

A large red square with a white border, centered on a white background. Inside the square, the text "Intro to Scala and Functional Programming" is written in white, bold, sans-serif font.

Intro to Scala and Functional Programming

Why is Scala so popular?

- Easy access to Java programmers
 - Runs on the JVM
 - You can write OO code
 - Syntax familiar
- ...but different enough
- Functional Programming is trendy

What is FP compared to OOP?

Object-oriented Programming - objects which have fields and methods which encapsulate state.

Functional Programming - treats your program as the evaluation of functions and avoids state.

An example of OO

Good

- Fits well with traditional Domain-Driven Design
- Puts everything which that object does in one place

Bad

- Mutability - adds complexity
- Can end up with massive objects
- Real life does not always match nicely to an object

An Example of FP

Good

- Immutable
- Easier to keep different parts of the program simple and decoupled
- Easier to test
- Makes the code more reusable

Bad

- Not as DDD
- Not obvious where everything you can do to that entity is

Miscellaneous points

- If you think you are being too clever with Scala to make something more concise, you definitely are. Readability > Conciseness
- Be very sure if you want to use implicits.