**Attack Surface**

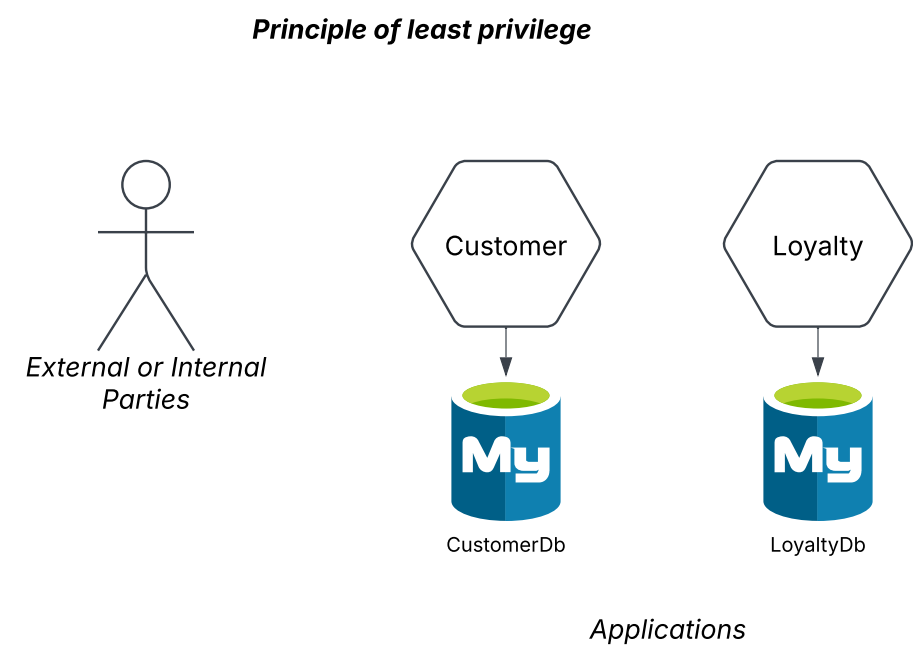|  | Monolithic | Microservices (Distibuted) |
|---|---|---|
|  | Smaller | Larger |
|  | Smaller depth of defense | Bigger depth of defense |

***Necessity to strike a balance***

**Core principles**

Five functions of cybersecurity - identify, protect, detect, respond, recover.

Foundations of application security - credentials, secrets, patching, backups, and rebuild.

Implicit trust vs. zero trust - how each of these forms of trust dictate our implementation of microservices and security related activities.

Securing data - protecting data over networks or on disk

Authentication & Authorization - (SSO) single sign on.

***Principle of least privilege***

External or Internal Parties

Customer

Loyalty

CustomerDb

LoyaltyDb

*Applications*

KINGS' CHAMBER

Inner Walls

Watch Towers

Moat

High Hard Walls

Limited Entry Points

Guards Check Identity

*zero day exploit*

| *Types of Security Controls* | gocladdy.com |
|---|---|
| Preventative | Mentality of thinking of security, testing, usability, operations as an afterthought - "do you want fries with that". |
| Detective |  |
| Responsive |  |

Zed attack proxy (ZED) - simulate attacks cross site scripting.

Static code analysis