

THE LAZY PROGRAMMER'S GUIDE TO

# APPLICATION DEVELOPMENT

WITH JAVA

 OLIVERGIERKE

Pivotal.

# Pivotal?

THE FASTEST PATH TO NEW BUSINESS VALUE

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Pivotal Software, Inc. [US] https://run.pivotal.io

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# The Agile Platform for the Agile Team

Powered by Cloud Foundry

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60 day free trial. No credit card required

The screenshot shows the Pivotal Web Services dashboard for the 'Example Org'. The top navigation bar includes links for Features, Pricing, Marketplace, Support, Docs, and Log In. The main heading is 'The Agile Platform for the Agile Team' with the subtext 'Powered by Cloud Foundry'. A large teal button says 'SIGN UP FOR FREE' with the note '60 day free trial. No credit card required'. Below this is a screenshot of the org management interface, which displays the 'Example Org' quota (22% of 10GB limit), billing information (Current Balance \$745.44, Next Statement Date 03/01/14), and details for four spaces: development, dev-hr, staging, and testing. Each space shows app and service counts.

A screenshot of a web browser displaying the official Spring website at <https://spring.io>. The browser interface includes standard navigation buttons (back, forward, search, etc.) and a tab labeled "Spring". The main content area features the Spring logo (a stylized leaf icon) and the tagline "Let's build a better Enterprise." Below this, a descriptive paragraph explains that Spring helps development teams build simple, portable, fast, and flexible JVM-based systems and applications.

Spring

<https://spring.io>

spring

DOCS GUIDES PROJECTS BLOG QUESTIONS Q

Let's build a better Enterprise.

Spring helps development teams everywhere build simple, portable, fast and flexible JVM-based systems and applications.



Spring Framework

Spring Data

projects.spring.io/spring-data/

spring

DOCS GUIDES PROJECTS BLOG QUESTIONS

PROJECTS

## Spring Data

Makes it easy to use new data access technologies, such as non-relational databases, map-reduce frameworks, and cloud based data services. Spring Data also provides improved support for relational database technologies. This is an umbrella project which contains many subprojects that are specific to a given database. The projects are developed by working together with many of the companies and developers that are behind these exciting technologies.

### Main Projects

**SPRING DATA JPA**

Makes it easy to implement JPA-based repositories

**SPRING DATA MONGODB**

Spring based, object-document support and repositories for MongoDB

**SPRING DATA NEO4J**

Spring based, object-graph support and repositories for Neo4j

olivergierke (Oliver Gierke) 

GitHub, Inc. [US] <https://github.com/olivergierke>

Search GitHub Explore Gist Blog Help olivergierke + ⌂ ⚙ ⌂

  
**Oliver Gierke**  
olivergierke

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Joined on 18 Sep 2009

**456** Followers   **53** Starred   **31** Following

**Contributions** **Repositories** **Public activity** **Edit profile**

**Popular repositories**

-  **spring-restbucks** 222 ★  
Implementation of the sample from REST in P...
-  **repositories-deepdive** 93 ★  
Sample code for the Spring Data JPA repository...
-  **rest-microservices** 35 ★  
Sample for Spring Boot based REST microser...
-  **whoops-architecture** 29 ★  
Sample code for my talk "Whoops! Where did ..."
-  **spring-rest** 27 ★  
Sample project for Spring 3 REST style web a...

**Repositories contributed to**

-  **spring-projects/spring-data-com...** 146 ★  
Spring Data Commons. Interfaces and code s...
-  **spring-projects/spring-data-rest** 276 ★  
Spring Data REST Exporter
-  **st-tu-dresden/salespoint** 0 ★  
SalesPoint
-  **spring-projects/spring-data-build** 6 ★  
Modules to centralize common resources and ...
-  **spring-projects/spring-data-mo...** 362 ★  
Provide support to increase developer product...

**Contributions**

May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr

M  
W  
F

Summary of Pull Requests, issues opened, and commits. [Learn more.](#)

Less  More

TUD – Lehrstuhl Softwaretechnologie

tu-dresden.de/die\_tu\_dresden/fakultaeten/fakultaet\_informatik/smt/st/studium?leaf=1&lang=de&su...

TECHNISCHE UNIVERSITÄT DRESDEN

DRESDEN concept

Startseite » ... » Institut für Software- und Multimediatechnik » Lehrstuhl Softwaretechnologie » Studium

English | Suche

LEHRSTUHL SOFTWARETECHNOLOGIE

LEHRSTUHL SOFTWARETECHNOLOGIE STUDIUM FORSCHUNG MITARBEITER PUBLIKATIONEN

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 Business-Bereich  
 Kontakt  
 Service

**STUDIUM**

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## Softwaretechnologie-Projekt Praktikum (WS 14) - Organisation

**News**

- 13.01.2015** Die Termine für die Abschlusspräsentationen stehen fest und sind bei "Timetable" zu finden.
- 29.10.2014** Der Lernraum startet ab 4.11. immer dienstags in der 6. DS im Raum INF E 40. Am 11.11. fällt der Lernraum wegen der Vorlesung von Prof. Weber aus.
- 10.10.2014** Die auf der Warteliste eingeschriebenen Studierenden sind noch nicht in die Gruppen eingruppiert. Ob es für diese Studierenden einen Praktikumsplatz gibt, entscheidet sich in der ersten Praktikumswoche.
- 09.10.2014** Alle externen und internen Gruppen sind online. Weitere Informationen gibt es am Dienstag, den 14.10. 16:40 HSZ/H/04 in der Praktikumseinweisung.
- 23.09.2014** Leider ist aus technischen Gründen dieses Jahr keine Abgabe von Teamwünschen möglich.

[Einführung \[mehr\]](#)

**KONTAKT**

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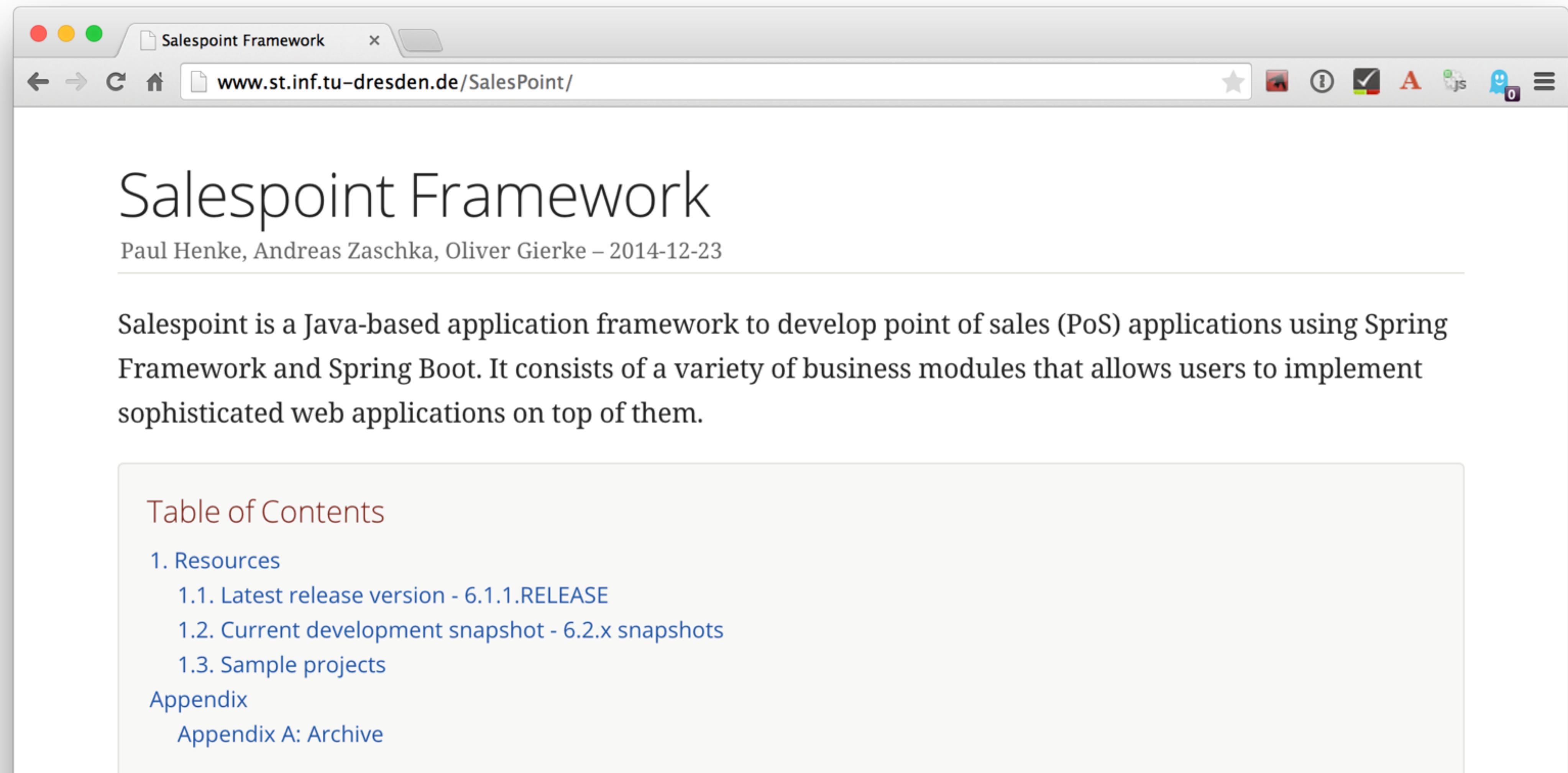
Sitz:  
[Nöthnitzer Straße 46, Zi. 2086](#)

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[Admin-Bereich](#)

# SALESPONT



The screenshot shows a web browser window titled "Salespoint Framework". The address bar displays the URL "www.st.inf.tu-dresden.de/SalesPoint/". The main content area features a large, bold title "Salespoint Framework" and a subtitle "Paul Henke, Andreas Zaschka, Oliver Gierke – 2014-12-23". Below the title, a descriptive paragraph states: "Salespoint is a Java-based application framework to develop point of sales (PoS) applications using Spring Framework and Spring Boot. It consists of a variety of business modules that allows users to implement sophisticated web applications on top of them." To the left of the main content, there is a sidebar with a "Table of Contents" section. This sidebar includes links for "1. Resources" (with sub-links for "Latest release version - 6.1.1.RELEASE", "Current development snapshot - 6.2.x snapshots", and "Sample projects"), "Appendix" (with a link to "Appendix A: Archive"), and other navigation icons.

# Salespoint Framework

Paul Henke, Andreas Zaschka, Oliver Gierke – 2014-12-23

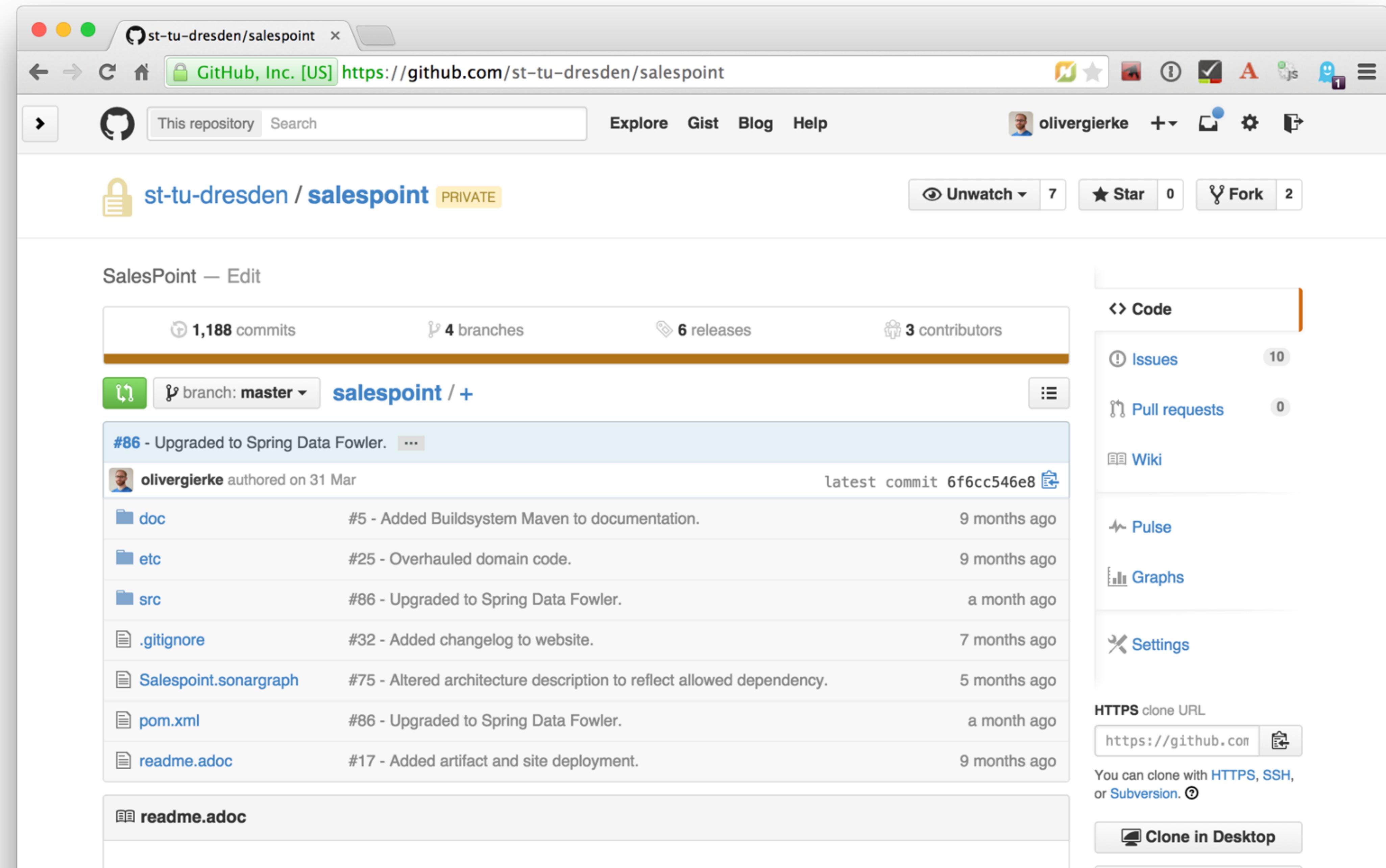
Salespoint is a Java-based application framework to develop point of sales (PoS) applications using Spring Framework and Spring Boot. It consists of a variety of business modules that allows users to implement sophisticated web applications on top of them.

## Table of Contents

- 1. Resources
  - 1.1. Latest release version - 6.1.1.RELEASE
  - 1.2. Current development snapshot - 6.2.x snapshots
  - 1.3. Sample projects
- Appendix
  - Appendix A: Archive

The framework generally consists of:

- 6 business modules - accountancy, inventory, catalog, orders, business time and user accounts.
- Domain types (entities and value objects) as well as Spring based repository and service implementations to provide Java APIs to be extended by (web) application developers.



# Software Engineering

""  
*In theory there is no  
difference between theory  
and practice. In practice –  
there is.*

– Yogi Berra

```
graph TD; A((JAVA TOOLING)) --- B((TEAM & TOOLING)); A --- C((LIBRARIES & FRAMEWORKS)); A --- D((DDD & JPA))
```

JAVA  
TOOLING

TEAM &  
TOOLING

LIBRARIES &  
FRAMEWORKS

DDD & JPA

## JAVA TOOLING

TODAY

- IDEs
- Dependencies
- Build

## LIBRARIES & FRAMEWORKS

JUNE, 26TH

- JUnit
- Spring
- Web apps

## TEAM & TOOLING

JUNE, 5TH

- Issue tracker
- Version control
- CI

## DDD & JPA

JULY, 17TH

- Entity, Value Object
- Repositories
- Persistence

# Scripts

- ⌚ <http://static.olivergierke.de/lectures>
- ⌚ <https://github.com/olivergierke/lectures>

A screenshot of a web browser window titled "TU Dresden lectures". The address bar shows the URL "static.olivergierke.de/lectures/". The page content includes the title "TU Dresden lectures" and a timestamp "Oliver Gierke – 2015-05-08 11:34:58 CEST". Below this is a section titled "Software engineering - Summer semester" with a list of topics. Another section titled "Software engineering labs - Winter semester" is partially visible at the bottom.

# TU Dresden lectures

Oliver Gierke – 2015-05-08 11:34:58 CEST

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## Software engineering - Summer semester

- [Overview / Intro](#)
- [Fundamentals of Java tooling](#)
- Frameworks and libraries
- Collaborative software development
- Domain-driven design & JPA

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## Software engineering labs - Winter semester

- [Web applications with Java and Spring](#)

The screenshot shows a web browser window with the following details:

- Title Bar:** Fundamentals of Java deve
- Address Bar:** static.olivergierke.de/lectures/java-tooling/
- Toolbar:** Includes standard browser icons for back, forward, search, and refresh, along with a star icon for bookmarks.

The main content area displays the following information:

# Fundamentals of Java development tooling

Oliver Gierke – 2015-05-07 21:33:48 UTC  
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- Resources
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- 2. Quick start
- 3. Eclipse
  - 3.1. Advantages of using an IDE
  - 3.2. Views and perspectives
- 4. Project build
  - 4.1. Maven
- Appendix A: Keyboard shortcuts
  - A.1. Code base navigation
  - A.2. Code editing / refactoring
  - A.3. Executing code
  - A.4. Maven
  - A.5. Miscellaneous
- Appendix B: License