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Big Data System Engineering with Scala
Spring 2023
Assignment 3(Movie database)

-List of Tasks Implemented

There are three implementations to create in *Movie.scala* (lines 101, 124, 204). This time it is OK to edit the Spec file (but after this assignment, you should not edit any Spec files). But I want to give you some familiarity with Spec files (i.e. ScalaTest with Matchers). The most useful documentation for this sort of thing is here: http://www.scalatest.org/user_guide/using_matchers.

The purpose of this code is to read the movie database file into *Movie* instances.

The module name for this assignment is *assignment-movie-database*. Let me clarify a little: you only need to work with *Ingest.scala, Movie.scala* and *IngestSpec.scala,* in addition, *MovieSpec.scala* is available for you to verify your implementation. These are all in the *asstmd* package (the spec file is under test of course). You will also need *movie_metadata.csv* which is under test/resources of the project (use this version).

-Code

Code in Movie.scala

```scala
new
  def parse(w: String): Try[Movie] = Try(
    Movie(w.split( regex = ",").toSeq)
  )// TO BE IMPLEMENTED
```

```scala
def elements(list: Seq[String], indices: Int*): List[String] = {
  // Hint: form a new list which is consisted by the elements in list
  // 6 points
  val result: Seq[String] = for(index <- indices) yield list(index)
  result.toList
```
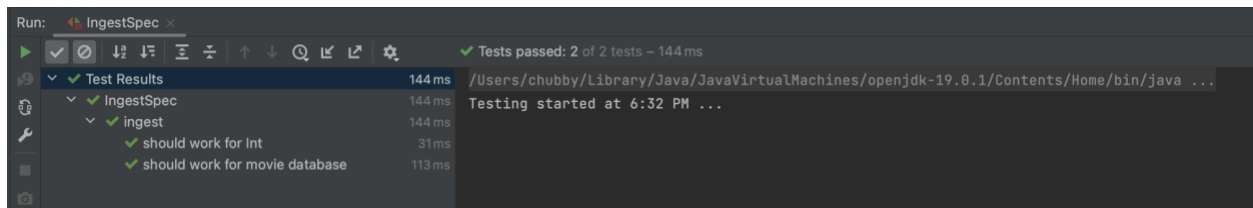
```scala
def apply(s: String): Rating = s match{
  case rRating(code, _, null) => Rating(code, None)
  case rRating(code, _, age) => Rating(code, Some(age.toInt))
  case _ => throw ParseException(s"parse error in Rating")
} // TO BE IMPLEMENTED
```
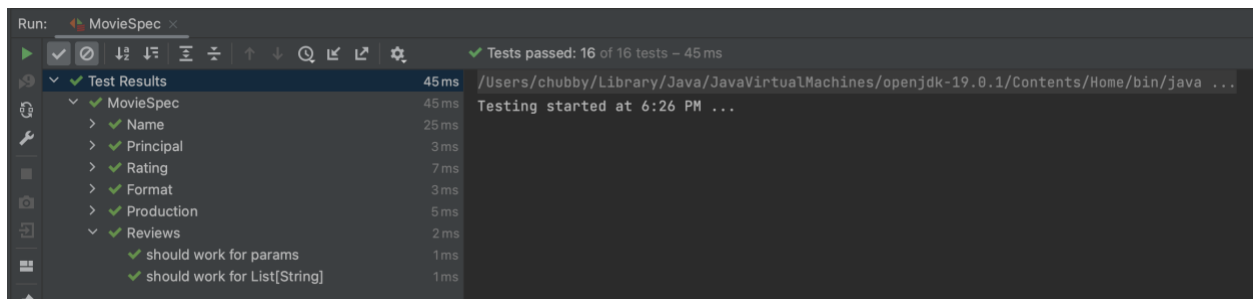
Code in IngestSpec.scala

```scala
implicit object ParsableInt$ extends ParsableInt$
val source = Source.fromChars(Array('x', '\n', '4', '2'))
val ingester = new Ingest[Int]()
val xys = ingester(source).toSeq
// check that xys has exactly one element, consisting of Success(42) -- 10 points
// TO BE IMPLEMENTED
xys.length shouldBe 1
xys(0) shouldBe Success(42)
```

-Unit tests

IngestSpec.scala

MovieSpec.scala

GitHub URL:https://github.com/ShangqingHu/CSYE7200.git