Promises

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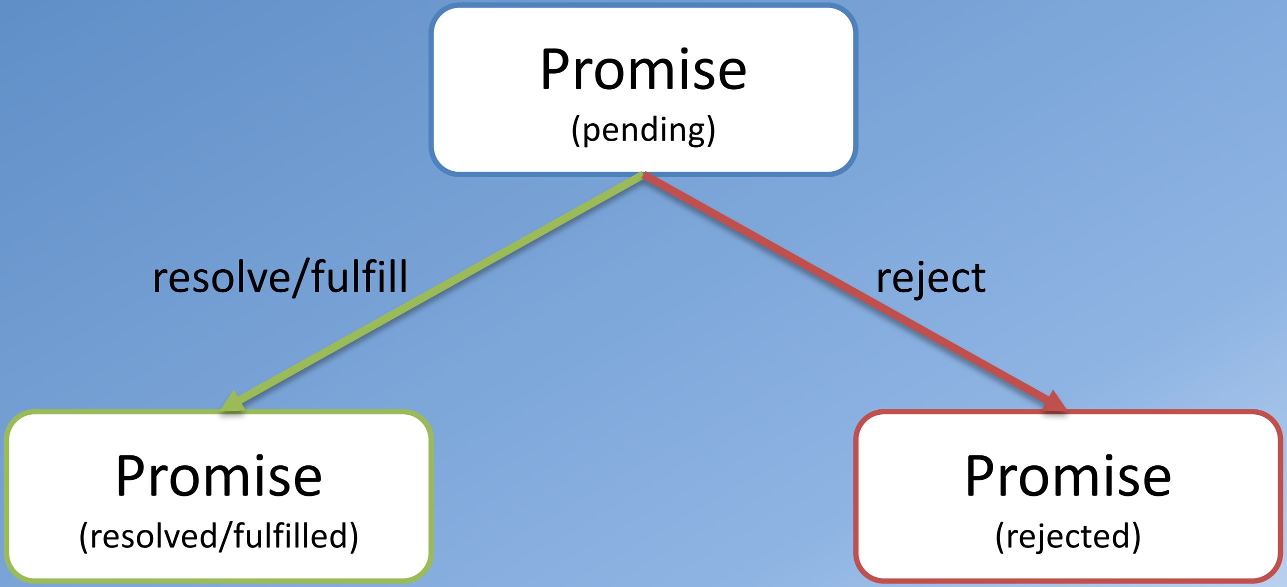
Promise

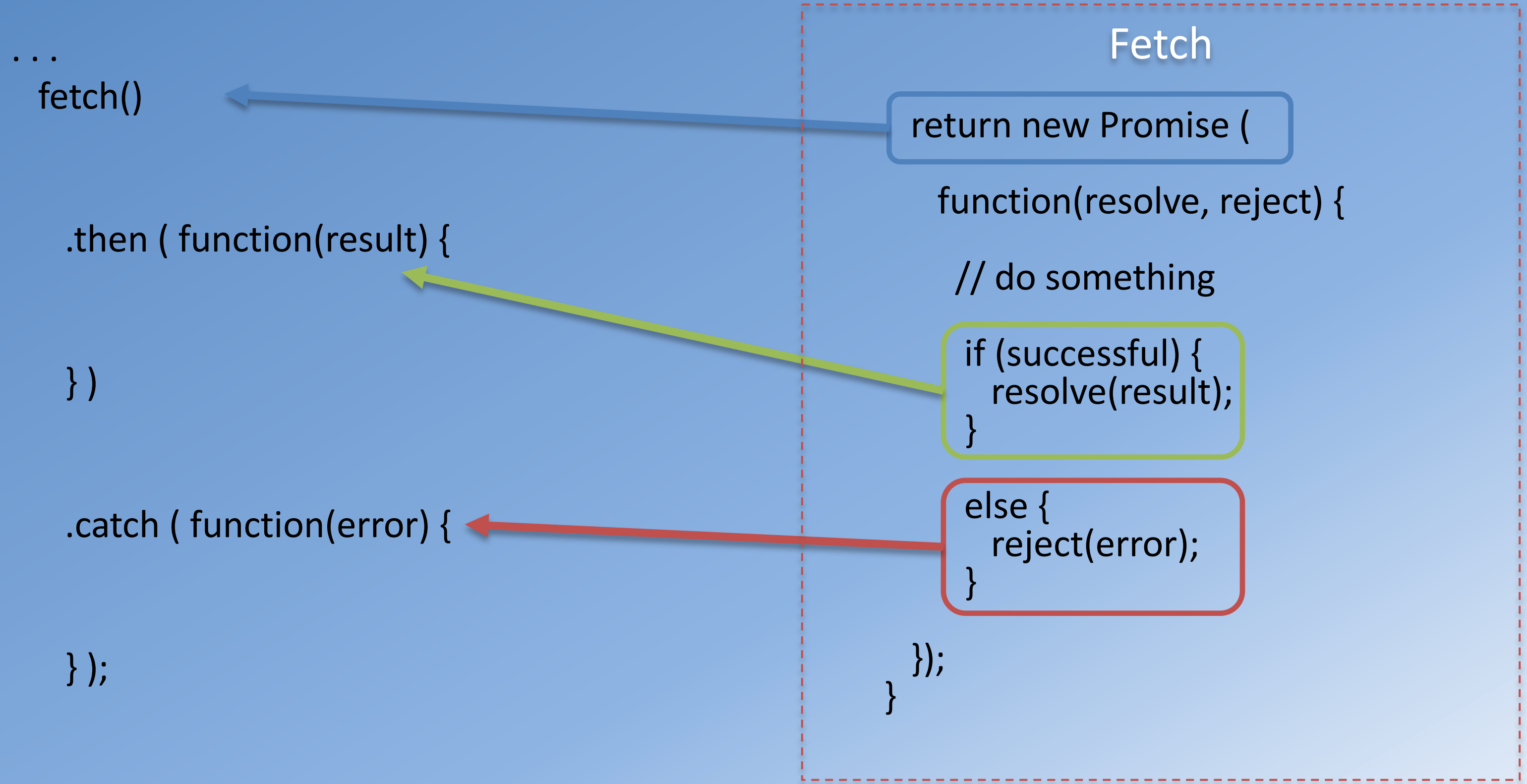
- Promise is a mechanism that supports asynchronous computation
- Proxy for a value not necessarily known when the promise is created:
  - It represents a value that may be available now, or in the future, or never

Promise



new Promise (function (resolve, reject) { . . . });

Promise Example



```
. . .
  fetch()


   .then ( function(result) {


   } )


   .catch ( function(error) {


   } );
```

Fetch

```
return new Promise (

   function(resolve, reject) {

     // do something

     if (successful) {
       resolve(result);
     }

     else {
       reject(error);
     }

   });
}
```

Why Promises?

- Solves the callback hell (heavily nested callback code) problem
- Promises can be chained
- Can immediately return:
  - Promise.resolve(result)
  - Promise.reject(error)