

```

type Success<T> = {
  data: T
  error: null
}

type Failure<E> = {
  data: null
  error: E
}

export class Result<T, E = Error> {
  private inner: Success<T> | Failure<E>

  private constructor(inner: Success<T> | Failure<E>) {
    this.inner = inner
  }

  static ok<T, E = Error>(value: T) {
    return new Result<T, E>({ data: value, error: null })
  }

  static err<T, E = Error>(value: E) {
    return new Result<T, E>({ data: null, error: value })
  }

  is_err() {
    return this.inner.error !== null
  }

  unwrap() {
    if (this.inner.error !== null) {
      throw this.inner.error
    }

    return this.inner.data
  }
}

export async function try_catch<
  T,
  F extends (...params: any[]) => Promise<T>,
  E = Error,
>(f: F, ...args: Parameters<F>): Promise<Result<T, E>> {
  try {
    return Result.ok(await f(...args))
  } catch (error) {
    return Result.err(error as E)
  }
}

```