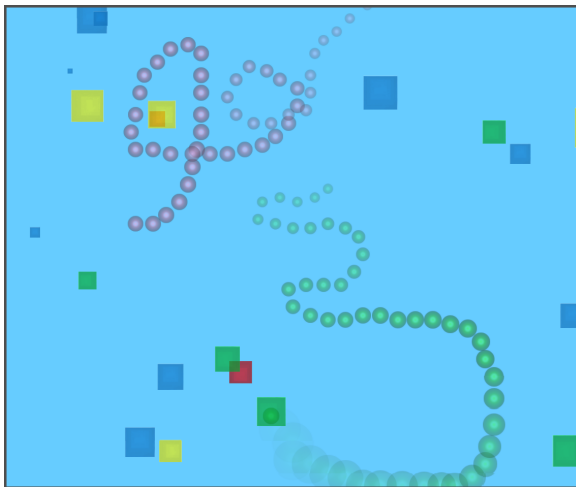


Browser-based MMO Game with Akka and Play!

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 - Iteratees
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Source code: <https://github.com/pkukielka/QuickPath>

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- Out of the box support for WebSockets and streams
- Embedded support for various assets (i.e. CoffeeScript, LESS)
- Simplified change-compile-run cycle
- Easy to work with Json

Build system

- Play console, sbt

Project structure - standard application layout

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- Logs (log/ directory)

Expensive tasks should be performed in separate threads using `Future[Result]`. `Async { }` is an helper method that builds an `AsyncResult` from a `Future[Result]`.

```
def index = Action {  
  val futureInt = scala.concurrent.Future {  
    intensiveComputation() }  
  Async {  
    futureInt.map(i => Ok("Got result: " + i))  
  }  
}
```

Use WebSockets instead of Comet when possible!

```
def index = WebSocket.using[String] { request =>
  // Log events to the console
  val in = Iteratee.foreach[String](println).mapDone {
    _ => println("Disconnected")
  }

  // Send a single 'Hello!' message
  val out = Enumerator("Hello!")

  (in, out)
}
```

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Let's see it in practice!

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val sum: Iteratee[Int,Int] =  
  Iteratee.fold[Int,Int](0) { (s, e) => s + e }
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Different look..

Iteratee is just a state machine in charge of looping over state
Cont until it detects conditions to switch to terminal states Done
or Error.

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```
val integerEnumerator: Enumerator[Int] =  
  Enumerate(45, 33, 25, 45)  
  
val fileEnumerator: Enumerator[Array[Byte]] =  
  Enumerator.fromFile("some_file.txt")  
  
val dateGenerator: Enumerator[String] =  
  Enumerator.generateM(  
    play.api.libs.concurrent.Promise.timeout(  
      Some(12345),  
      500  
    )  
  )
```

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- it can be composed with other Enumerator

```
val enumerator = Enumerator(123, 345, 456)
val iteratee: Iteratee[String, List[String]] = ???

val list: List[String] =
  enumerator through Enumerator.map(_.toString) run
  iteratee
```

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