Application



MySql



SQL Database

Products

id	name	price
1	Samsung S6	2000
2	Samsung S7	3000
3	Samsung S8	4000

Users

id	name	email
1	Sadık	sadik@gmail.com
2	Çınar	cinar@gmail.com
3	Emel	emel@gmail.com

Orders

id	userid	productid
1	1	1
2	1	2
3	2	2



Relationships

- 1-One to Many
- 2-One to One
- **3-Many to Many**



One to Many

Products

id	name	price
1	Samsung S6	2000
2	Samsung S7	3000
3	Dell Laptop	5000

Category

id	name
1	Telefon
2	Bilgisayar
3	Tablet



One to Many

Products

id	name	price	category
1	Samsung S6	2000	Telefon
2	Samsung S7	3000	Telefon
3	Dell Laptop	5000	Bilgisayar

Category

id	name
1	Telefon
2	Bilgisayar
3	Tablet



Many to Many

Products

id	name	price
1	Samsung S6	2000
2	Samsung S7	3000
3	Dell Laptop	5000

Category

id	name
1	Telefon
2	Bilgisayar
3	Elektronik

ProductCategory

productid	categoryid
1	1
1	3
2	1



One to One

Products

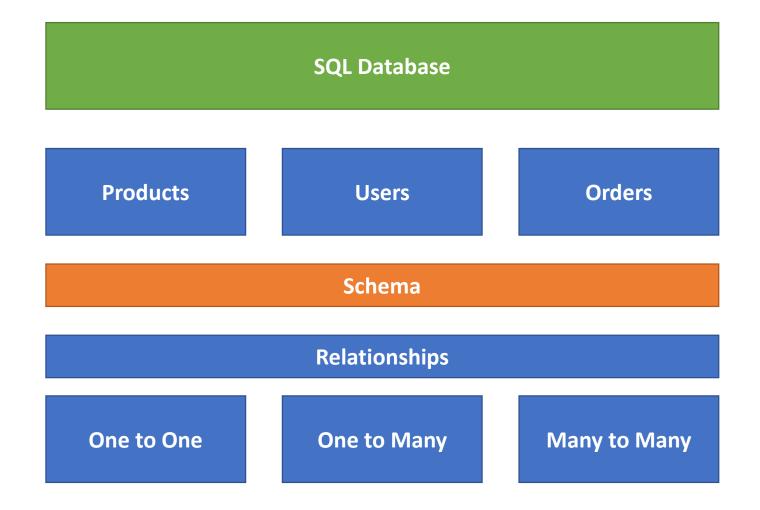
id	name	price
1	Samsung S6	2000
2	Samsung S7	3000
3	Dell Laptop	5000

Product_Details

id	renk	ebat	agirlik
1	kırmızı	100x50	150gr
2	mavi	100x50	150gr
3	siyah	100x50	3500gr

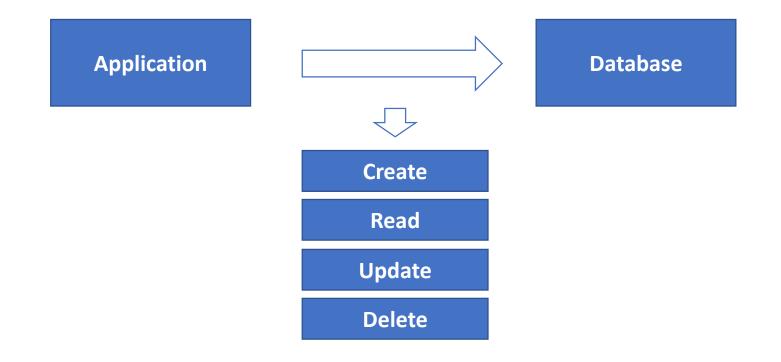


SQL Database



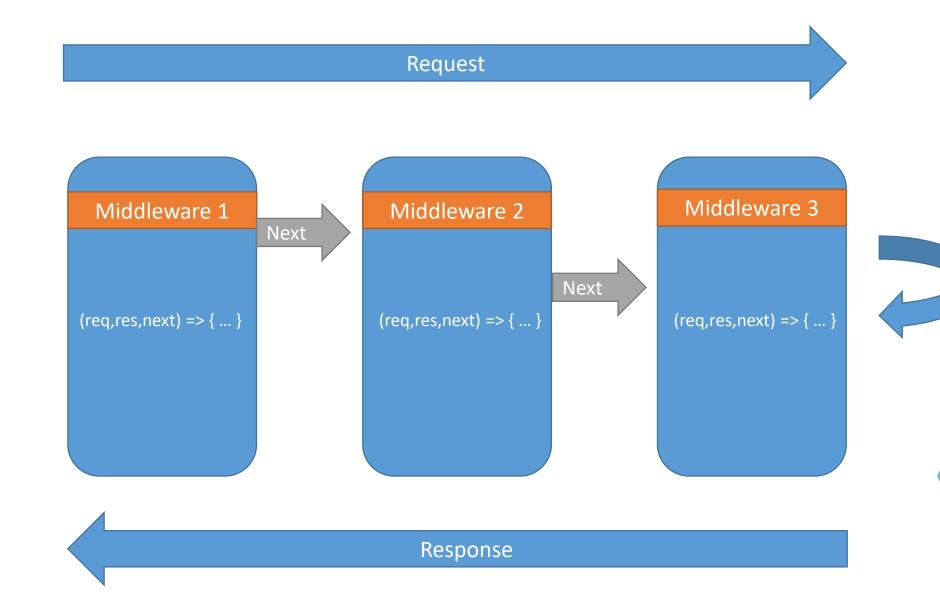


SQL Query



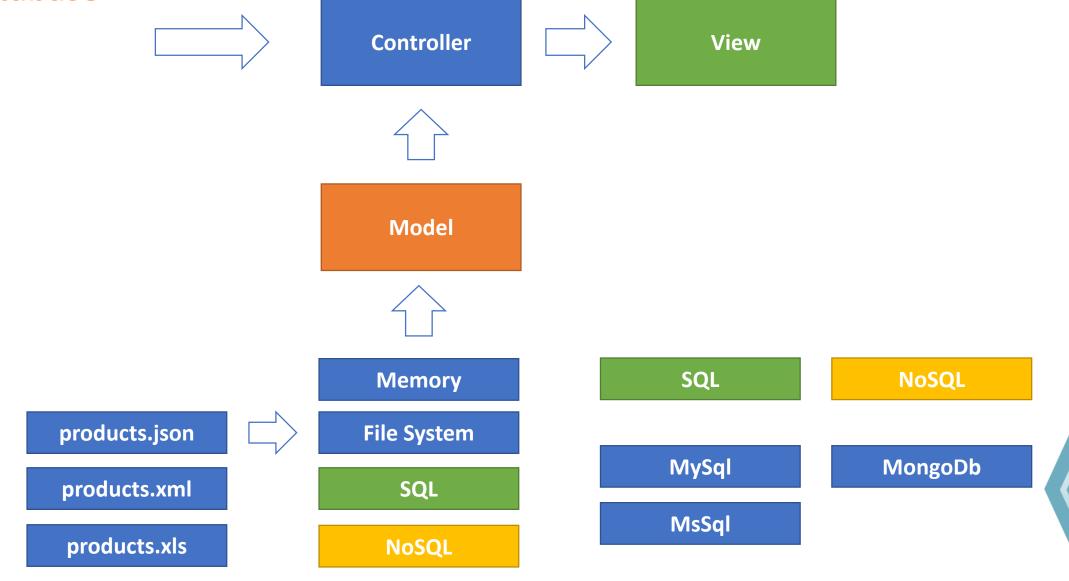


Middleware Nedir?

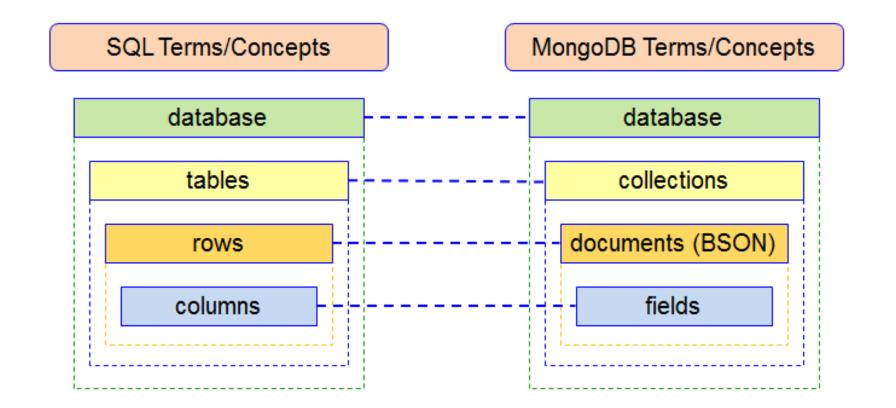




Database



BTK AKADEMI





Server node-app **Database** Collections Categories **Products** {name: 'Samsung S6', price:3000} {name: 'Telefon'} **Documents** {name: 'Bilgisayar', description: {name: 'Samsung S7', price:4000} 'aciklama'}



```
"name": "Ahmet",
"age": 25,
"address": {
    "city": "Kocaeli",
    "country": "Türkiye"
"roles": [
    "admin",
    "customer"
```



Orders

```
{id: 1, user: {id:1, email: 'ahmet@gmail.com'}, product: {id:2,price: 3000}}
```

{id: 2, user: {id:2, email: 'ali@gmail.com'}, product: {id:1,price: 2000}}

{id: 3, user: {id:2, email: 'ali@gmail.com'}, products: [{id:1,price: 2000}, {id:2,price: 3000}]}

Users

{id: 1, name: 'ahmet',email: 'ahmet@gmail.com'}}

{id: 2, name: 'ali',email: 'ali@gmail.com'}}

Products

{id: 1, name: 'Samsung S6', price: 2000}}

{id: 2, name: 'Samsung S7', price: 3000}}



Embedded Documents

```
Users
name: 'ahmet',
age: 25,
address: {
  city: 'Kocaeli',
  country: 'Türkiye'
```

References

```
Users
name: 'ahmet',
orders: [ {...}, {...} ]
                               Users
name: 'ahmet',
orders: ['id1', 'id2']
                               Orders
_id: 'id1',
productid: 1
```



Demo: Error Handling



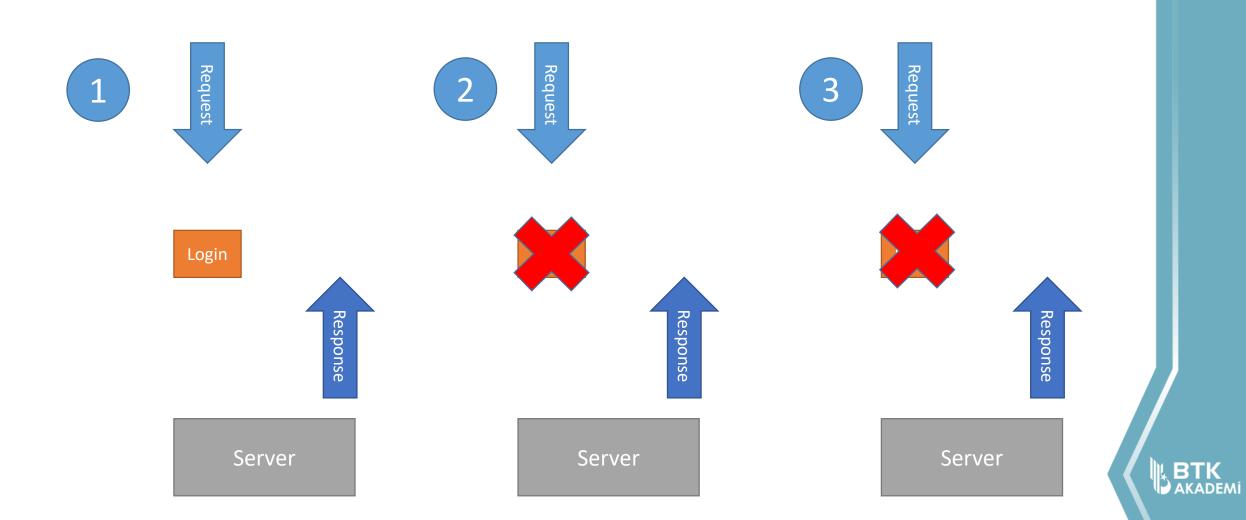


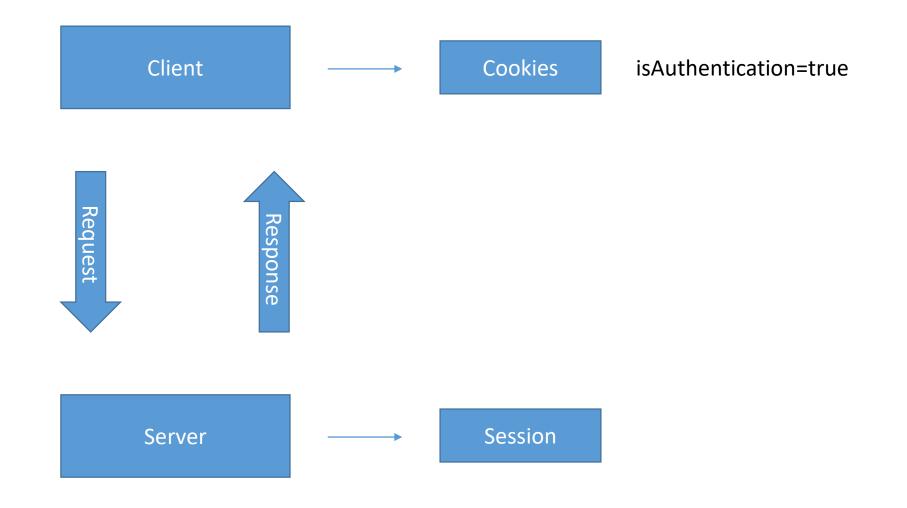
Login

Response

Server













One to Many

Products

id	name	price	catid
1	Samsung S6	2000	1
2	Samsung S7	3000	1
3	Dell Laptop	5000	2

Category

id	name
1	Telefon
2	Bilgisayar
3	Tablet



Users Products

_id: ObjectId("5c6d06756dce4705d0568c10")

name : "sadikturan "

email : "email@sadikturan.com "

_id: ObjectId("5c68e1297c335b096c841311")

name: "IPhone 8"
price: "3000"

description: " fff"
imageUrl: "3.jpg"

userId: ObjectId("5c6d0ec57fd89e0000565380")



Users

_id: ObjectId("5c6d06756dce4705d0568c10")

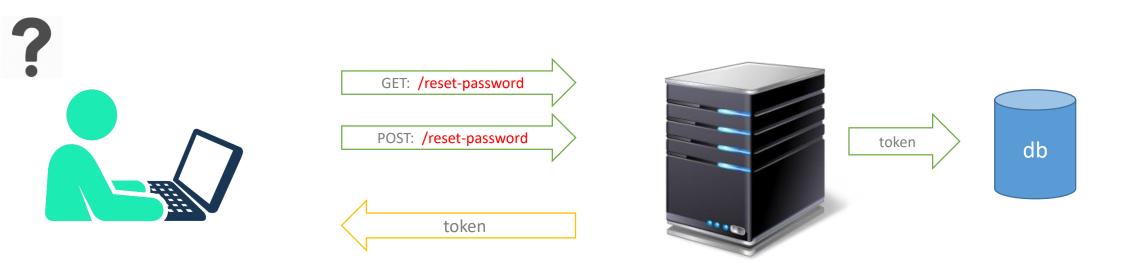
name : "sadikturan "

email : "email@sadikturan.com "

Products

```
_id: ObjectId("5c68e1487c335b096c841312")
name : "IPhone 7 "
price : "5000 "
description : " ccc "
imageUrl : "2.jpg "
> user : Object
```





http://localhost:3000/reset-password/5c67e51dd5ec1385298695c8





www.bank.com





cookie

session

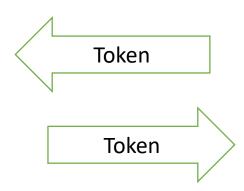
```
<form action="http://bank.com" method="POST">
     <input type="hidden" name="aliciHesapNo" value="132323">
          <input type="hidden" name="miktar" value="500">
                <input type="submit" value="Submit">
                </form>
```

















Html Editor



Validation

