



# Design and Develop

**a Serverless Event-Driven  
Microservice-Based Solution**



# Workshop Introduction



# Who is Chad Green?

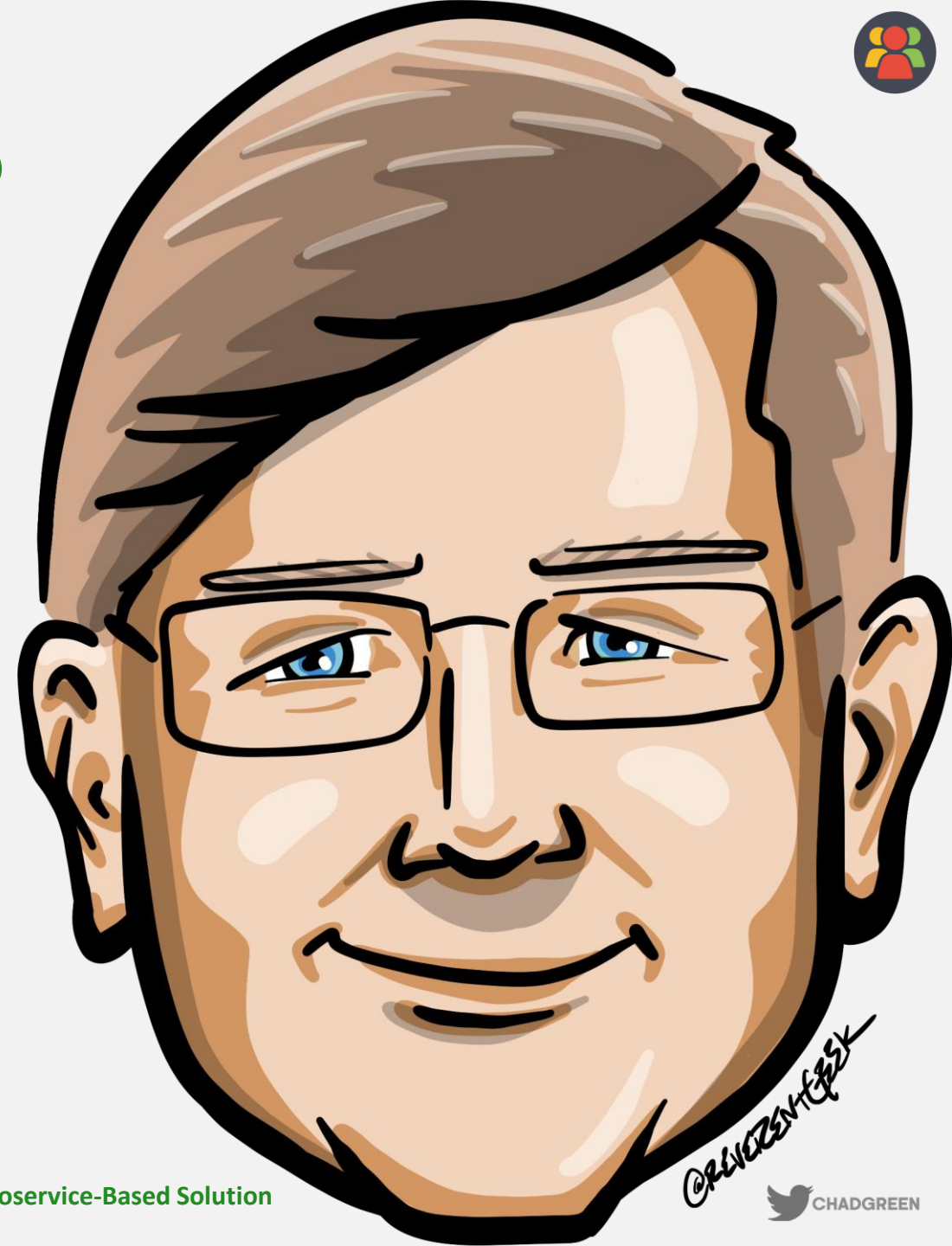
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# Attendee Introductions





# Workshop Overview





# Agenda

- Introduction (5 minutes)
  - Welcome and Overview



# Agenda

- Introduction (5 minutes)
- Prologue (1 hour)
  - Introduction to Microservices
  - Introduction to Event-Driven Architecture
  - Introduction to Serverless
  - Overview of Azure Serverless
  - Introduction to Infrastructure as Code and Terraform



# Agenda

- Introduction (5 minutes)
- Prologue (1 hour)
- Serverless Design Patterns (30 minutes)
  - Overview of common serverless design patterns
  - How to apply these patterns in real-world scenarios





# Agenda

- Introduction (5 minutes)
- Prologue (1 hour)
- Serverless Design Patterns (30 minutes)
- Business Scenario (45 minutes)
  - Cool Revive Technologies and the business scenario
  - Discussion on how to architect a solution for the business scenario



# Agenda

- Introduction (5 minutes)
- Prologue (1 minute)
- Serverless Design
- Business Scenario
- Hands-On Labs
  - Hands-On Labs**
    - Predictive Ingredient Replacement System
    - Real-Time Inventory Management System
    - Data Analytics Pipeline
    - Maintenance Alert System
    - Contactless Pouring and Customization System
    - Cost Optimization System
    - User Interface System



# Agenda

- Introduction (5 minutes)
- Prologue (1 hour)
- Serverless Design Patterns (30 minutes)
- Business Scenario (45 minutes)
- Hands-On Labs (3 hours)
- Additional Topics (45 minutes)
  - Serverless Security Best Practices
  - Monitoring and Troubleshoot Serverless Applications
  - Scaling and Performance Optimization



# Agenda

- Introduction (5 minutes)
- Prologue (1 hour)
- Serverless Design Patterns (30 minutes)
- Business Scenario (45 minutes)
- Hands-On Labs (3 hours)
- Additional Topics (45 minutes)
- Wrap-Up and Q&A (15 minutes)
  - Recap of the day
  - Open discussion and Q&A



# Schedule

Segment	Duration	Start Time	End Time
Introduction	5 minutes	8:45	8:50
Prologue	55 minutes	8:45	9:45
Serverless Design Patterns	30 minutes	9:45	10:15
Morning Break	30 minutes	10:15	10:45
Business Scenario	45 minutes	10:45	11:30
Hands-On Labs (Part 1)	45 minutes	11:30	12:15
Lunch	1 hour	12:15	13:15
Hands-On Lab (Part 2)	1.5 hours	13:15	14:45
Afternoon Break	30 minutes	14:45	15:15
Hands-On Lab (Part 3)	30 minutes	15:15	15:45
Additional Topics	30 minutes	15:45	16:30
Wrap-Up and Q&A	15 minutes	16:30	16:45



# Code of Conduct

- Respect and Inclusion
- Professional Behavior
- Confidentiality
- Collaborating and Listening
- Conflict Resolution
- Compliance with Laws and Policies
- Safety and Well-Being
- Feedback and Improvement



# PROLOGUE



Design and Develop a  
Serverless Event-Driven  
Microservice-Based Solution