

Spring Framework

1. Menambahkan dependensi :
 - Dependensi Spring Framework
 - Dependensi MySQL
 - Dependensi commons-dbcp

```
<dependencies>
  <dependency>
    <groupId>junit</groupId>
    <artifactId>junit</artifactId>
    <version>3.8.1</version>
    <scope>test</scope>
  </dependency>
  <dependency>
    <groupId>org.springframework</groupId>
    <artifactId>spring-jdbc</artifactId>
    <version>3.2.2.RELEASE</version>
  </dependency>
  <dependency>
    <groupId>mysql</groupId>
    <artifactId>mysql-connector-java</artifactId>
    <version>5.1.22</version>
  </dependency>
  <dependency>
    <groupId>commons-dbcp</groupId>
    <artifactId>commons-dbcp</artifactId>
    <version>1.4</version>
  </dependency>
</dependencies>
```

Gambar 1. POM.xml

2. Mendeklarasikan object spring framework pada

```
<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="http://www.springframework.org/schema/beans"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.springframework.org/schema/beans
    http://www.springframework.org/schema/beans/spring-beans.xsd">

  <bean id="dataSource" class="org.apache.commons.dbcp.BasicDataSource">
    <property name="driverClassName" value="com.mysql.jdbc.Driver"> </property>
    <property name="url" value="jdbc:mysql://localhost/tokobagus"> </property>
    <property name="username" value="root"> </property>
    <property name="password" value=""> </property>
  </bean>
```

Gambar 2. config-spring.xml

3. Membuat class Produk

```
package com.spring.framework;

import java.math.*;

public class Produk {
    private Integer id;
    private String kode;
    private String nama;
    private BigDecimal harga;

    public void setNama(String nama){
        this.nama=nama;
    }
    public String getNama(){
        return nama;
    }
    public void setKode(String kode){
        this.kode=kode;
    }
    public String getKode(){
        return kode;
    }
    public void setHarga(BigDecimal harga){
        this.harga=harga;
    }
    public BigDecimal getHarga(){
        return harga;
    }
}
```

Gambar 3. Produk.java

4. Membuat class ProdukDao

```
package com.spring.framework;

import com.spring.framework.Produk;
import com.spring.framework.ProdukMapper;
import java.util.List;
import javax.sql.DataSource;
import org.springframework.jdbc.core.JdbcTemplate;

public class ProdukDao {
    private DataSource ds;
    private JdbcTemplate js;

    public void simpan(Produk p){
        String SQL = "insert into produk (kode, nama,harga) values (?, ?,?)";
        js.update( SQL, p.getNama(), p.getHarga(),p.getKode());
        System.out.println("Created Record");
        return;
    }
    public List<Produk> cariSemuaProduk(){
        String SQL = "select * from produk";
        List <Produk> produk = js.query(SQL,new ProdukMapper());
        return produk;
    }
}
```

Gambar 4. ProdukDao.java

5. Membuat ProdukMapper

```
package com.spring.framework;

import java.sql.ResultSet;
import java.sql.SQLException;
import org.springframework.jdbc.core.RowMapper;

public class ProdukMapper implements RowMapper<Produk> {
    public Produk mapRow(ResultSet rs, int rowNum) throws SQLException {
        Produk pro = new Produk();
        pro.setNama(rs.getString("nama"));
        pro.setKode(rs.getString("kode"));
        pro.setHarga(rs.getBigDecimal("harga"));
        return pro;
    }
}
```

Gambar 5. ProdukMapper.java

6. Hasil Program.

Masih belum bisa bekerja dengan baik. a.k.a "ERROR".