

## Scala

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| Scala            | Modern and powerful programming language invented in Switzerland. Scala has full support for functional programming and a very strong static type system. Designed to be concise, many of Scala's design decisions were inspired by criticism of the shortcomings of <a href="#">Java</a> .  |
| Scala frameworks | <a href="#">Akka</a> , <a href="#">Cats</a> , <a href="#">Lift</a> , <a href="#">Play</a> , <a href="#">Scalaz</a> , <a href="#">Slick</a> , <a href="#">Shapeless</a> , <a href="#">Spray</a> .   |
| Akka             | The platform for the next generation of event-driven, scalable and fault-tolerant architectures on the <a href="#">JVM</a> . Akka is an implementation of the actor model, a mathematical model of concurrent computation, based on the central idea of actors.  |
| Akka HTTP        | The Streaming-first <a href="#">HTTP</a> server/module of <a href="#">Akka</a> . The Akka HTTP modules implement a full server- and client-side HTTP stack on top of akka-actor and akka-stream.   |
| Apache Kafka     | Fast, scalable, durable, and fault-tolerant publish-subscribe messaging system. Kafka is often used in place of traditional message brokers like <a href="#">JMS</a> and <a href="#">AMQP</a> because of its higher throughput, reliability and replication.   |
| Cats             | Lightweight, modular, and extensible library for functional programming which provides abstractions for functional programming in the Scala programming language. The name is a playful shortening of the word category.   |
| Colossus         | Lightweight framework for building high-performance applications in <a href="#">Scala</a> that require non-blocking network I/O. It spins up multiple event loops, generally one per <a href="#">CPU</a> core. <a href="#">TCP</a> connections are bound to event loops and request handlers (written by you) are attached to connections to transform incoming requests into responses. |
| Finatra          | Lightweight framework for building fast, testable, scala applications on top of TwitterServer and Finagle. Finatra provides an easy-to-use <a href="#">API</a> for creating and testing Finagle servers and apps as well as powerful <a href="#">JSON</a> support, modern logging via SLF4J, Finagle client utilities, and more.   |
| Finch            | Scala combinator library for building Finagle <a href="#">HTTP</a> services. Purely Functional <a href="#">REST API</a> atop of Finagle.   |
| http4s           | Typeful, functional, streaming <a href="#">HTTP</a> for <a href="#">Scala</a> . http4s servers and clients share an immutable model of requests and responses. Standard headers are modeled as semantic types, and entity codecs are done by typeclass.  |
| Lift 3.0-RC1     | A powerful Web application framework for Scala that has a <a href="#">ORM</a> mapper for mongoDB. Gives a solid security layer on top, so by default, there's no XSS and CSRF.   |
| Play             | The High Velocity Web Framework For <a href="#">Java</a> and <a href="#">Scala</a> , based on a lightweight, stateless, web-friendly architecture. Built on Akka, Play provides predictable and minimal resource consumption ( <a href="#">CPU</a> , memory, threads) for highly-scalable applications.  |
| Play 2.5.0       | An open source web app framework, written in Scala and also usable from e.g. <a href="#">Java</a> , which follows the <a href="#">MVC</a> architectural pattern and aims to optimize developer productivity by using convention over configuration, hot code reloading and display of errors in the browser. Play 2.5.0 was released in March 2016.                                      |
| sbt              | Scala Build Tool. An alternative to ANT and Maven made with <a href="#">Scala</a> in mind. Its main features is native support for compiling Scala code and integrating with many Scala test frameworks.   |
| SBT 0.13.12      | An open source build tool for Scala and Java projects (similar to Java's Maven or Ant), that is used by the Lift & Play frameworks. Released in July 2016.   |
| Scalatra         | A scalable web micro-framework for <a href="#">Scala</a> . Scalatra offers advanced features and can be used for server-side development, creating high-performance mobile and web <a href="#">APIs</a> . It can be extended with libraries for templates, data models, testing and others.  |
| Scalaz           | An extension to the core <a href="#">Scala</a> library for functional programming. A Scala library of pure data structures, type classes, highly generalized functions, and concurrency abstractions to perform functional programming in Scala.   |
| Shapeless        | A type class and dependent type based generic programming library for <a href="#">Scala</a> . Used widely in production systems wherever there are arities to be abstracted over and boilerplate to be scrapped.   |
| Slick            | Modern database query and access library for <a href="#">Scala</a> . It allows to work with stored data almost as if you were using Scala collections while at the same time giving you full control over when a database access happens and which data is transferred.  |
| Spray            | Toolkit for building <a href="#">REST / HTTP</a> -based integration layers on top of <a href="#">Scala</a> and <a href="#">Akka</a> . Being asynchronous, actor-based, fast, lightweight, modular and testable it's a great way to connect your Scala applications to the world.   |