

Implementing a security-typed variant of Scala

MASTER THESIS

to optain the academic degree master degree in computer science

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Abstract

This October sees the release of our first Time of Legends audio drama: Aenarion. Aenarion's story is one of the cornerstones of high elf history, so we've placed it in the capable hands of Black Library stalwart, Gav Thorpe. As with the ToL novel covers we've managed to rope in Jon 'sleep is for wimps' Sullivan. We reminded him that CD covers are actually quite small, but it didn't stop him layering an insane amount of detail onto Aenarion's armour. It seems a crime that we're going to have to show it so small on the cover, so here's the whole piece in all its unadulterated glory.

Was soll ich blo $\tilde{A}\ddot{Y}$ noch schreiben. Ich habe echt keine Ahnung was ich dir noch alles so sagen soll.

Nun kann ich eventuell noch einen weiteren Satz schreiben.

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1 Preface 4

1 Preface

Once upon a time, there was the preface in which Matze starts his last academic works.

2 Scala 5

2 Scala

Scala is a great language which has many components \dots

2.1 Scala in Action

Figure 2.1: Reihungszugriff f $\tilde{A}\frac{1}{4}r$ Array A

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3 Appendix

A Hey

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Listing 1: Bala

```
1 44 match {
    case 44 => true // if we match 44, the result is true
    case _ => false // otherwise the result is false
  // pattern-Match fuer Klassen
  Stuff("David", 45) match {
    case Stuff("David", 45) => true
    case _ => false
11 }
   // koennen den Namen testen, wobei uns der zweite Parameter (age) rille ist
  Stuff("David", 45) match {
    case Stuff("David", _) => "David"
    case _ => "Other"
  // koennen das age field extrahieren und in die howold-Variable schreiben
  Stuff("David", 45) match {
  case Stuff("David", howOld) => "David, age: "+ howOld
    case _ => "Other"
  // koennen einen Guard setzen
26 Stuff("David", 45) match {
    case Stuff("David", age) if age < 30 => "young David"
    case Stuff("David", _) => "old David"
    case _ => "Other"
   }
```

aa

Figure 3.1: array

B You

B You 13

Punkt 1, 2 3 und

Längerer Text und nicht über den Rest geschrieben

wird um-

brochen

Table 3.1: *bla*

 $\textbf{Figure 3.2:} \ \textit{Reihungszugriff für Array A}$

Independance declaration

I declare that I have made this work independently, and olny using the specified sources and utilities.

Jena, May 22, 2010