**Section 1**

Microservices -> small business services that can wok together, and can be deployed independently.

A diagram of a service

Description automatically generated

Caracteristics:

* Small independent and loosely coupled.
* Separate codebase
* Deployed independently.
* Well-defined APIs
* Technology agnostic

Monolithic architecture pros-cons:

* Single codebase
* Easy to develop, debug and deployments.
* Complexity
* Hard to maintenance
* Challenge of making new changes
* Inability to apply new technology.

Microservices architecture pros-cons:

* Independent services
* Better scability
* Technology Diversity
* Agility
* Small, focused teams
* Challenge of management and traceability

Bad for small applications

A diagram of a comparison between a diagram and a diagram

Description automatically generated

Section 2

16. MongoDb CLI Commands using Interactive Terminal For MongoDb Connection

docker exec -it shopping-mongo /bin/bash

1

-- Now we can open interactive terminal for mongo

docker exec -it shopping-mongo /bin/bash

2

-- After that, we are able to run mongo commands.

Let me try with

- create database

- create collection

- add items into collection

- list collection

ls

mongo

show dbs

use CatalogDb --> for create db on mongo

db.createCollection('Products') --> for create people collection

db.Products.insertMany([{ 'Name':'Asus Laptop','Category':'Computers', 'Summary':'Summary', 'Description':'Description', 'ImageFile':'ImageFile', 'Price':54.93 }, { 'Name':'HP Laptop','Category':'Computers', 'Summary':'Summary', 'Description':'Description', 'ImageFile':'ImageFile', 'Price':88.93 } ])

db.Products.insertMany(

[

{

"Name": "Asus Laptop",

"Category": "Computers",

"Summary": "Summary",

"Description": "Description",

"ImageFile": "ImageFile",

"Price": 54.93

},

{

"Name": "HP Laptop",

"Category": "Computers",

"Summary": "Summary",

"Description": "Description",

"ImageFile": "ImageFile",

"Price": 88.93d

}

])

db.Products.find({}).pretty()

db.Products.remove({})

show databases

show collections

db.Products.find({}).pretty()

17. Analysis and Architecture of Catalog Microservices

A diagram of a software

Description automatically generated