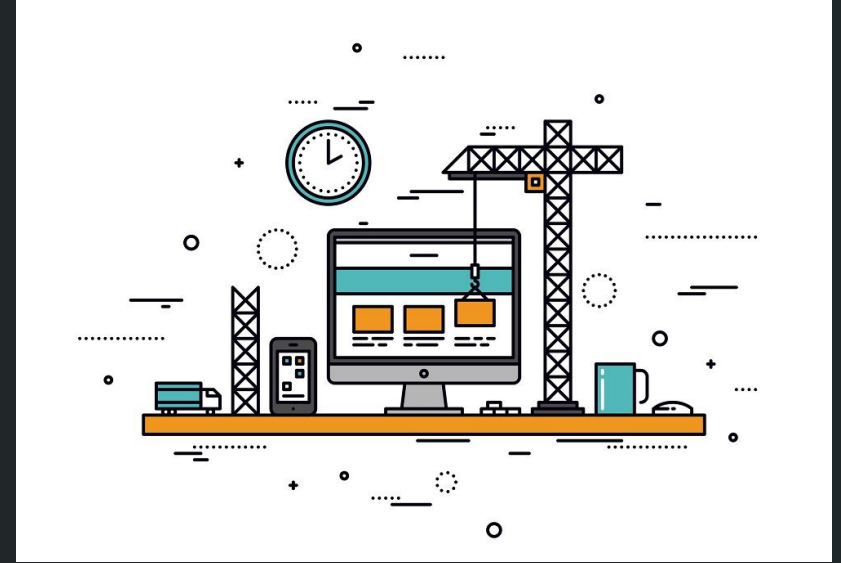


# The Importance of Good Software Architecture

---

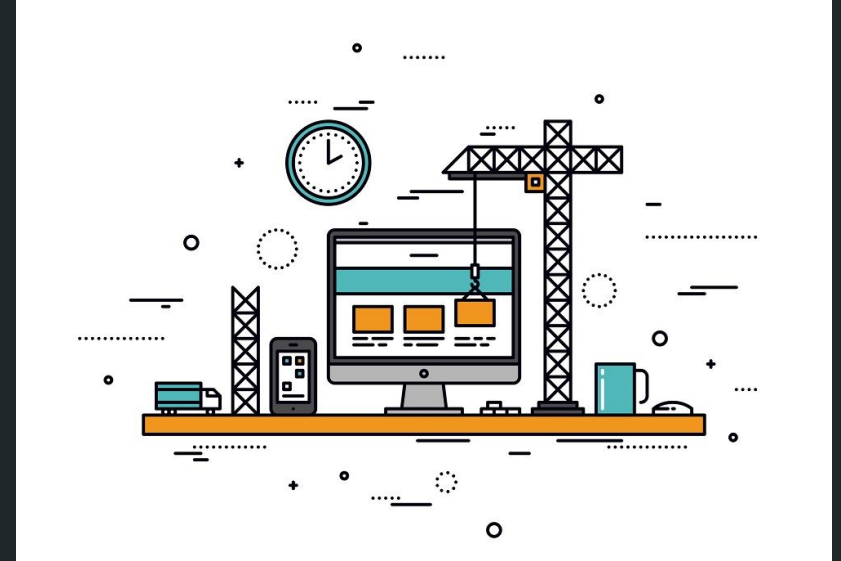
Vitalii Melnychuk, Software Engineer

# Software Architecture



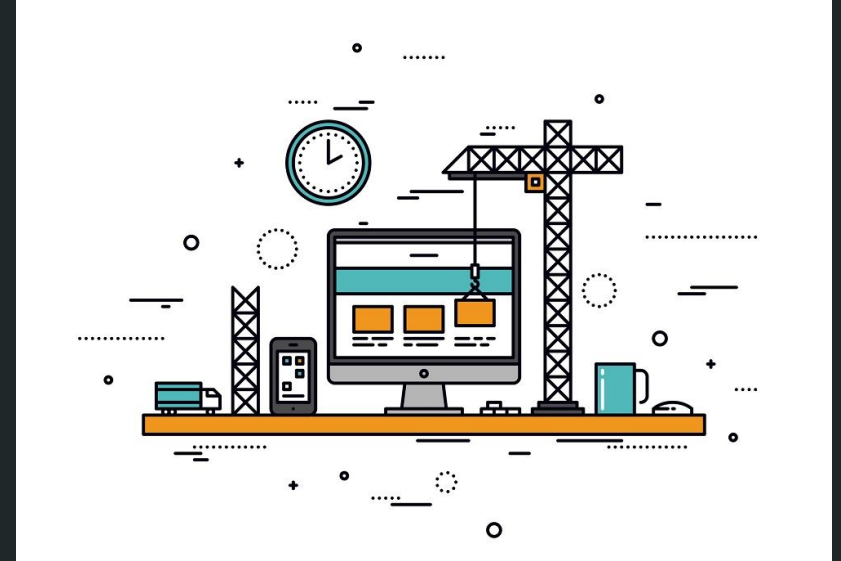
# Architectural styles and patterns

- Client-server model



# Architectural styles and patterns

- Client-server model
- Component based



# Architectural styles and patterns

- Client-server model
- Component based
- Event-driven



# Architectural styles and patterns

- Client-server model
- Component based
- Event-driven
- Data-centric



# Architectural styles and patterns

- Client-server model
- Component based
- Event-driven
- Data-centric
- Plug-ins



# Architectural styles and patterns

- Client-server model
- Component based
- Event-driven
- Data-centric
- Plug-ins
- Monolithic application





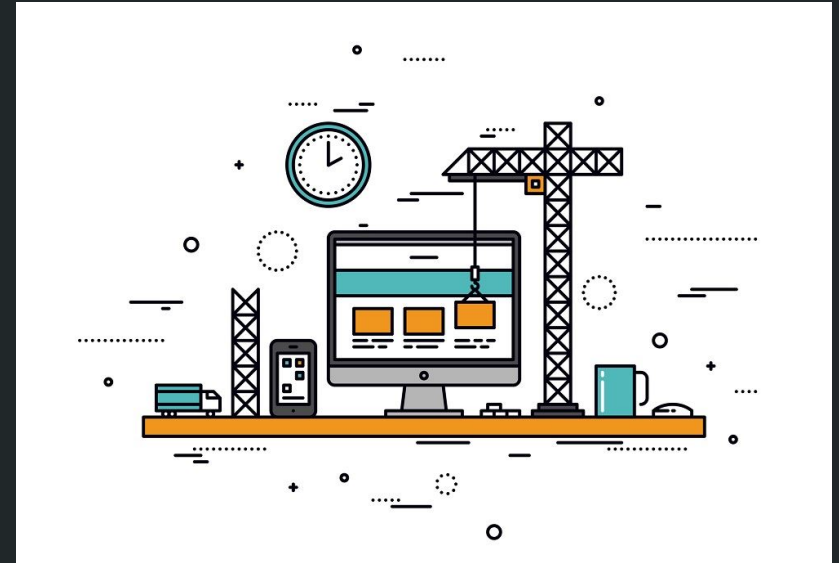
# Architectural styles and patterns

- Client-server model
- Component based
- Event-driven
- Data-centric
- Plug-ins
- Monolithic application
- Microservices architecture

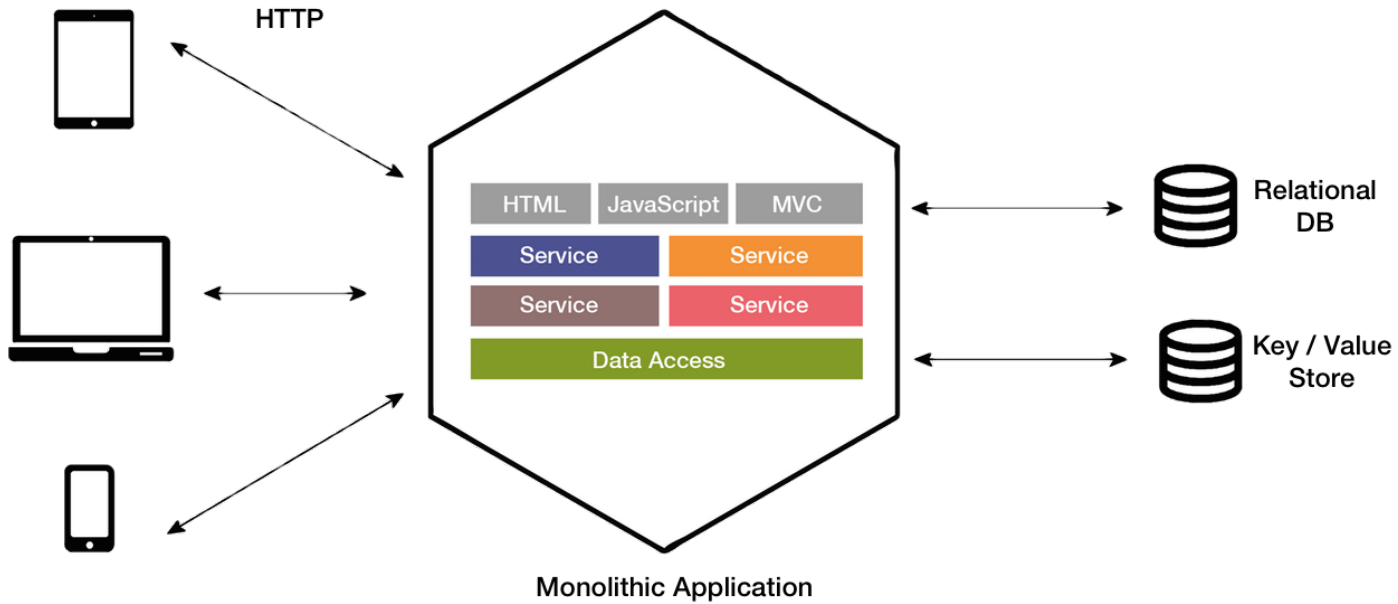


# Architectural styles and patterns

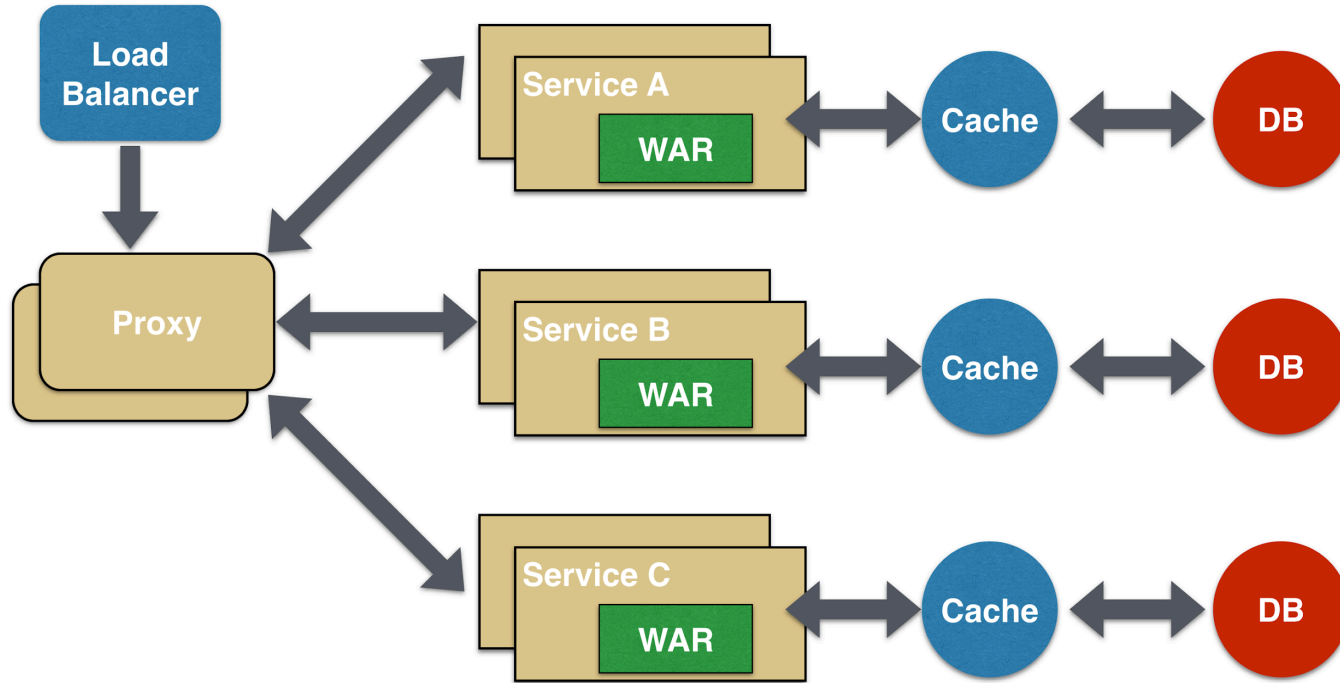
- Client-server model
- Component based
- Event-driven
- Data-centric
- Plug-ins
- **Monolithic application**
- **Microservices architecture**



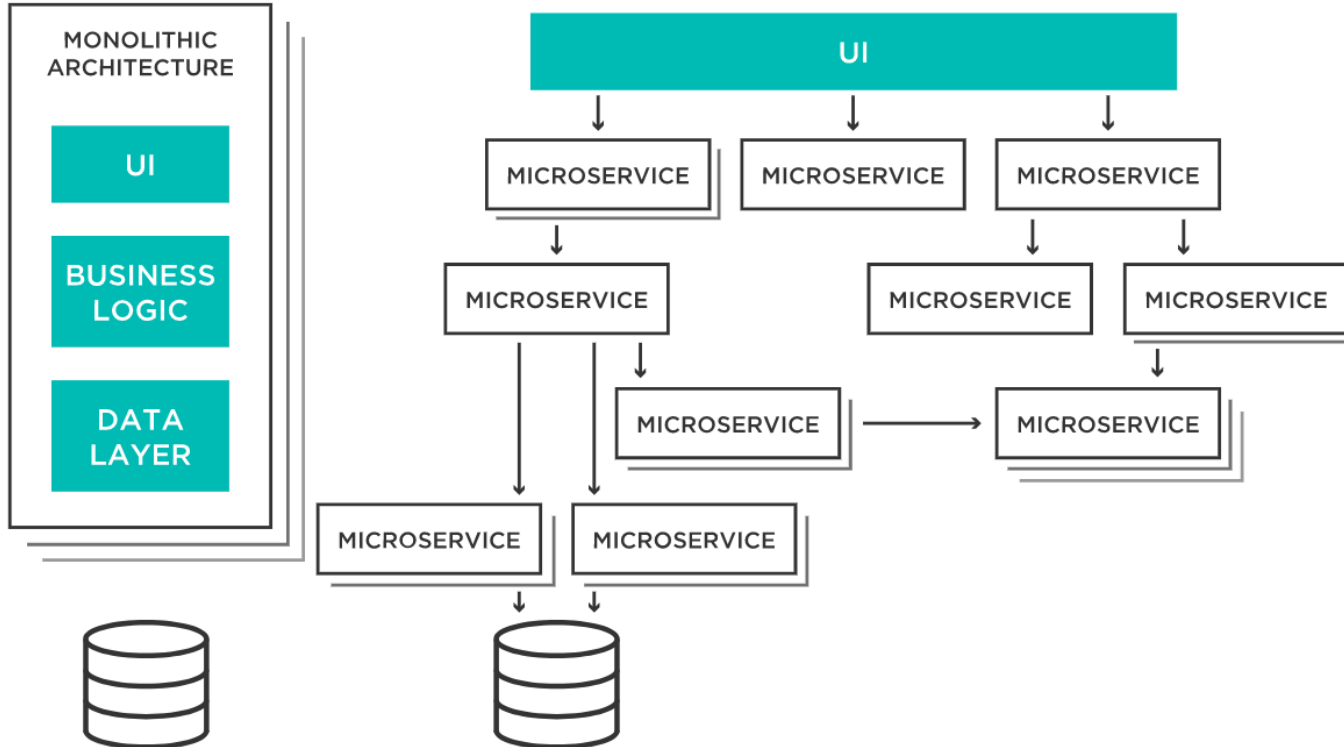
# Monolithic application



# Microservices architecture



# Feel the difference

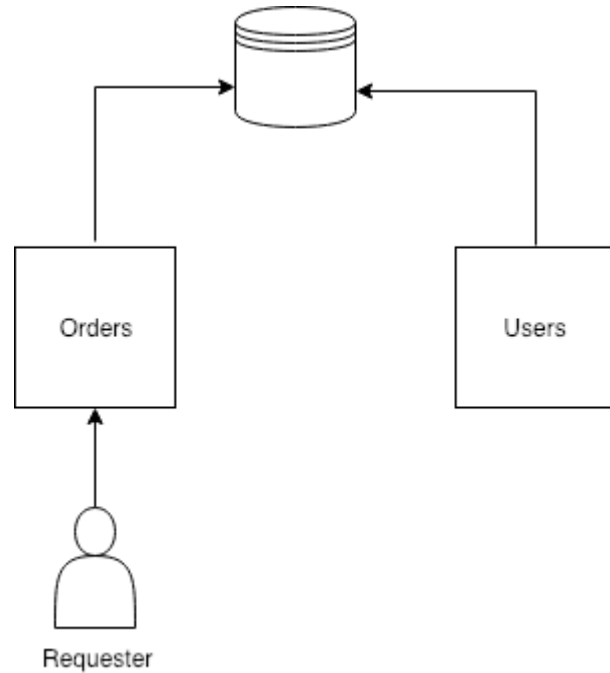


- Data storage

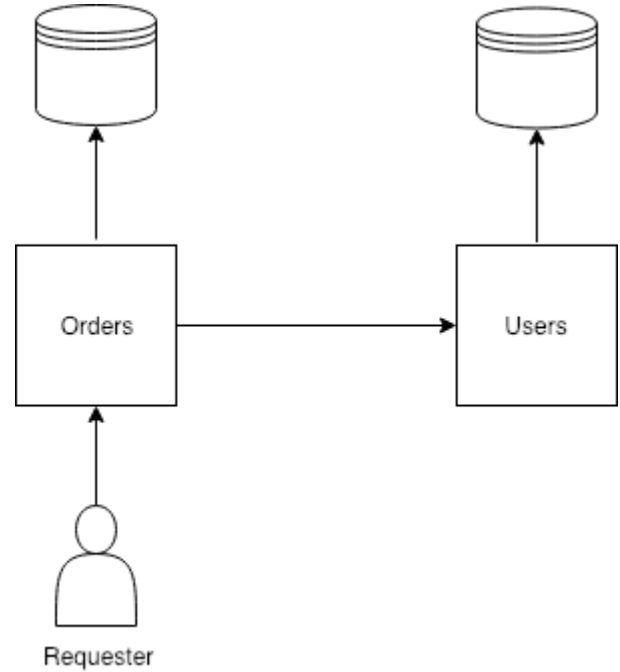
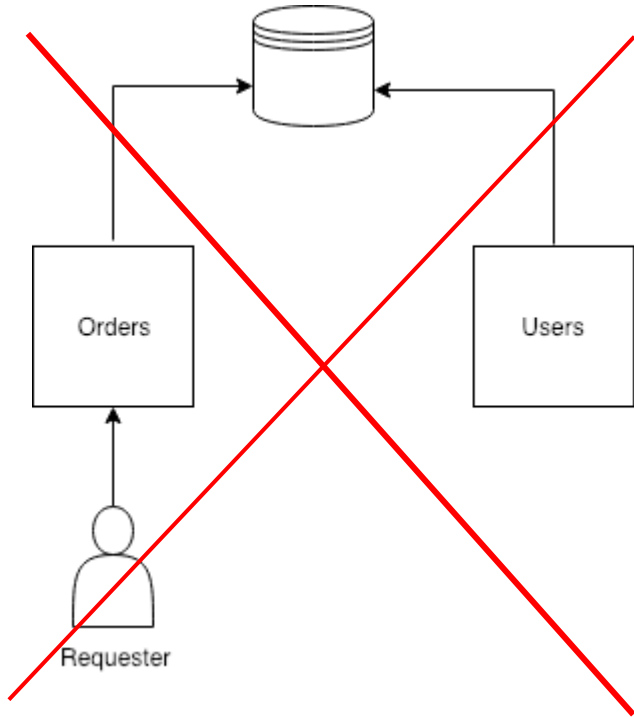
# Components of Software Architecture Diagram

---

# The hardest part about Microservices: Your Data



# The hardest part about Microservices: Your Data





- Data storage
- **Routing**

## Components of Software Architecture Diagram

---

- Data storage
- Routing
- **Documentation**

## Components of Software Architecture Diagram

---

- API specs
- Code comments
- Wiki
- High-level diagrams

# Documentation

---

- Data storage
- Routing
- Documentation
- **Tests**

## Components of Software Architecture Diagram

---

Tests coverage is 0% =(

- Data storage
- Routing
- Documentation
- Tests
- **Deployment**

## Components of Software Architecture Diagram

---

One service - one deployment

- Data storage
- Routing
- Documentation
- Tests
- Deployment
- **Logs & Metrics**

## Components of Software Architecture Diagram

---



One service - one configuration

If you have Microservice and don't have any tests or docs — you have nothing.

- Data storage
- Routing
- Documentation
- Tests
- Deployment
- Logs & Metrics

## Components of Software Architecture Diagram

---

Questions?

---

There's No Such Thing As a Stupid Question

---