

# Readers



# Prep

## What we know so far

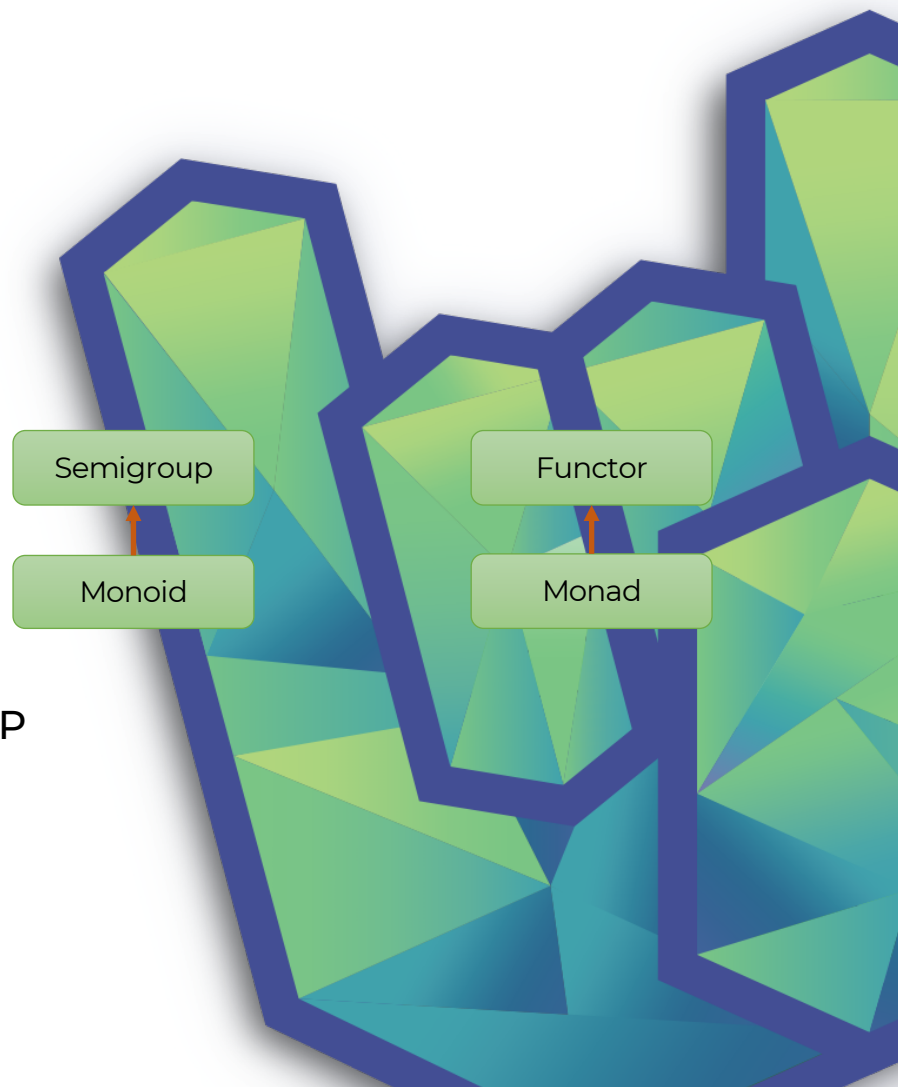
- Scala implicits, TC pattern, extension methods
- Cats type classes

## Major type classes

- Semigroup: |+|
- Monoid extends Semigroup: empty, |+|
- Functor: map
- Monad extends Functor: pure, flatMap

This chapter: data manipulation with pure FP

Next chapter: more type classes



# Regular slide

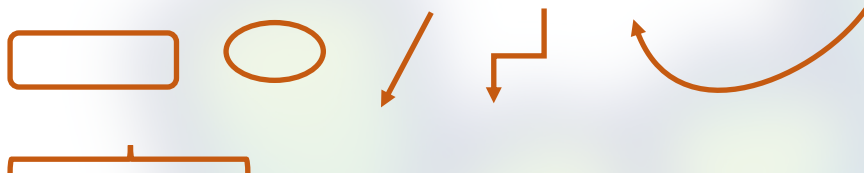
big comment

small comment

Error message

Text & bullet

- big bullet



```
import cats.data.OptionT
import cats.instances.list._ // for a Monad[List]

val listOfNumberOptions: OptionT[List, Int] = OptionT(List(Option(1), Option(2)))
val listOfCharOptions: OptionT[List, Char] = OptionT(List(Option('a'), Option('b')))
val listOfTuples: OptionT[List, (Int, Char)] = for {
  char <- listOfCharOptions
  number <- listOfNumberOptions
} yield (number, char)
```

**Cats rock**

