Dt : 29/9/2024(Day-4)

Note:

=>we use getConnection()-method from 'java.sql.DriverManger' class to create implementation

object for 'Connection-Interface' and this 'Connection-Object' internally connected to

Database product.

=>This getConnection()-method internally holding 'Anonymous Local InnerClass as

implementation class of Connection interface'.

Method Signature of getConnection():

public static java.sql.Connection getConnection(java.lang.String,java.lang.String,

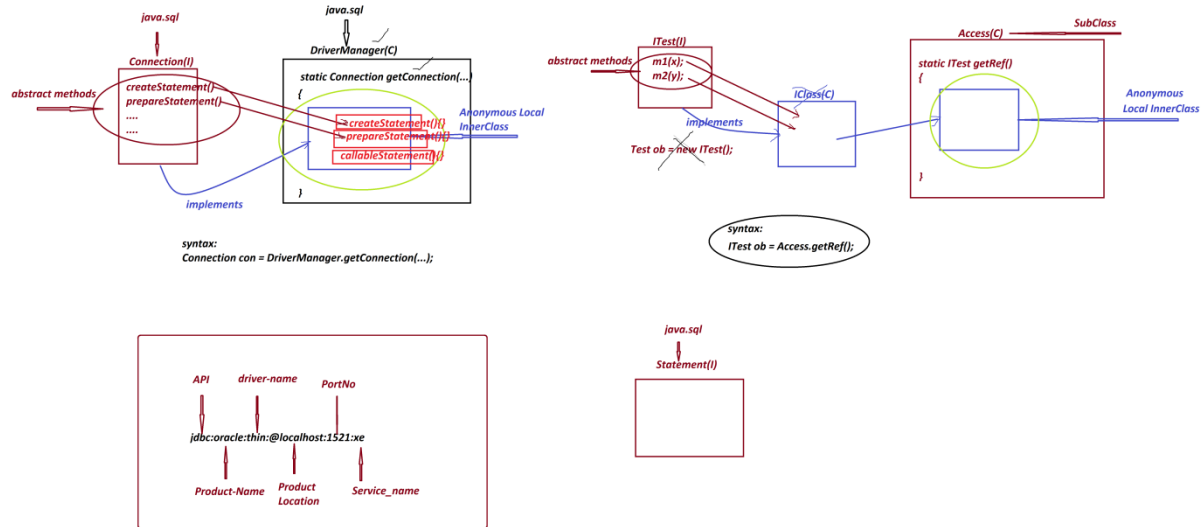*java.lang.String) throws java.sql.SQLException;*

syntax:

Connection con = DriverManager.getConnection("DB-URL","DB-UName","DB-PWord");

DB-URL => jdbc:oracle:thin:@localhost:1521:xe

DB-UName => system

DB-PWord => tiger

Diagrams:

java.sql

Connection(I)

abstract methods

createStatement()
prepareStatement()
....
....

java.sql

DriverManager(C)

static Connection getConnection(...)
{

createStatement(){}
prepareStatement(){}
callableStatement(){}

Anonymous Local InnerClass

}

implements

syntax:
Connection con = DriverManager.getConnection(...);

ITest(I)

abstract methods

m1(x);
m2(y);

implements

Test ob = new ITest();

IClass(C)

Access(C) ———— SubClass

static ITest getRef()
{

Anonymous Local InnerClass

}

syntax:
ITest ob = Access.getRef();

API   driver-name   PortNo

jdbc:oracle:thin:@localhost:1521:xe

Product-Name   Product Location   Service_name

java.sql

Statement(I)

----

*imp

JDBC statements:

=>The statements which specify the actions to be performed on database product are known

as JDBC-statements.

=>These JDBC-statements are categorized into three types:

1.Statement

2.PreparedStatement

3.CallableStatement

1.Statement:

=>'Statement' is an interface from java.sql package and which is used to execute normal

queries without IN-Parameters.

(Normal queries means Create,Insert,Retrieve(Select),Update,Delete)

=>we use createStatement()-method from 'Connection-Interface' to create implementation

object for 'Statement-Interface'.

=>This createStatement()-method internally holding 'Anonymous Local InnerClass as

implementation class of Statement-Interface'.

Method Signature of createStatement():

public abstract java.sql.Statement createStatement() throws java.sql.SQLException;

syntax:

Statement stm = con.createStatement();

=>The following are two important methods of Statement:

    (i)executeQuery()

    (ii)executeUpdate()

(i)executeQuery():

  =>executeQuery()-method is used to execute select-queries.

  Method Signature of executeQuery():

  public abstract java.sql.ResultSet executeQuery(java.lang.String)

                  throws java.sql.SQLException;

  syntax:

  ResultSet rs = stm.executeQuery("select-query");

(ii)executeUpdate():

  =>executeUpdate()-method is used to execute Non-Select queries like Create,Insert,Update

  and delete.

  Method Signature of executeUpdate():

  public abstract int executeUpdate(java.lang.String) throws java.sql.SQLException;

  syntax:

```
int k = stm.executeUpdate();
```