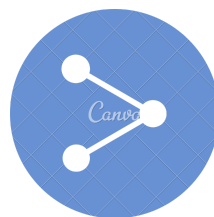
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