

Agenda

→ What are promise combinators?

→ Promise.all, Promise.allSettled, race, any

Promise combinators are methods that are defined in JS to manage multiple promises.

1) Promise.all

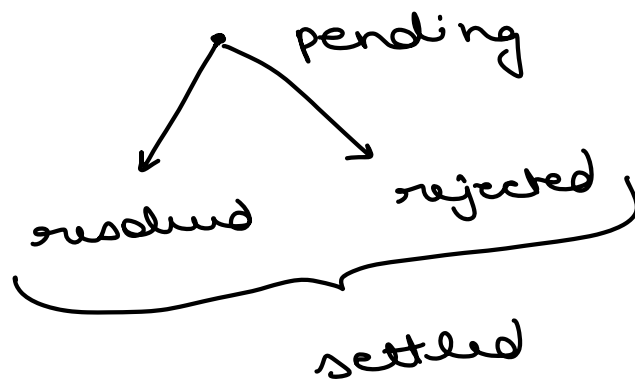
Use:- Waits for all promises to be resolved before moving on.

Behavior:- Takes in an array of promises and return a single promise which resolves when all the promises in the array are resolved. It gets rejected when any one promise in the array is rejected.

2) Promise.allSettled:-

Use:- Similar to Promise.all(), but when you want to wait for all promise to complete.

Behaviour :- Take an array of promises and returns a promise. It resolves when all promises in the array is settled, irrespective of whether they were resolved or rejected.



[p1, p2, p3]

[{ }, { }, { }]

State: Resolved / Rejected
value: Resolved or rejected value

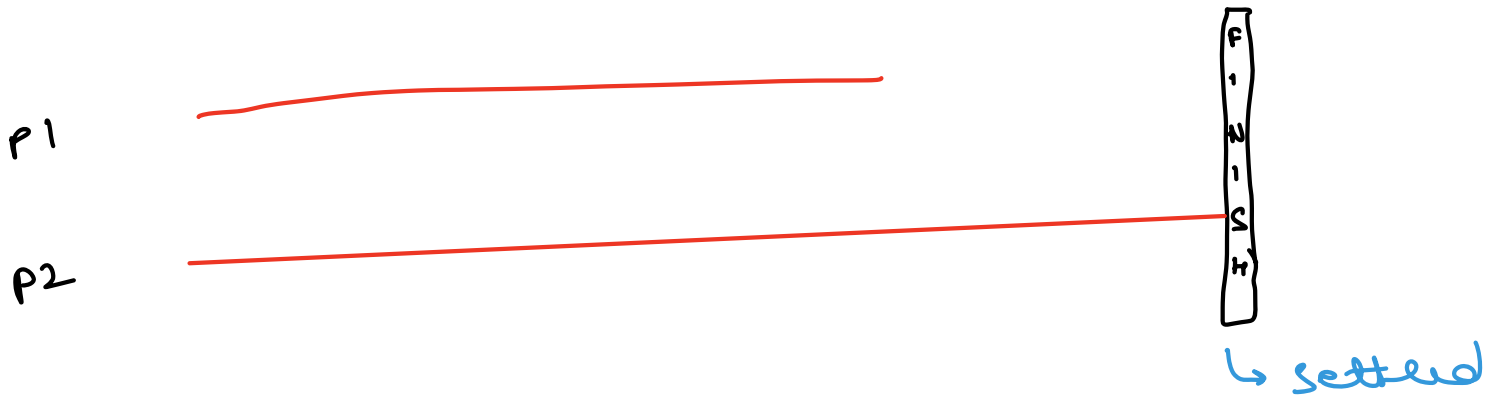
3) Promise.race :-

Use :- When you need to run multiple promises but only care about the one which finishes first.

Behaviour :- It resolves or rejects as

Soon as the first promise is settled.

$[p_1, p_2]$



4) Promise.any

Use:- Similar to above, but it rejects if all of the input promises have rejected.

Behaviour:- It returns the first promise which resolved. Only gets rejected when all promises in the array are rejected.

$[p_1, p_2, p_3]$