Where to Go from Here

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Starting the Transition to Functional Programming

There's nothing stopping you from writing pure functions in your current language

LINQ in .Net

Pure

Immutable

Piped

```
Users
    .Where(u => u.IsActive)
    .Select(u => u.LastName)
    .Distinct()
    .Take(5)
```

LINQ is Functional Programming

Start to think like a functional programmer

Java is also a multi-paradigm language

Add concepts, don’t rewrite

Learning a Functional Language

Functional Programming

A programming paradigm that treats computation as the evaluation of mathematical functions and avoids changing-state and mutable data.

Type Safety

Static types

Dynamic types

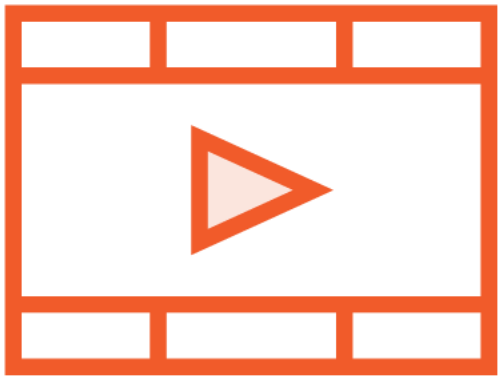
Learn both static and dynamic typed languages

Languages that have safety nets

F#

Multi-paradigm

Part of the .Net family



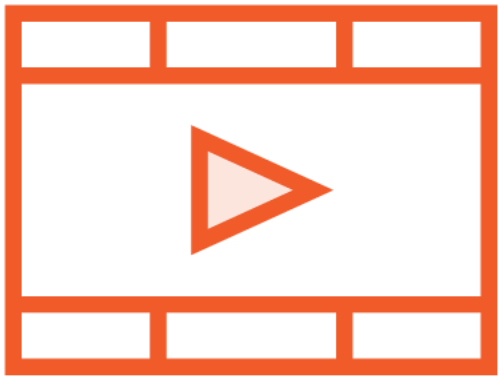
F# Fundamentals

Scala

Influenced by functional languages

Immutability and laziness

Compiled to Java bytecode

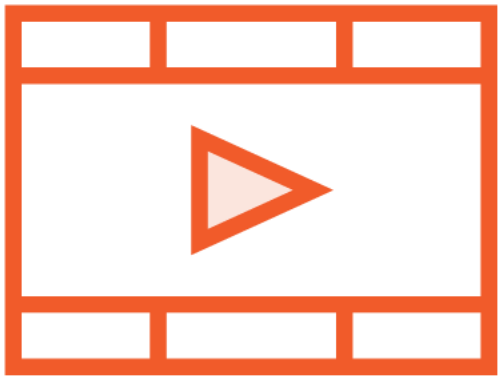


Thinking Functionally in Scala

Haskell

Very influential

Biggest paradigm shift



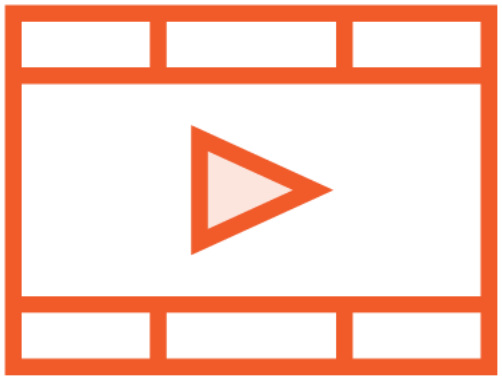
Haskell Fundamentals

Dynamic functional languages

JavaScript

Multi-paradigm

Extended via libraries

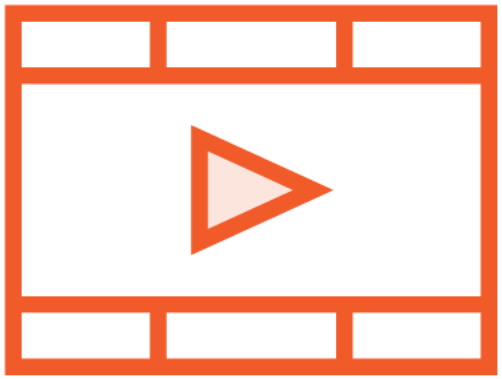


Fundamentals of Functional Programming in JavaScript

Python

Multi-paradigm

Used widely for data science



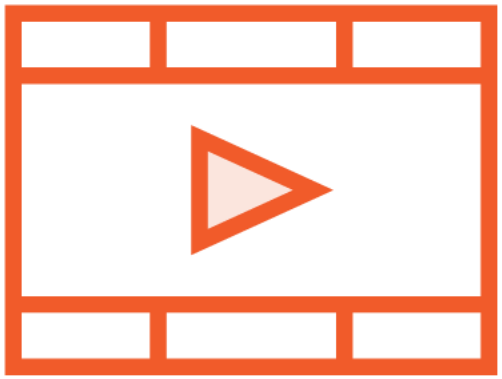
Fundamental Programming with Python

Elixir

Only functional

Built on Erlang

Influenced by Ruby



Getting Started with Elixir

Example Functional Programming Languages

F#

Scala

Haskell

JavaScript

Python

Elixir

Common Questions

How is this different than what I already do?

Can I use functional programming in line of business applications?

Why should I learn functional programming?

Thank you

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