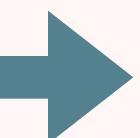
BUYUK RESIM-JDBC NEDIR

JAVA APPLICATION



JDBC



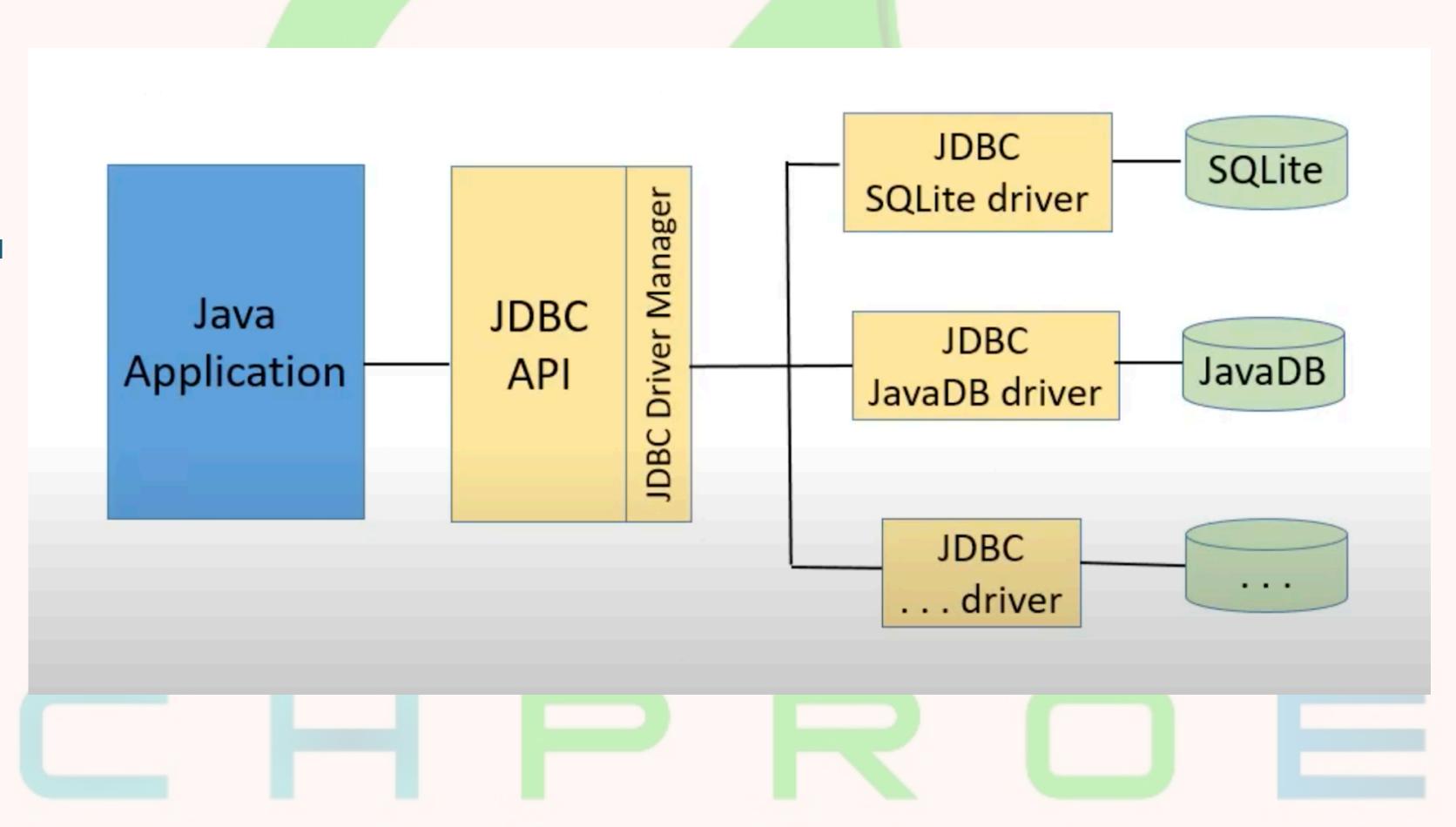
DATA SOURCE (DATABASE)

- JDBC = Java DataBase Connectivity
- JDBC bir API dir
- JDBC Java application lari data source a baglar.



JDBC= JAVA DATABASE CONNECTIVITY

- **JDBC Driver i kullanılır**
- Farkli databaseler icin farklı driverlar kullanılır
- > sql developer, portgre sql,etc...gibi toollar database testing icin kullanilabilir
- > JDBC automasyon icin kullanilir



NEDEN JDBC KULLANILIR

- 1. Database baglanma
 - connection=DriverManager.getConnection("url", "kullaniciAdi", "sifre");
- 2.Query gonderip data alma
 - statement=connection.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE, ResultSet.CONCUR_READ_ONLY);
- 3. Bu dataları test caselerde kullanıp assertion yapma. ResultSet objesiyle datayı kullanırız.
 - resultSet = statement.executeQuery("SELECT * FROM Book;");
 - String beklenenDeger = resultSet.getString("BookName");
 - Assert.assertEquals(beklenenDeger, gercekDeger);

BAZI DATA ALMA METODLARI

- > resultSet.getRow() => Hangi rowdasin
- > resultset.first() => Ilk rowa git
- resultset.last => son row a git
- > resultset.absolute(5)=> 5inci row a git
- > resultSet.getObject("BookName") =>BookName row daki objeyi ver
- resultSet.getString("BookName") =>BookName row daki degeri ver

DATABASE TESTING I NASIL YAPTIN?

- > UI daki(Front End) ve Database(Bach End) deki degerlerin ayni olup olmadigini database testing yapılır
- > Database testing UI testing e gore cok hizli
- > Ornek: UI dan girilen dataların okunması ve Bu dataların dogrulanmasi(Assertion)
- > Ornek: Database e gönderilen dataların UI da olusup olusmadiginin doğrulanması(Assertion)
- **Extra ornekler:**
- Ornek1: Kayıt formuna girilen kullanıcı adi ve şifrenin database de oluşması
- > Ornek2: Database den girilen bir datanın UI da bulunup bulunmadigini test icin
- > Ornek 3: UI da yapılan degisikligim database de olup olmadığı, yazilarin değişmesi gibi

SCHEMA

- **Bu bizim schema**
- Tablelar primary key lie birbirlerine baglidir
- Isimler net anlasilabilit olmayabilir
- Database tester lar shemayi database anlamak, quarileri ona gore yazmak icin kullanır

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DATA TIPLERI

Play	WPLSK12SQL15edb - dbo.tHOTEL □ ×		
	Column Name	Data Type	Allow Nulls
8	IDHotel	int	
	Code	nvarchar(50)	✓
	Name	nvarchar(50)	✓
	Address	nvarchar(250)	✓
	Phone	nvarchar(50)	~
	Email	nvarchar(50)	~
	IDGroup	int	~
١	CreateDate	datetime ~	~
	CreateUser	int	✓
	EditDate	datetime	<u>~</u>
	EditUser	int	<u>~</u>

TEHREE

DATABASE BAĞLANMAK ICIN ADAMLAR(ESKI BILGILER)

```
1. Add Maven Dependency:
     <!-- https://mvnrepository.com/artifact/mysql/mysql-connector-java --> <dependency> <groupld>mysql</groupld> <artifactld>mysql-connector-java</artifactld> <version>8.0.19</version>
      </dependency>
2. Connect to MySQL Database
Our connection data:
String url = "jdbc:mysql://107.182.225.121:3306/LibraryMgmt";
String username = "techpro";
String password = "tchpr2020";
3. Write need statement object ro write the queries
 Stament stament= connection.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE, ResultSet.CONCUR_READ_ONLY);
statement.executeQuery("SELECT * FROM Book;");
```

CREATE A MAVEN FRAMEWORK

Create a JUnit framework



TECHPROE

MY SQL SERVER

KaolaPlace ve FHC Trip my sql server e bagli



DATABASE UTILITIES

- This utilities class is in the utilities folder. The reason is to keep the test classes clean avoid repeatation
- This class has reusable methods, similar to Driver or Test Base class
- For example, we have createConnection() method in this class. We can call this class whenever we need.

TECHPROE

DERS NOTLARI

- **▶1.**junit projesi olustur
- 2.pom.xml file a dependencyleri ekle
- 3. java folder da gerekli folder lari olusturmak
- 4. utilities folder olustur ve DBUtils classi olustur ve DBUTils classa olusturulan cutom methodlari yapistirin
- >5.tests folderi olustur
- **▶6.** DBUtilsTest java sinifi olustur ve DBUtils deki hazir methodlari kullanarak islem yap
- >7. Java Sinifi Olustur: ReadData
- **8. Java sinifi olustur : UpdateData**
- **▶**9. Java sinifi olusture : CreateData

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