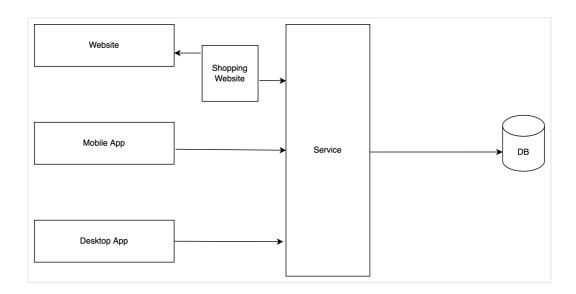
# **Microservices**

### Services

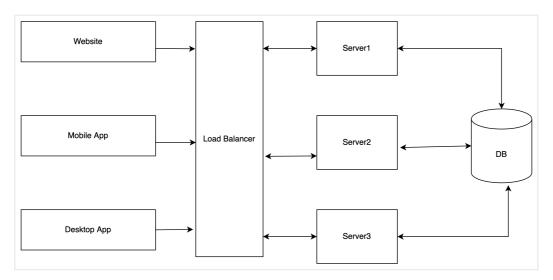
- service is a piece of s/w that provide the functionality to another piece of s/w like mobile app or desktop app



- Micro service is a service oriented architecture

# Service Oriented Architecture

 Instead of using modules if we use services many apps can use the same services



# **SOA Benefits**

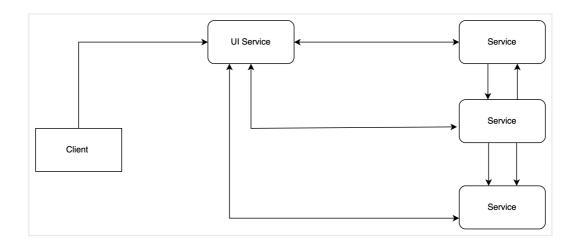
\_\_\_\_\_

- 1. Scalability
- 2. Reusability
- 3. Standardize interface
- 4. Stateless

# Micro Services

\_\_\_\_\_

- Micro service architecture follows additional set of design principles



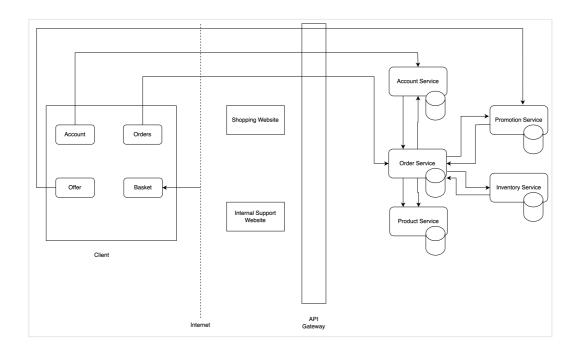
## Micro Services Provides

\_\_\_\_\_

- 1. Efficiently scalable applications
- 2. Flexible applications
- 3. High performance applications
- 4. Applications powered by multiple services
- 5. Small services with single focus
- 6. Light weight communication machanism Both client to service and service to service
- 7. Independent data storage
- 8. Independently changeable
- 9. Independently deployable
- 10. Distributed transaction
- 11. Centralised tooling for management

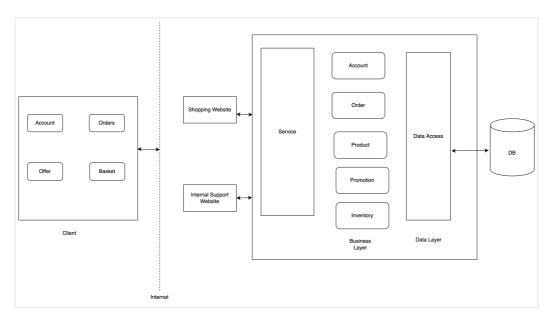
Micro Services: Ecommerce Application

\_\_\_\_\_



# Monolithic:

\_\_\_\_



- No restriction on size
- Large codebase
- Longer development time
- Challenging deployment
- Fixed technology stack
- High levels of coupling b/w modules and services
- Failure could affect the whole system
- Scaling requires duplicate of whole application
- Single service on server
- Minor change could result in complete rebuild

### Benefits of micro services

- Shorter development time
- Reliable and faster deployment
- Enable frequent update
- Decouple the changeable parts
- Security
- Increased up time
- Highly scalable and better performance
- Better ownership and knowledgeable
- Right technology

implementation 'org.springdoc:springdoc-openapi-ui:1.6.11'

Export the content into civ file in spring boot

https://codeburst.io/returning-csv-content-from-an-api-in-spring-boot-63ea82bbcf0f

Regulatory Report

**APAC** 

**EMEA** 

NA

LATAM

Front office

Middle Office - exchange

**Back Office**