If __APL-URL__ is invalid

Program stopped executing and quickly jumps to
Catch block

One more way to handle

handle Promise (). catch ( )

Async/Await   vs   __Promise .then/catch__

Async await is just synctactic sugar. The only
effect is happening in code but it always deals
with promises.

* Use async/await whenever possible

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Promise APIs + Interview questions

1) __Promise .all()__   [FAIL FAST]

Use case: Calling APIs in parallel. Eg: Get the user info
       of all 10 ids.

Eg: P1 resolves after 3s
     P2 resolves after 1s
     P3 resolves after 2s.

* Promise. All takes array (iterable) as input and
  returns resolved values array

 I/P   Promise. All ([p1, p2, p3]) ⟹ [val1, val2, val3]
                                      →after 3s

It waits for all of them to finish before giving
output.

* What if any of the promise fails?
As soon as the one of the promise fails it throws
error immediately. (5: p2 fails after 1s
                       error thrown immediately)

P1 and P3 success calls in the above failure scenarios does not cancel promise, eventually they will accept/reject

2) Promise.allSettled()

Use case: What if out of 10, 9 api's were resolved successfully and we want those results

Success case: Same as Promise.all()

Failure case:

Promise.allSettled([P1, P2, P3]); Imagine P2 is rejected

o/p [val1, err2, val3].   o/p => input-length

3) Promise.race()

whatever promise settles first, it returns value

Promise.race([P1, P2, P3])
          ↓   ↓   ↓
         3s   2s   1s

P3 returns val3 after 1s.(it's a race)   Returns a value (not only)

What if first Promise fails?

Error will be thrown after 1s.   Returns a string (not only)

It will not wait for other promises to get settle

4) Promise.any

Similar to race, but we will wait for 1st sucess

Eg: P1 takes 3s (✓)   returns
    P2 takes 1s (X)   val 3
    P3 takes 2s (✓)   P3, as it is first
                       successful promise

What it everything fails?

Return result is Aggregate Error it will be an array of all the three errors

Terminology

Settled → got result

resolve   reject
success   failure
fulfilled   rejected

* Observe the code Snippets for all Promise APIs