

Effect on Frontend?

Pavel Kepka

What is Effect?

Application Framework

- Requirements Management
- Observability
- Configuration
- Scheduling
- Concurrency
- ...

Standard Library

- BigDecimal
- Duration
- DateTime
- Either & Option
- ...

Language

- Opinionated way to write code
- Exhaustive Pattern Matching
- Compositional patterns: generators & piping
- Functions decoloration

This is Effect

```
let attempt = 0
const unstableTask = Effect.gen(function* () {
  attempt += 1
  yield* Effect.log(`Attempt ${attempt}`)

  if (attempt < 3) {
    return yield* Effect.fail(new Error('Task failed'))
  }
  return yield* Effect.succeed('Task succeeded')
}).pipe(Effect.withLogSpan('unstableTask'))

Effect.runPromise(Effect.retry(unstableTask, Schedule.fixed('600 millis')))
  .then(console.log)
  .catch(console.error)
```

This is Effect

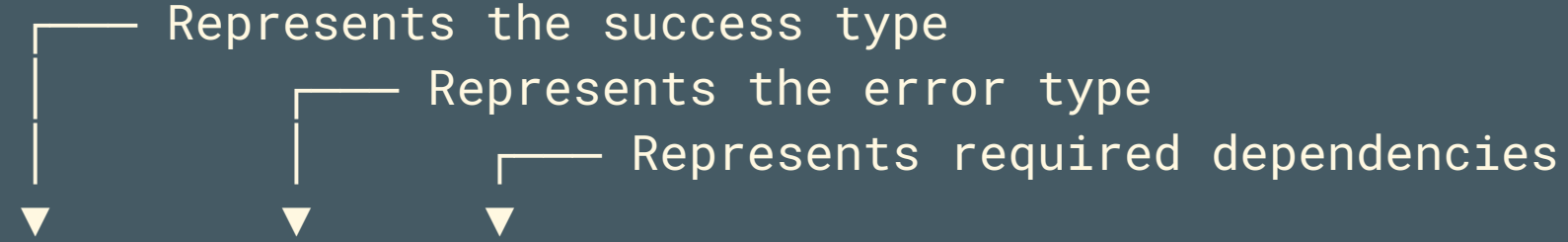


Diagram illustrating the components of the `Effect` type signature:

- Represents the success type
- Represents the error type
- Represents required dependencies

`Effect<Success, Error, Requirements>`

But how to use Effect on FE?

A reactive state management library for Effect

@effect-atom/atom-react

Thank You!

Resources

- @effect-atom/atom-react: <https://github.com/tim-smart/effect-atom>
- Effect: <https://effect.website/>
- @effect/platform: <https://github.com/Effect-TS/effect/tree/main/packages/platform>