

COURSE INTRODUCTION

Domain-Driven Design and Event-Driven Microservices

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OVERVIEW

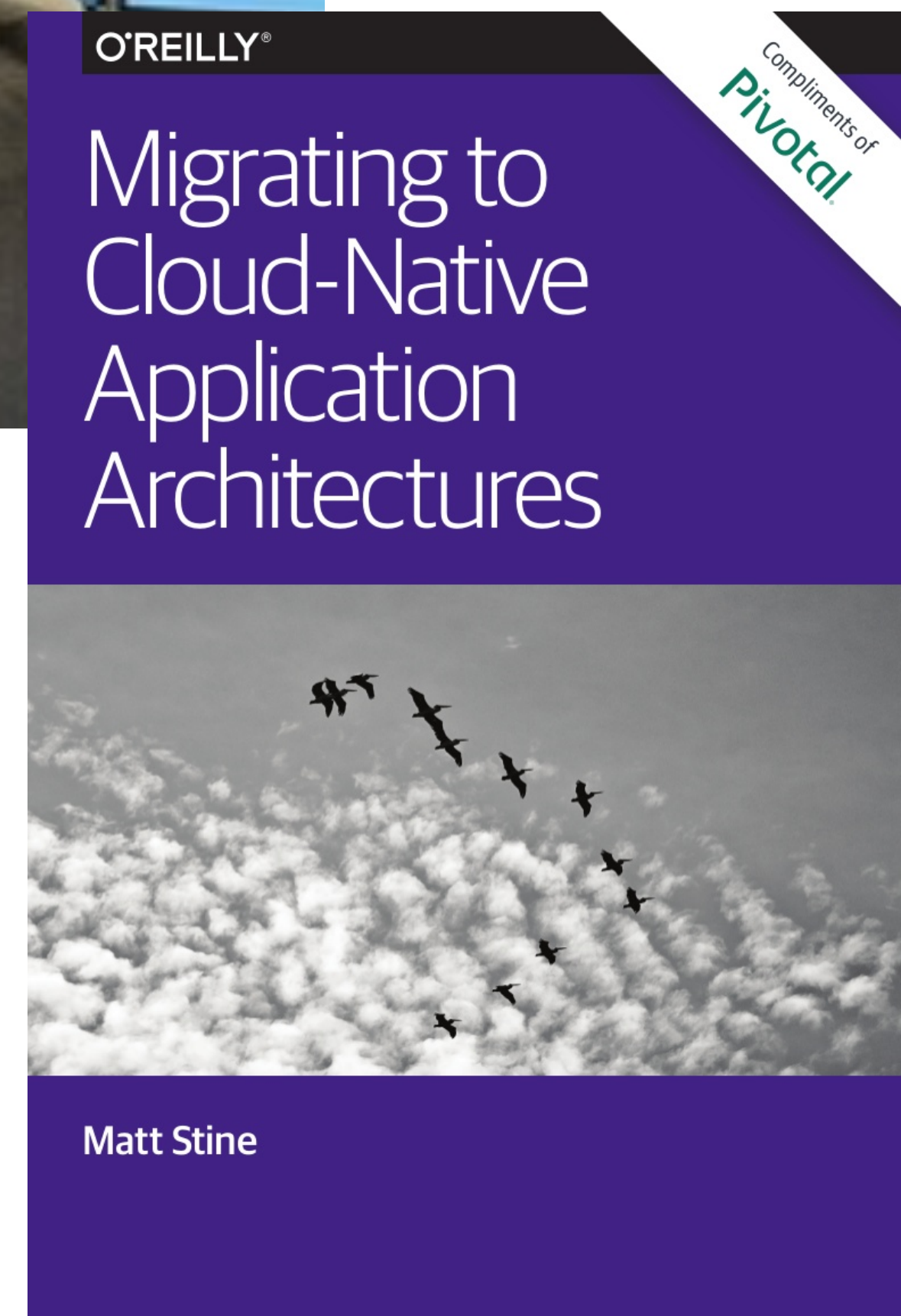
- **Participants will understand:**
 - Why DDD is an effective tool for designing evolutionary architectures.
 - The basic concepts of DDD (DDD 101).
 - The importance of the Ubiquitous Language.
 - How DDD can effectively be combined with multiple technical architectures.

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

- Executive Director - Software Engineering
JPMorgan Chase
- 22 year Enterprise IT veteran developer / architect
- 7 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

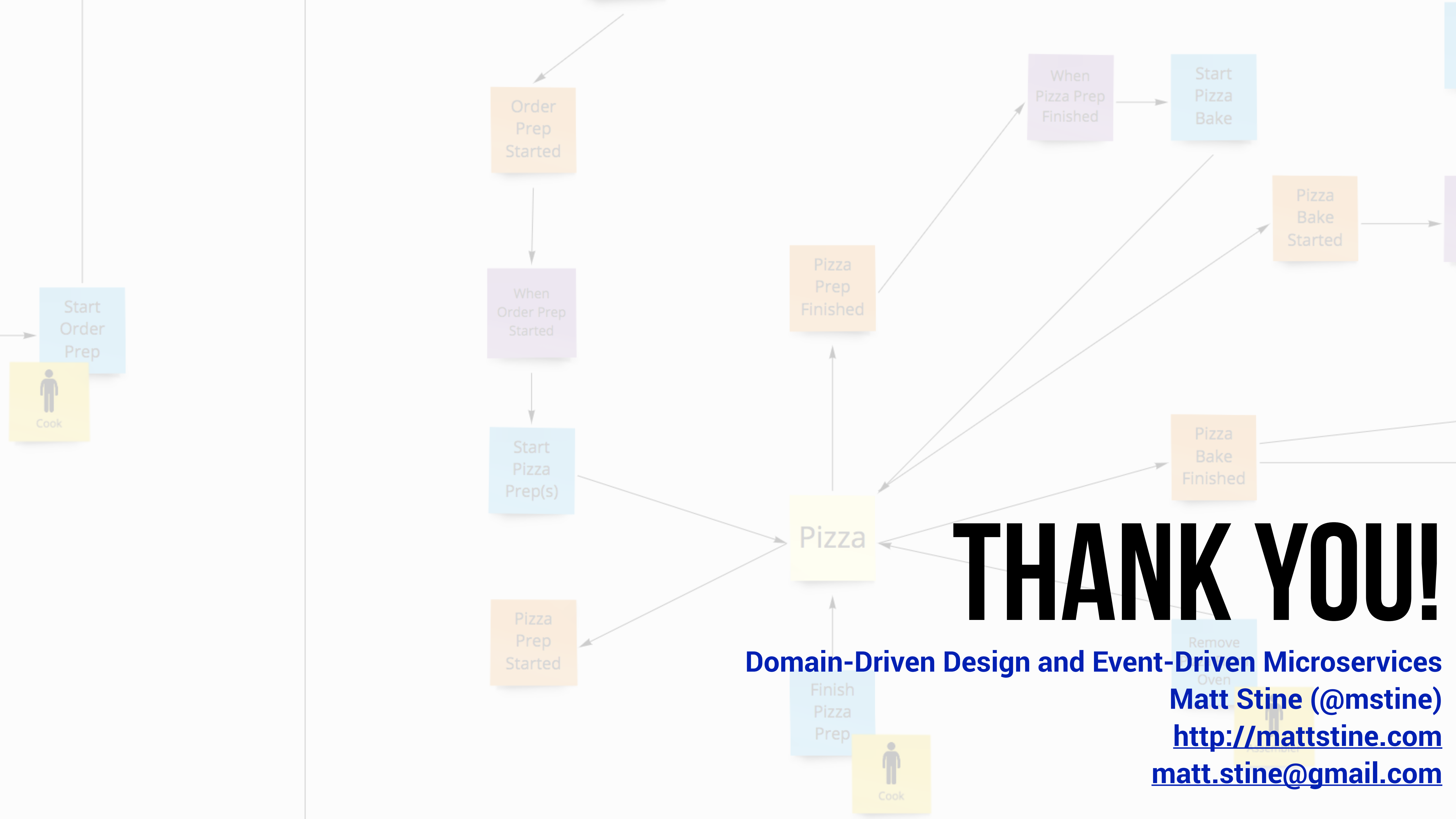
- **Day One Recap**
(10 minutes)
- **DDD and Technical Architectures**
(25 minutes)
- **Overview of the Pizza Shop Coding Exercise Environment**
(10 minutes)
- **Lab 1: TDD Aggregate Root: Commands with Business Logic and Invariants**
(25 minutes)
- **Lab 2: TDD Aggregate Root: Publish Domain Events**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

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