

# COURSE INTRODUCTION

**Domain-Driven Design and Event-Driven Microservices**

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# OVERVIEW

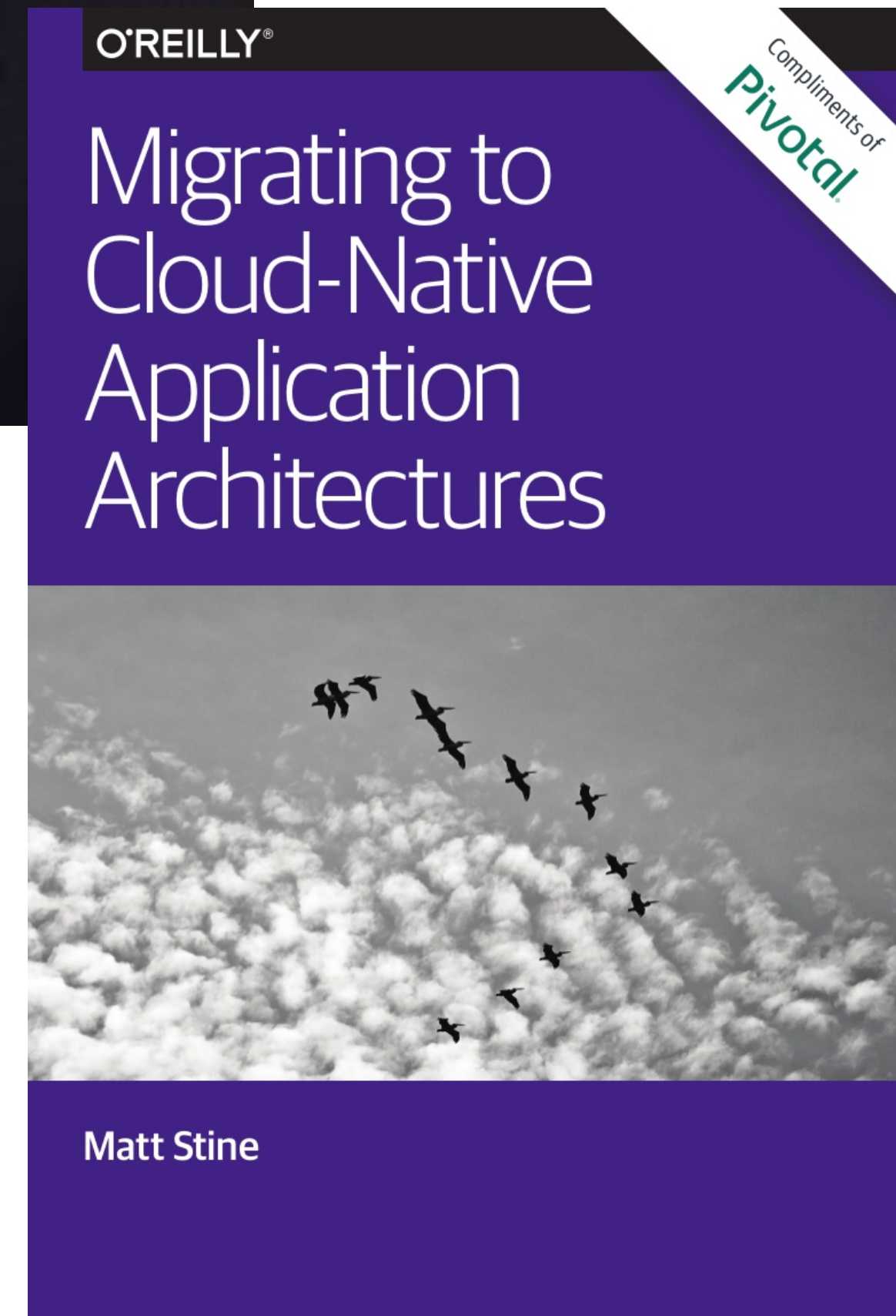
- **Participants will understand:**
  - Why DDD is an effective tool for designing evolutionary architectures.
  - The basic concepts of DDD (DDD 101).
  - The importance of the Ubiquitous Language.
  - How DDD can effectively be combined with multiple technical architectures.

# OVERVIEW

- **Participants will be able to:**
  - Leverage Event Storming to arrive at a candidate domain model.
  - Translate an Event Storm into User Stories.
  - Effectively apply DDD patterns to design modules that can be evolved into event-driven microservices.
  - Effectively leverage Hexagonal Architecture to implement modules that can be evolved into event-driven microservices.

# INSTRUCTOR: MATT STINE

- Global Field CTO / Chief Architect at Pivotal
- 18 year Enterprise IT veteran developer / architect
- 6 years focused on Cloud Native Platforms and Architecture
- Frequent conference circuit speaker
- Host of Software Architecture Radio  
<http://softwarearchitecturerad.io>
- I wrote a little cloud book...  
<https://www.oreilly.com/programming/free/migrating-cloud-native-application-architectures.csp>





# LOGISTICS

- Visual content will be delivered via the ON24 platform (what you're seeing).
- You can ask questions in the ON24 Group Chat or Q&A Panel (preferred).
- Questions will be answered via the audio channel.
- I'll ask questions via the audio channel, you can answer via Group Chat.
- We will take fairly frequent breaks.

# DAY ONE

- **Class Introduction**  
(10 minutes)
- **Why do we need DDD?**  
(15 minutes)
- **What is the Ubiquitous Language and why is it so important?**  
(15 minutes)
- **Open Q&A and Class Discussion**  
(10 minutes)
- **Break**  
(10 minutes)

# DAY ONE

- **DDD 101: Strategic Design**  
(25 minutes)
- **Open Q&A and Class Discussion**  
(10 minutes)
- **DDD 101: Tactical Design**  
(25 minutes)
- **Open Q&A and Class Discussion**  
(10 minutes)
- **Overview of Event Storming**  
(15 minutes)

# DAY ONE

- **Break**  
(10 minutes)
- **Intro to the Pizza Shop Domain**  
(10 minutes)
- **Open Q&A and Class Discussion**  
(10 minutes)
- **Pizza Shop Event Storming Exercise**  
(20 minutes)
- **Pizza Shop Event Storming Solution**  
(15 minutes)



# DAY ONE

- **Event Storming → DDD / User Stories / TDD**  
(20 minutes)
- **Day One AMA**  
(10 minutes)

# DAY TWO

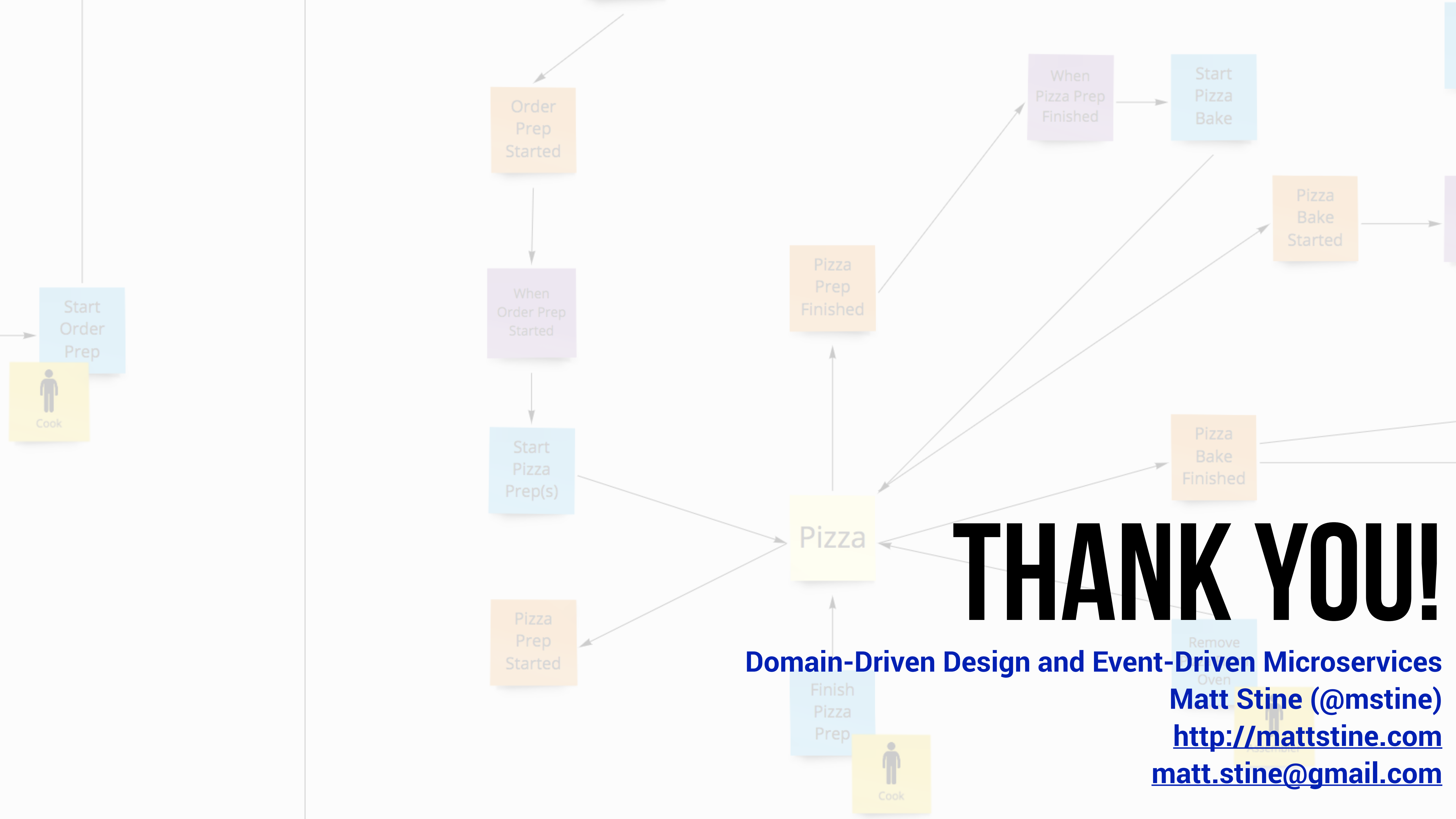
- **Day One Recap**  
(10 minutes)
- **DDD and Technical Architectures**  
(25 minutes)
- **Overview of the Pizza Shop Coding Exercise Environment**  
(10 minutes)
- **Lab 1: TDD Aggregate Root: Commands with Business Logic and Invariants**  
(25 minutes)
- **Lab 2: TDD Aggregate Root: Publish Domain Events**  
(25 minutes)

# DAY TWO

- **Lab 3: TDD Repository: Create Repositories and Add Domain Events**  
(25 minutes)
- **Lab 4: TDD Repository: Rehydrate Aggregates by Reference**  
(25 minutes)
- **Lab 5: TDD Policy: Subscribe to Event within Aggregate / Create CQRS View**  
(25 minutes)
- **Lab 6: TDD Application Service: Expose Business Interface and Transactions**  
(25 minutes)
- **Lab 7: TDD Policy: Subscribe to Event from Adjacent Aggregate / Update State**  
(25 minutes)

# DAY TWO

- **Day Two AMA**  
(10 minutes)
- **Conclusion**



# THANK YOU!

**Domain-Driven Design and Event-Driven Microservices**

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