



# Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure

By Leonardo Borges

Download now

Read Online ➔

## Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure By Leonardo Borges

### Key Features

- Learn how to leverage the features of functional reactive programming using Clojure
- Create dataflow-based systems that are the building blocks of reactive programming
- Learn different Functional Reactive Programming frameworks and techniques by implementing real-world examples

### Book Description

Reactive Programming (RP) is central to many concurrent systems. It endeavors to make the process of developing highly-concurrent, event-driven, and asynchronous applications simpler and less error-prone. RP comes in many flavors and we will look at some of them in this book.

*Clojure Reactive Programming* is a practical guide aimed at exploring RP. It starts by describing Functional Reactive Programming (FRP) and its formulations, as well as how it inspired Compositional Event Systems (CES).

It also presents several examples of Reactive applications implemented in different frameworks, allowing you to develop an understanding of the subject as well as learn how to develop your ability to work with time-varying values. By the end of the book, you will be equipped to solve real-world problems and have a clear understanding of when and how you should use different the approaches that are shown in the book.

### What you will learn

- Understand the key abstractions of Functional Reactive Programming (FRP) and Compositional Event Systems (CES)
- Discover how to think in terms of time-varying values and event streams

- Create, compose, and transform Observable sequences with Reactive Extensions
- Create a CES framework from scratch using core.async as its foundation
- Build a simple ClojureScript game using Reagi
- Integrate Om and RxJS in a web application
- Implement a reactive API to Amazon Web Services
- Discover approaches to backpressure and error handling
- Get to grips with futures and learn where they fit in

### About the Author

**Leonardo Borges** is a programming languages enthusiast who loves writing code, contributing to open source software, and speaking on subjects he feels strongly about. After nearly 5 years of consulting at ThoughtWorks, where he worked in two commercial Clojure projects, among many others, he is now a software engineer at Atlassian. He uses Clojure and ClojureScript to help build real-time collaborative editing technology.

### Table of Contents

1. What is Reactive Programming?
2. A Look at Reactive Extensions
3. Asynchronous Programming and Networking
4. Introduction to core.async
5. Creating your own CES Framework with core.async
6. Bilding a Simple ClojureScript Game with Reagi
7. The UI as a Function
8. Futures
9. A Reactive API to Amazon Web Services

 [Download Clojure Reactive Programming - How to Develop Conc  
...pdf](#)

 [Read Online Clojure Reactive Programming - How to Develop Co  
...pdf](#)

# Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure

*By Leonardo Borges*

**Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure** By Leonardo Borges

## Key Features

- Learn how to leverage the features of functional reactive programming using Clojure
- Create dataflow-based systems that are the building blocks of reactive programming
- Learn different Functional Reactive Programming frameworks and techniques by implementing real-world examples

## Book Description

Reactive Programming (RP) is central to many concurrent systems. It endeavors to make the process of developing highly-concurrent, event-driven, and asynchronous applications simpler and less error-prone. RP comes in many flavors and we will look at some of them in this book.

*Clojure Reactive Programming* is a practical guide aimed at exploring RP. It starts by describing Functional Reactive Programming (FRP) and its formulations, as well as how it inspired Compositional Event Systems (CES).

It also presents several examples of Reactive applications implemented in different frameworks, allowing you to develop an understanding of the subject as well as learn how to develop your ability to work with time-varying values. By the end of the book, you will be equipped to solve real-world problems and have a clear understanding of when and how you should use different the approaches that are shown in the book.

## What you will learn

- Understand the key abstractions of Functional Reactive Programming (FRP) and Compositional Event Systems (CES)
- Discover how to think in terms of time-varying values and event streams
- Create, compose, and transform Observable sequences with Reactive Extensions
- Create a CES framework from scratch using core.async as its foundation
- Build a simple ClojureScript game using Reagi
- Integrate Om and RxJS in a web application
- Implement a reactive API to Amazon Web Services
- Discover approaches to backpressure and error handling
- Get to grips with futures and learn where they fit in

## About the Author

**Leonardo Borges** is a programming languages enthusiast who loves writing code, contributing to open source software, and speaking on subjects he feels strongly about. After nearly 5 years of consulting at ThoughtWorks, where he worked in two commercial Clojure projects, among many others, he is now a

software engineer at Atlassian. He uses Clojure and ClojureScript to help build real-time collaborative editing technology.

## Table of Contents

1. What is Reactive Programming?
2. A Look at Reactive Extensions
3. Asynchronous Programming and Networking
4. Introduction to core.async
5. Creating your own CES Framework with core.async
6. Bilding a Simple ClojureScript Game with Reagi
7. The UI as a Function
8. Futures
9. A Reactive API to Amazon Web Services

## Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure By Leonardo Borges Bibliography

- Sales Rank: #635952 in Books
- Published on: 2015-03-24
- Released on: 2015-03-23
- Original language: English
- Number of items: 1
- Dimensions: 9.25" h x .53" w x 7.50" l, .89 pounds
- Binding: Paperback
- 194 pages

 [Download Clojure Reactive Programming - How to Develop Conc ...pdf](#)

 [Read Online Clojure Reactive Programming - How to Develop Co ...pdf](#)

## **Download and Read Free Online Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure By Leonardo Borges**

---

### **Editorial Review**

About the Author

#### **Leonardo Borges**

Leonardo Borges is a programming languages enthusiast who loves writing code, contributing to open source software, and speaking on subjects he feels strongly about. After nearly 5 years of consulting at ThoughtWorks, where he worked in two commercial Clojure projects, among many others, he is now a software engineer at Atlassian. He uses Clojure and ClojureScript to help build real-time collaborative editing technology. This is his first full-length book, but he contributed a couple of chapters to Clojure Cookbook, O'Reilly. Leonardo has founded and runs the Sydney Clojure User Group in Australia. He also writes posts about software, focusing on functional programming, on his website ([leonardoborges.com](http://leonardoborges.com)). When he isn't writing code, he enjoys riding motorcycles, weightlifting, and playing the guitar.

### **Users Review**

**From reader reviews:**

#### **Ellen Jones:**

Do you have favorite book? For those who have, what is your favorite's book? Book is very important thing for us to understand everything in the world. Each reserve has different aim as well as goal; it means that reserve has different type. Some people sense enjoy to spend their the perfect time to read a book. They may be reading whatever they get because their hobby is definitely reading a book. What about the person who don't like studying a book? Sometime, man feel need book once they found difficult problem or exercise. Well, probably you'll have this Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure.

#### **Ernestine Miller:**

Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure can be one of your beginner books that are good idea. All of us recommend that straight away because this publication has good vocabulary that could increase your knowledge in vocabulary, easy to understand, bit entertaining but delivering the information. The article writer giving his/her effort to set every word into enjoyment arrangement in writing Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure although doesn't forget the main stage, giving the reader the hottest and based confirm resource facts that maybe you can be among it. This great information can drawn you into new stage of crucial thinking.

#### **Thomas Deleon:**

Are you kind of hectic person, only have 10 or even 15 minute in your day time to upgrading your mind

expertise or thinking skill perhaps analytical thinking? Then you have problem with the book in comparison with can satisfy your limited time to read it because pretty much everything time you only find publication that need more time to be examine. Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure can be your answer as it can be read by anyone who have those short extra time problems.

#### **Heather Robertson:**

Beside this particular Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure in your phone, it could possibly give you a way to get more close to the new knowledge or details. The information and the knowledge you are going to got here is fresh from your oven so don't always be worry if you feel like an old people live in narrow small town. It is good thing to have Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure because this book offers to your account readable information. Do you often have book but you would not get what it's about. Oh come on, that wil happen if you have this in your hand. The Enjoyable blend here cannot be questionable, just like treasuring beautiful island. Techniques you still want to miss it? Find this book along with read it from at this point!

**Download and Read Online Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure By Leonardo Borges #RJHDC0MYA1K**

# **Read Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure By Leonardo Borges for online ebook**

Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure By Leonardo Borges Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure By Leonardo Borges books to read online.

## **Online Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure By Leonardo Borges ebook PDF download**

### **Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure By Leonardo Borges Doc**

**Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure By Leonardo Borges Mobipocket**

**Clojure Reactive Programming - How to Develop Concurrent and Asynchronous Applications with Clojure By Leonardo Borges EPub**