

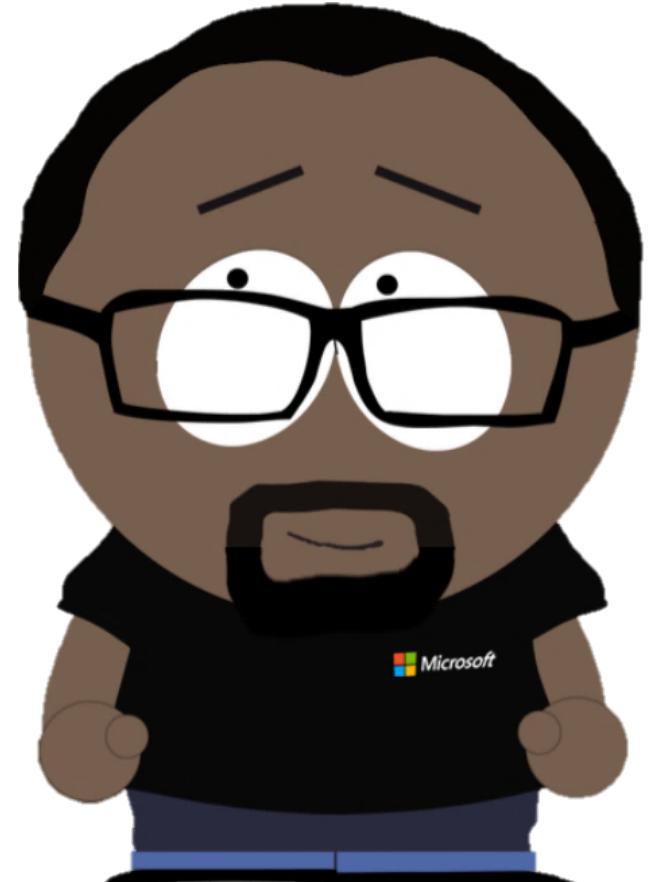
# Azure DevOps

# Introduction

DevOps is the union of  
**people, process, and**  
**products** to enable  
continuous delivery of  
**value** to our end users

—Donovan Brown

<http://bit.ly/WhatIs-DevOps>

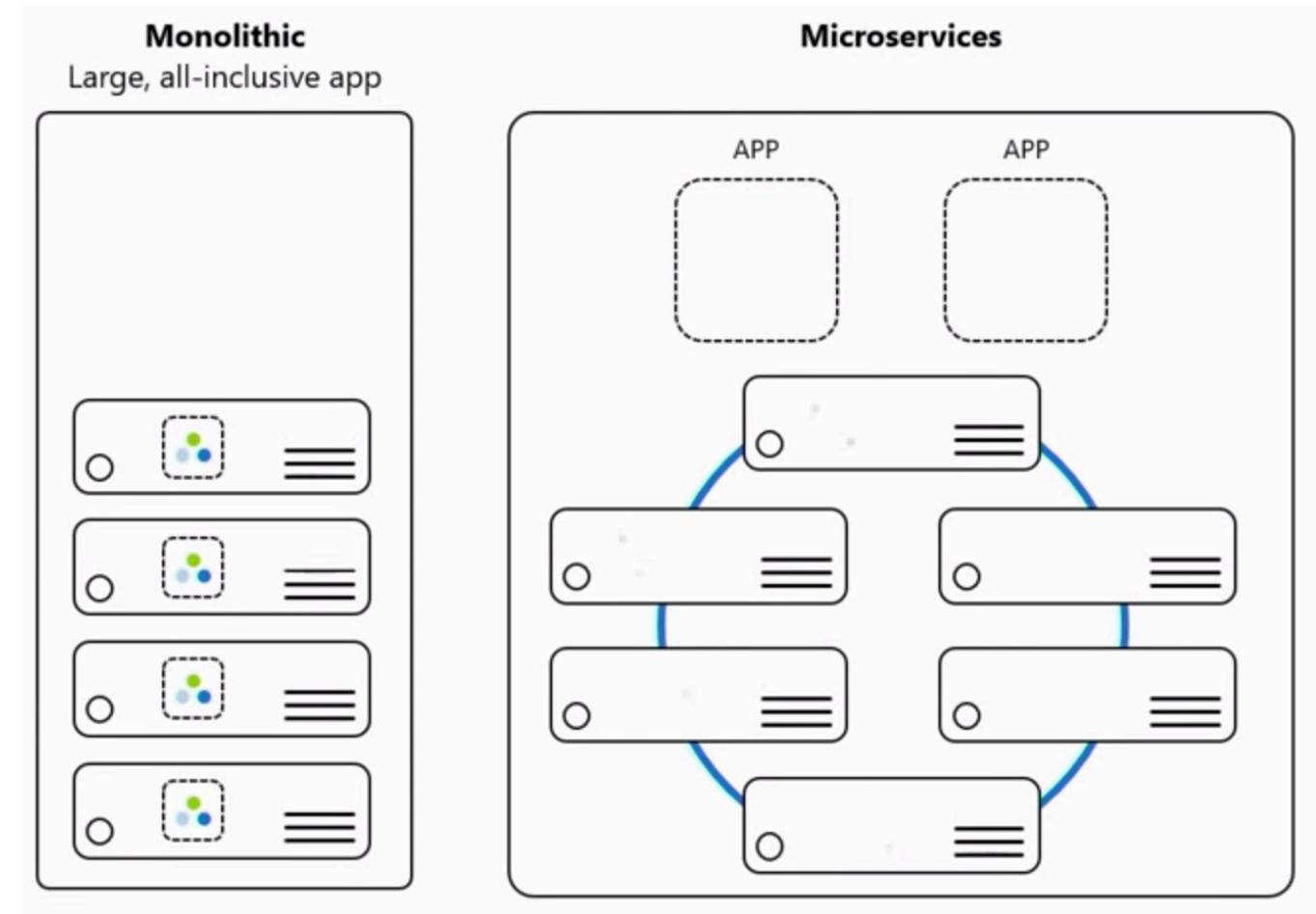


# Why are we here?

- Containers, microservices and Kubernetes are cool but can be remarkably hard
- How can we get make it easier for developers?
- How can we get it easier to adopt DevOps best practices from day one?
- How can we enable multiple dev teams to work together efficiently on a microservice architecture?

# Microservices 101

- Independent deployments
- Improved scale and resource utilization per services
- Smaller, focused and independent teams



# Kubernetes + Microservices = power

- Exclusively container-based
- Built-in service discovery
- Granular, automated container level scaling
- Naming and resource isolation via namespaces
- Role-based access control



## Bikes available in Seattle area

A selection of bikes that are best suited for your preferences.



**Women's Cruiser**

1907 18th Ave S, Seattle, WA 98144  
\$1/hour



**Men's Cruiser**

283 NW Market St, Seattle, WA 98107  
\$1/hour



**Women's Cruiser**

1302 Market St, Kirkland, WA 98033  
\$1/hour



**Men's Cruiser**

8638 22nd Ave SW, Seattle, WA 98106  
\$1/hour



**Men's Comfort**

3401 California Ave SW, Seattle, WA 98116  
\$1.5/hour



**Women's Racer**

14505 NE 91st St, Redmond, WA 98052  
\$2/hour



**Men's Cruiser**

8431 SE 39th St, Mercer Island, WA 98040  
\$1/hour



**Girl's Cruiser**

500 17th Ave, Seattle, WA 98122  
\$1/hour



**Women's Cruiser**

8049 18th Ave NW, Seattle, WA 98117  
\$1/hour



**Men's Comfort**

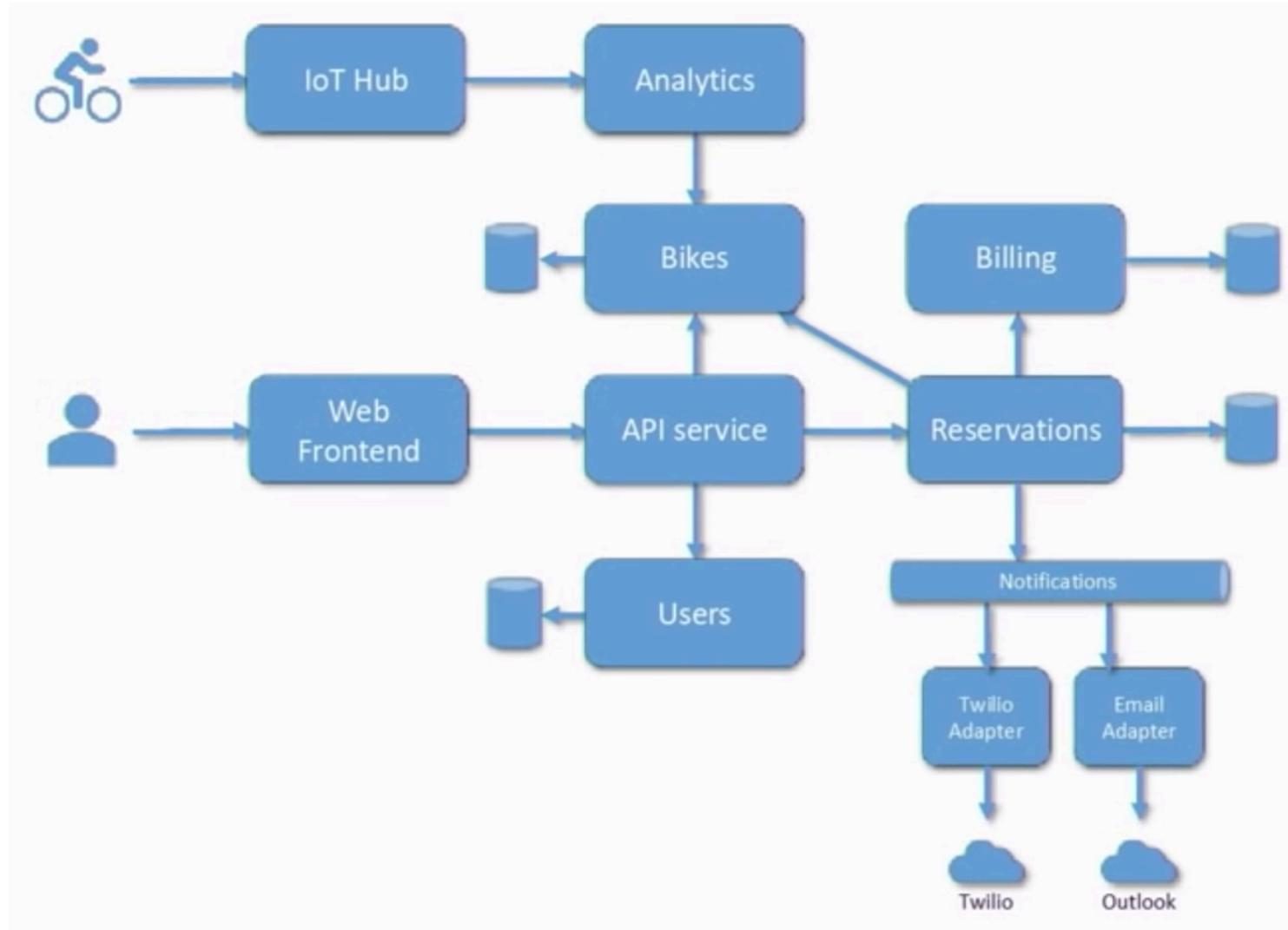
2100 Queen Anne Ave N, Seattle, WA 98109  
\$1.5/hour



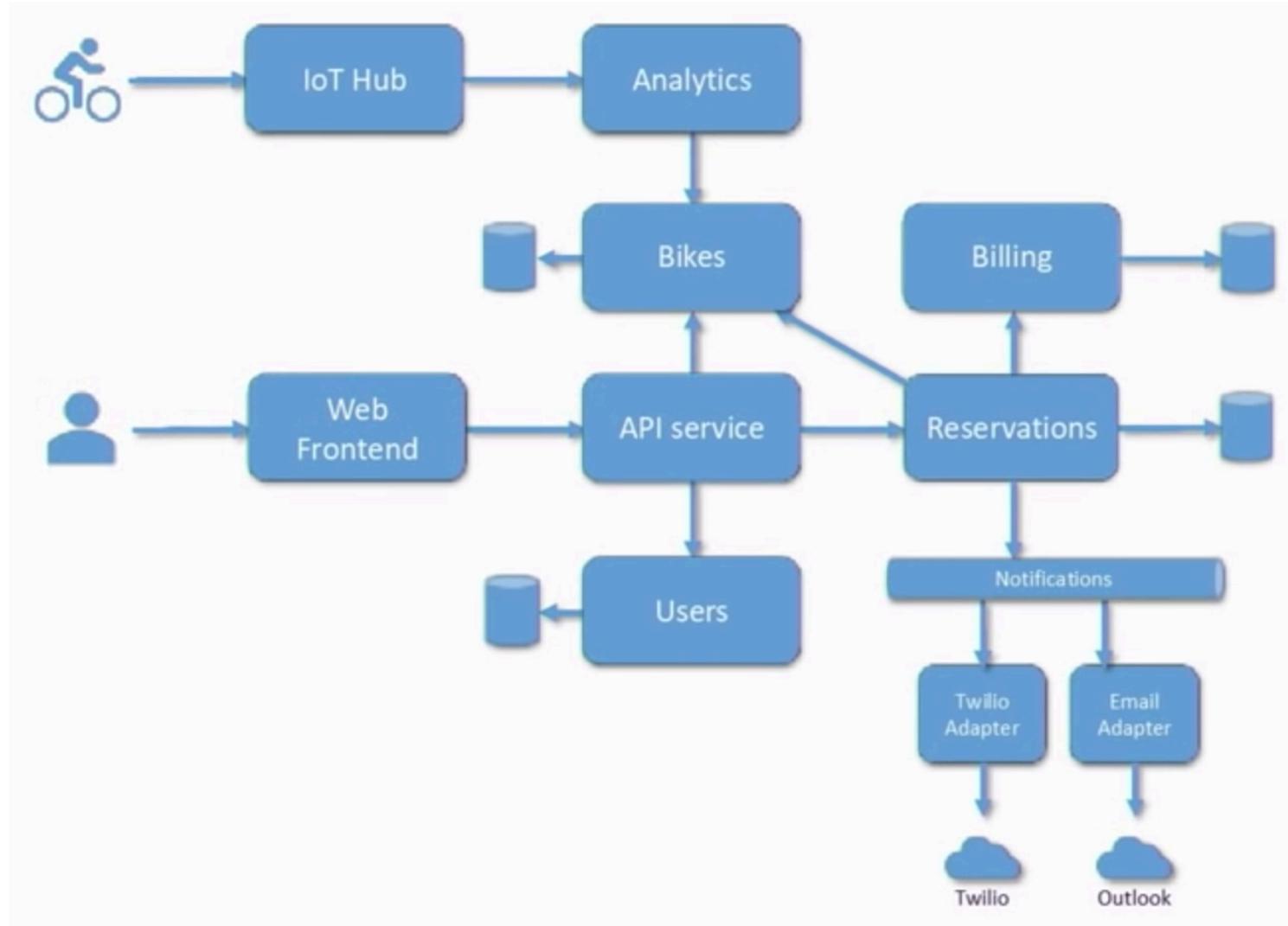
**Men's Racing**

7516 135th Ave SE, Newcastle, WA 98059  
\$2/hour

# Architecture



# Architecture: the challenges of scale



Many components

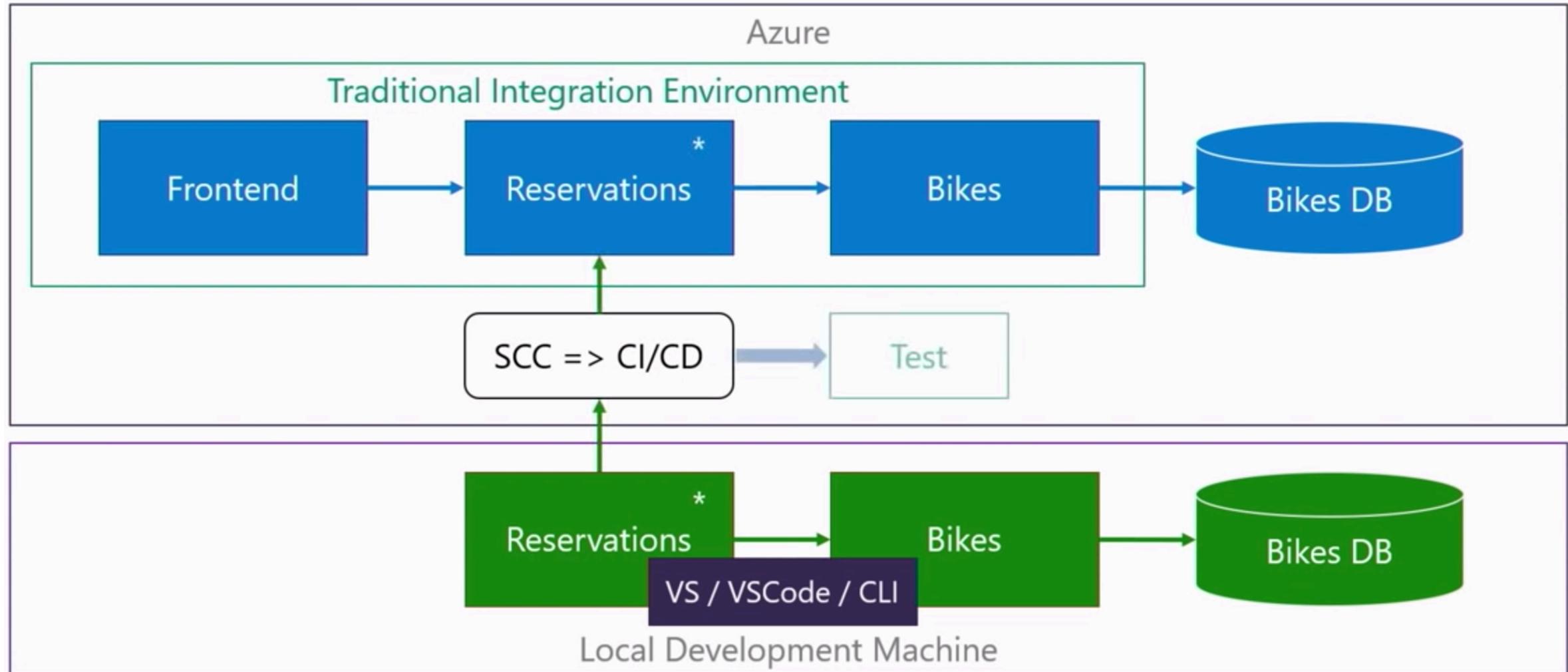
Developed incrementally

Complex dependency graphs

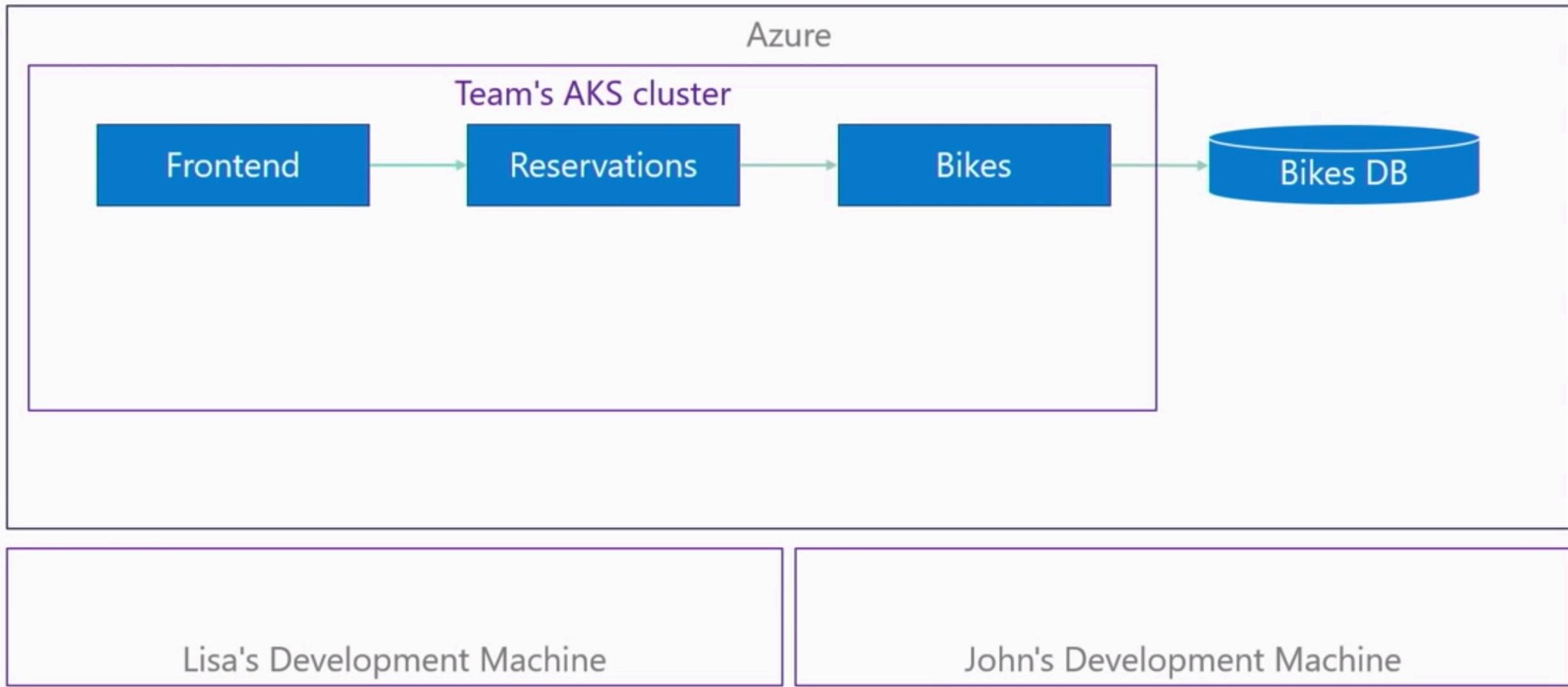
Complex inner loop testing

Hard to develop locally

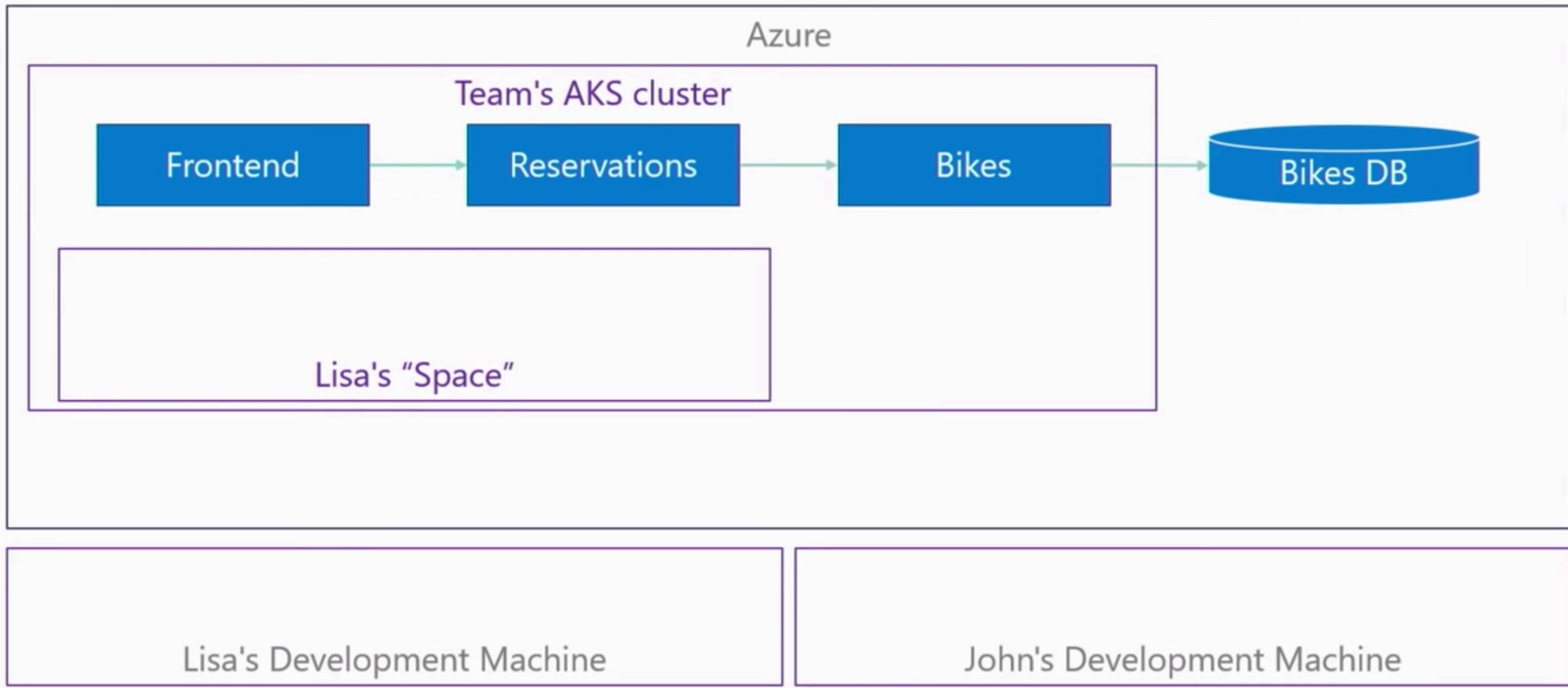
# Microservices are hard to develop locally



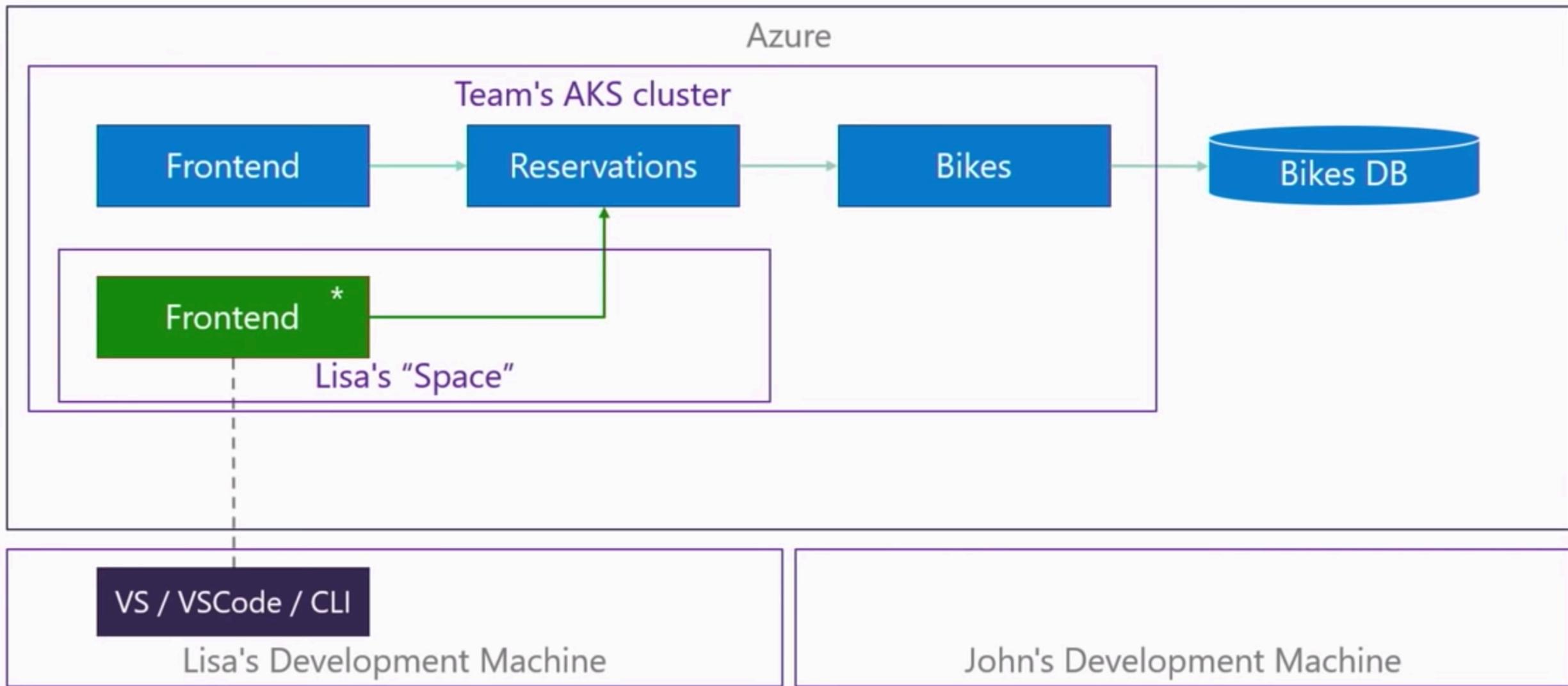
# Collaborate in a team's AKS cluster



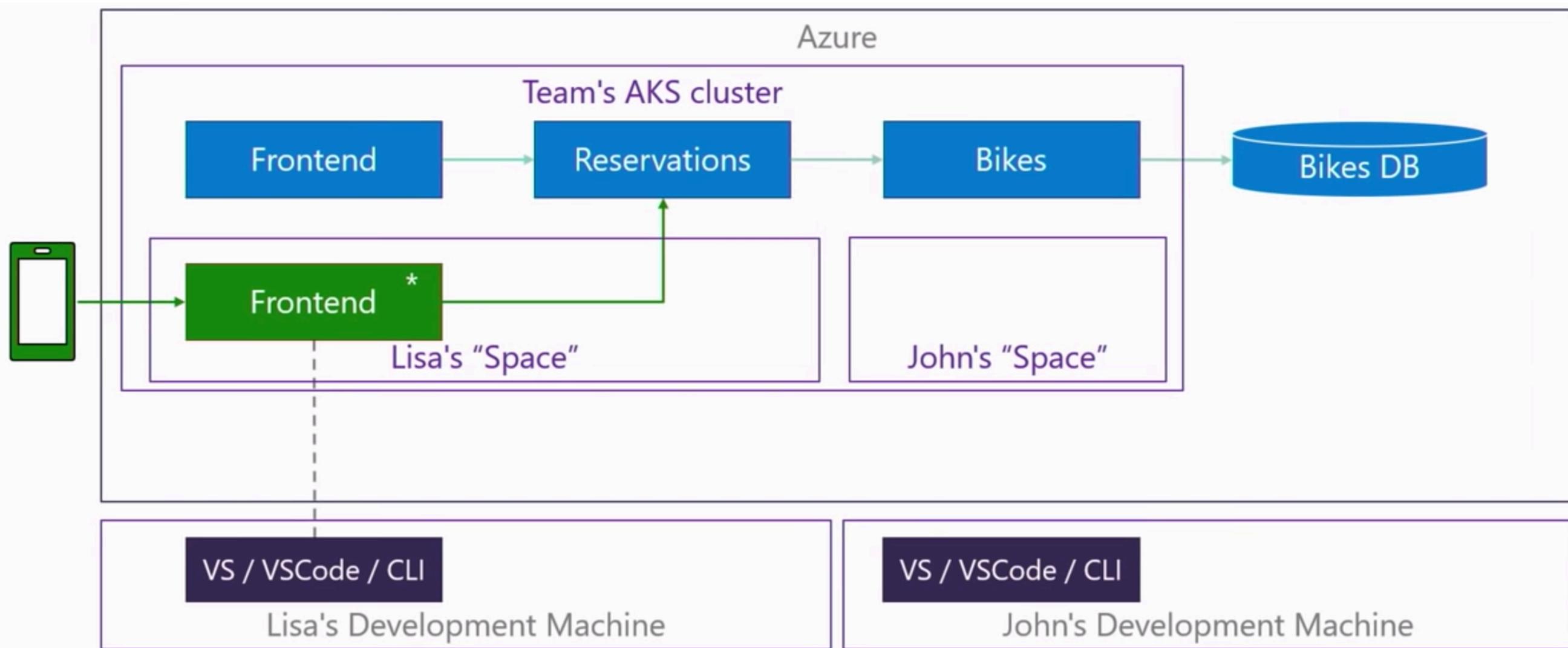
# Collaborate in a team's AKS cluster



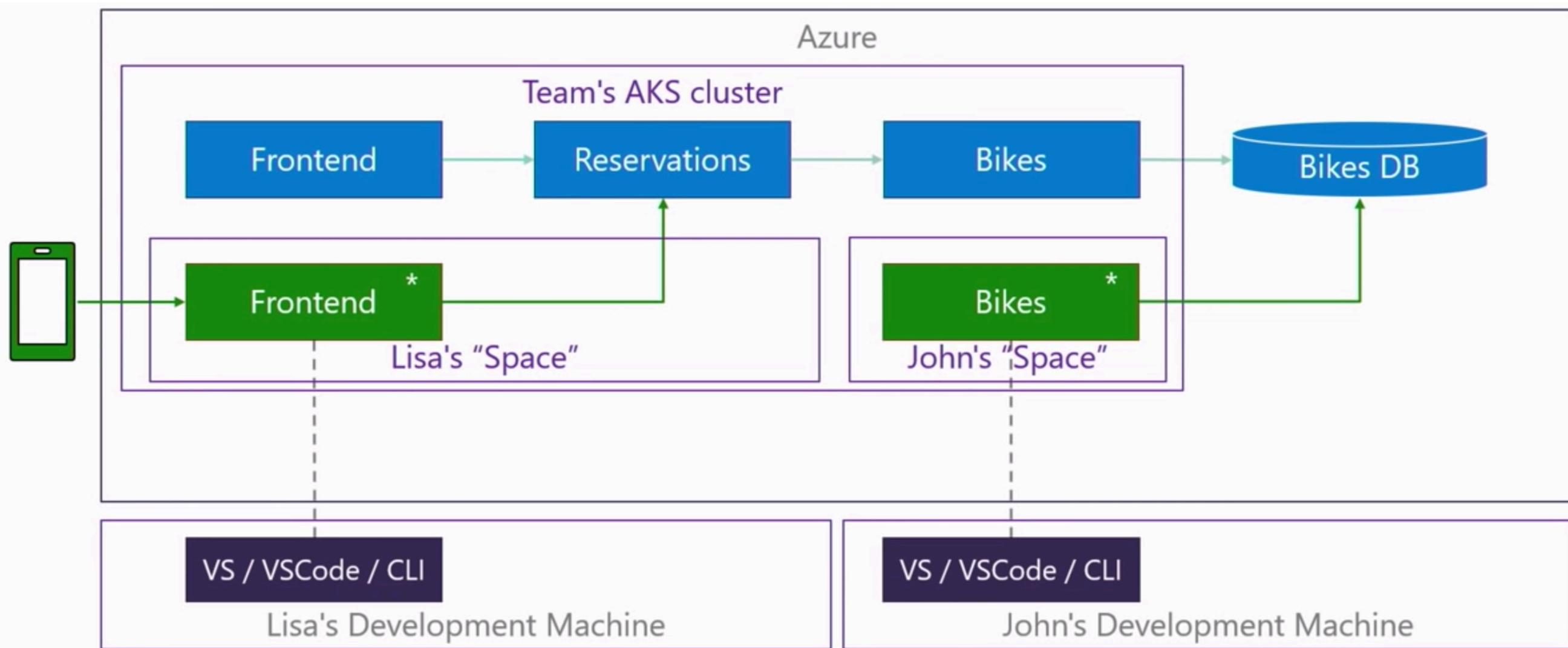
# Collaborate in a team's AKS cluster



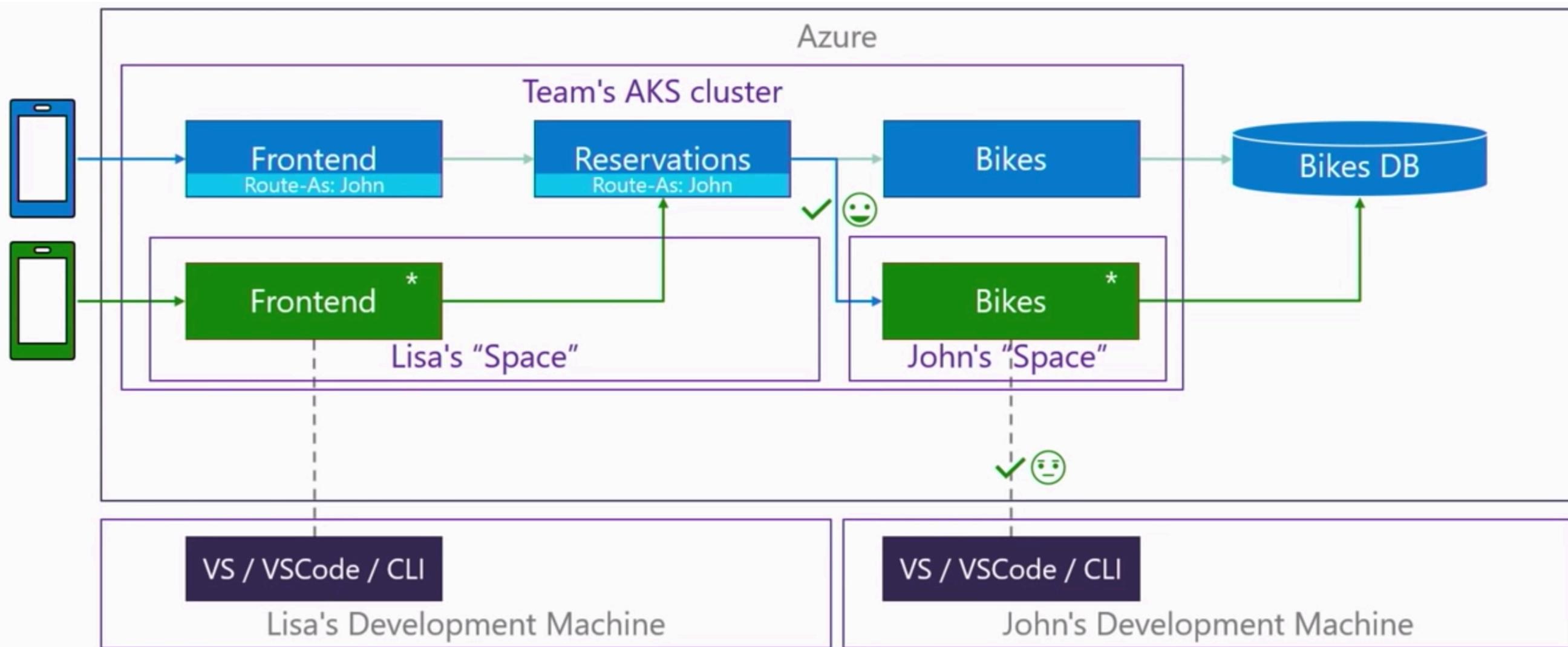
# Collaborate in a team's AKS cluster



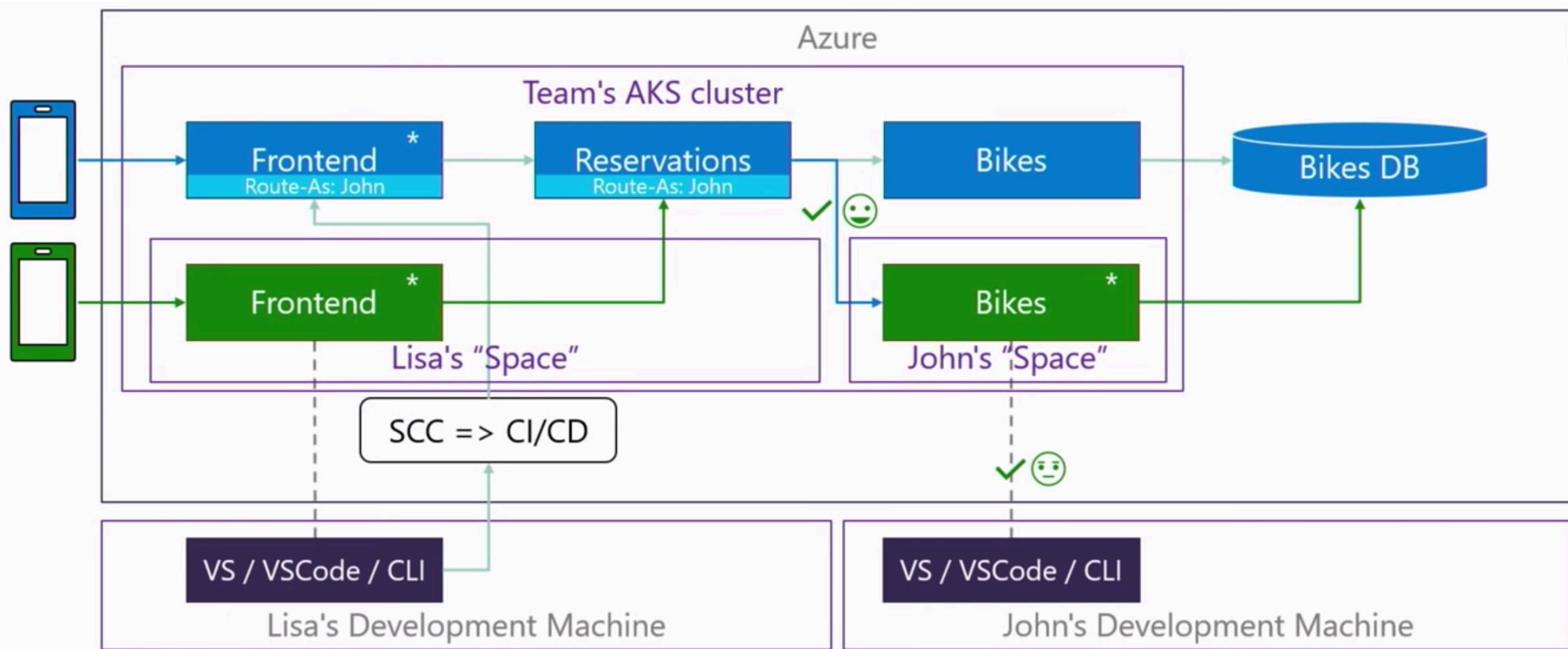
# Collaborate in a team's AKS cluster



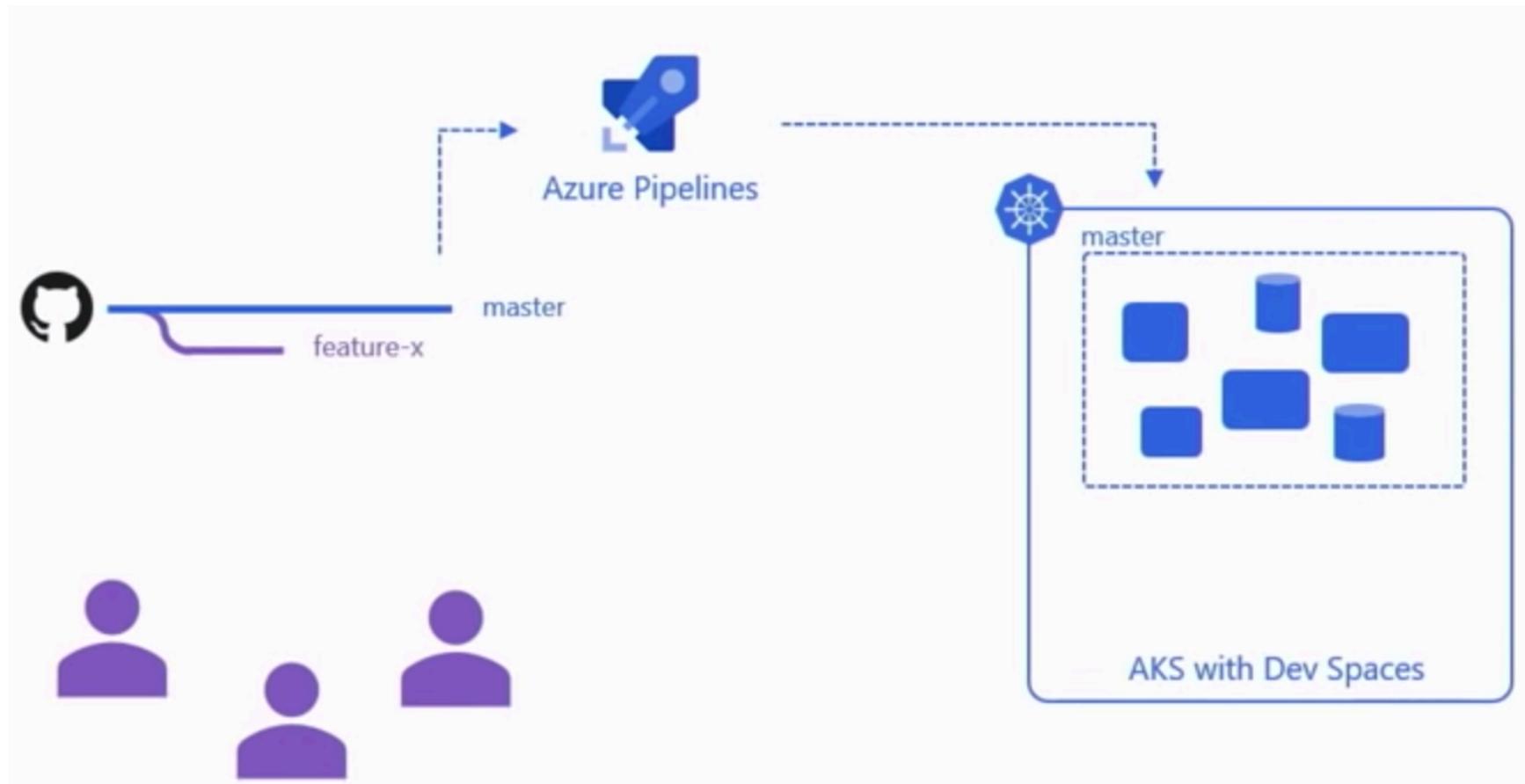
# Collaborate in a team's AKS cluster



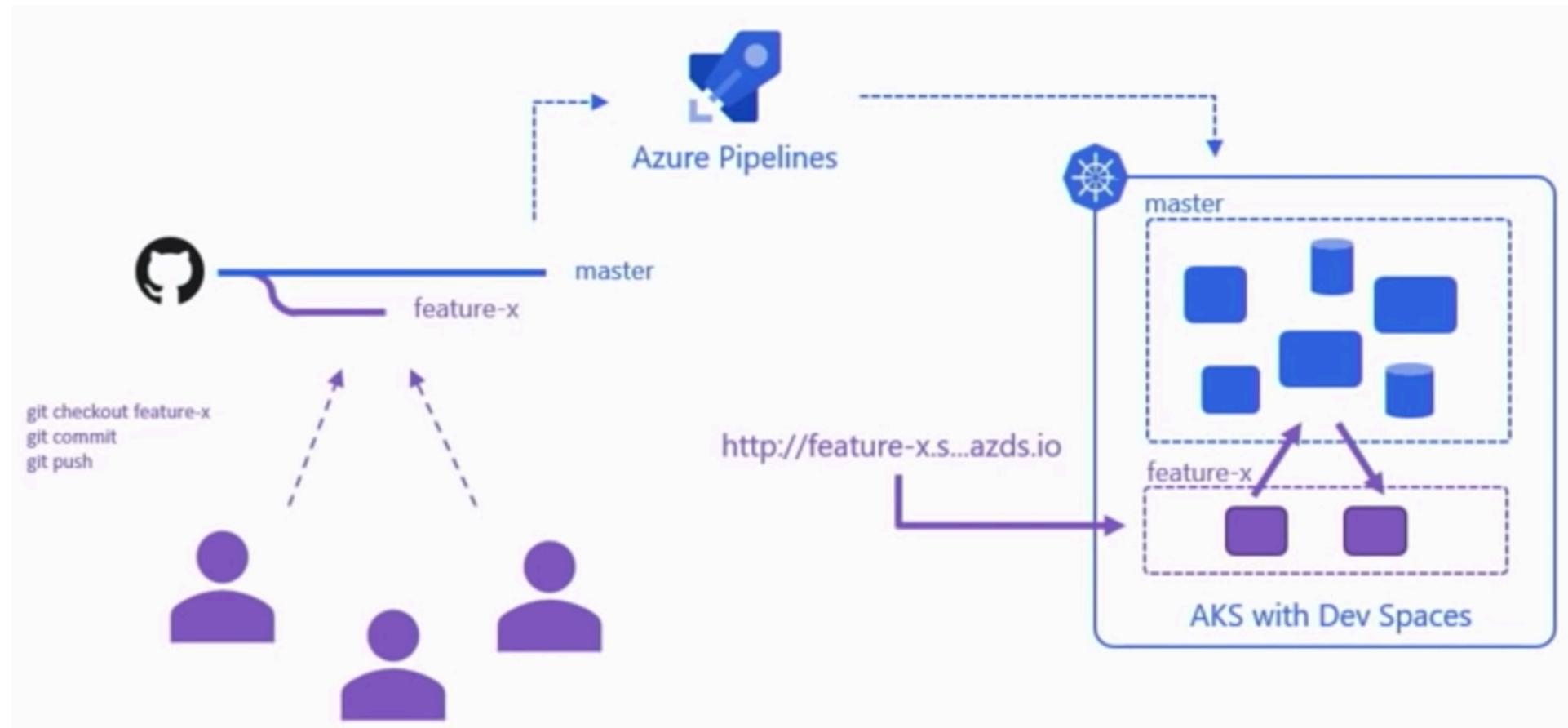
# Collaborate in a team's AKS cluster



# Dev Spaces + Azure Pipelines = PR confidence



# Dev Spaces + Azure Pipelines = PR confidence



Time for fun:

<https://github.com/texnokot/DevDays2019/>



Thank you