

# Promise

## What is a Promise?

- A **Promise** is an object representing the eventual completion or failure of an asynchronous operation.
- It allows you to write asynchronous code in a more manageable way.
- A promise can be in one of three states:
  1. **Pending** – initial state, neither fulfilled nor rejected.
  2. **Fulfilled** – operation completed successfully.
  3. **Rejected** – operation failed.

## Creating a Promise

```
let p = new Promise((resolve, reject)=>{  
  
  let studied = false  
  
  if(studied)  
  {  
    resolve("I will give mock on 15th sept")  
  }  
  else{  
    reject("I will not give bcz I am not prepared")  
  }  
  
})
```

- `resolve(value)` → called when operation succeeds.
- `reject(error)` → called when operation fails.

## Consuming a Promise

```
p
.then((data)=>{
  console.log(data)
})
.catch((err)=>{

  console.log(err)
})
.finally(
  console.log("I am finally block")
)
```

- .then() → used to handle successful completion.
- .catch() → used to handle errors.
- finally() → executes regardless of the outcome (success or failure)

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