

# Spring Framework: Spring Fundamentals

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WHAT IS SPRING?

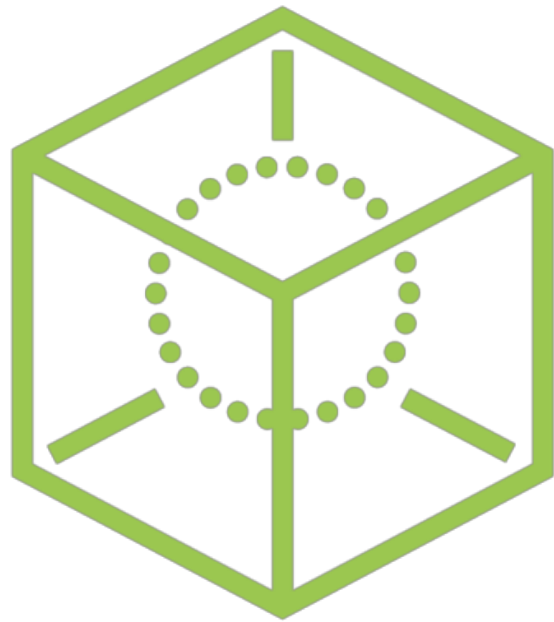


**Bryan Hansen**

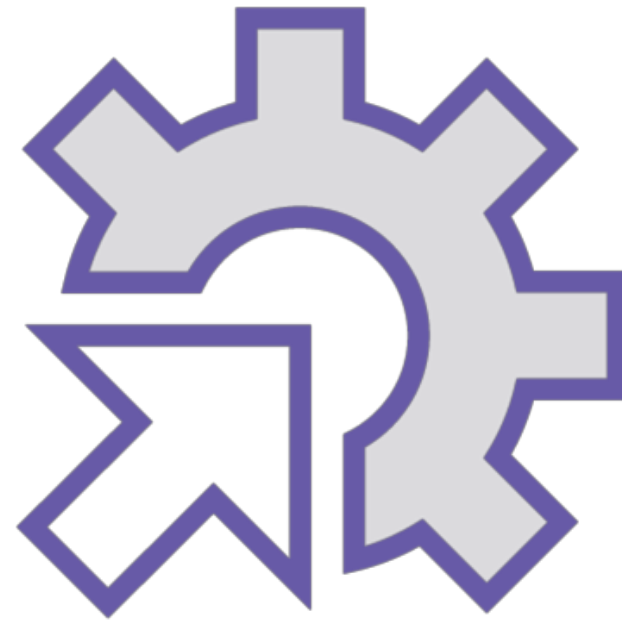
DIRECTOR OF SOFTWARE DEVELOPMENT

@bh5k

# What Is Spring?



**Inversion of  
Control Container**



**Dependency  
Injection**



**Java without  
Enterprise  
JavaBeans (EJBs)**



Dependency Injection

# What Is Spring?

**JEE**

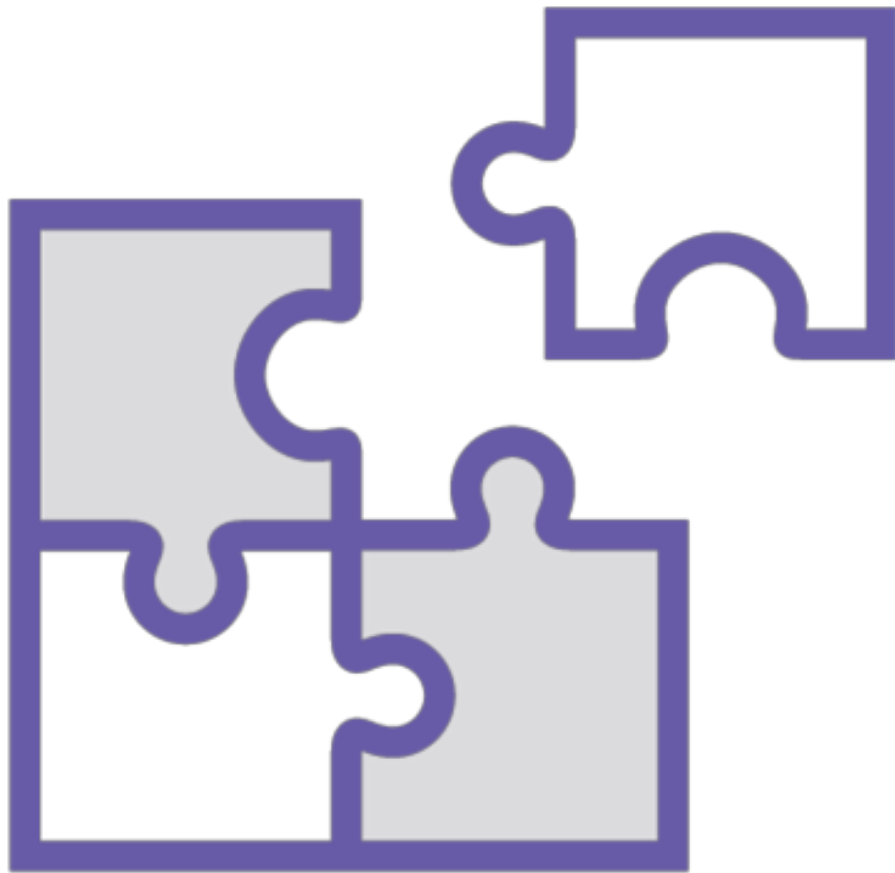
**POJO-based**

**Unobtrusive**

**AOP/Proxies**

**Best Practices**

# The Problem



**Testability**

**Maintainability**

**Scalability**

**Complexity**

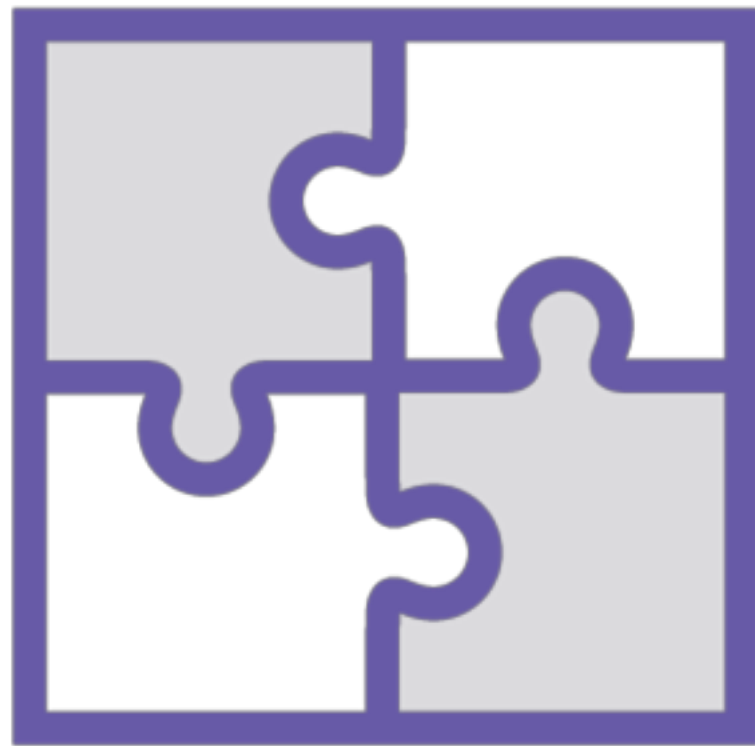
**Business Focus**

# Business Focus

```
public Car getById(String id) {
    Connection con = null;
    PreparedStatement stmt = null;
    ResultSet rs = null;

    try {
        String sql = "select * from CAR where ID = ?";
        con = DriverManager.getConnection("localhost:3306/cars");
        stmt = con.prepareStatement(sql);
        stmt.setString(1, id);
        rs = stmt.executeQuery();
        if(rs.next()) {
            Car car = new Car();
            car.setMake(rs.getString(1));
            return car;
        }
        else {
            return null;
        }
    } catch (SQLException e) { e.printStackTrace();}
    finally {
        try {
            if(rs != null && !rs.isClosed()) {
                rs.close();
            }
        } catch (Exception e) {}
    }
    return null;
}
```

# The Solution



**Configuration**

**Focus**

**Testing**

**Annotation or XML-based**

**Interface-based**

# Business Focus Revisited

```
public Car getById(String id) {
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            }
        } catch (Exception e) {}
    }
    return null;
}
```

```
public Car findCar(String id) {
    return getEntityManager().find(Car.class, id);
}
```

# How It Works

**POJOS**

**HashMap**

**Registry**

# Demo

## **Conference registration app**

- Model / Wiring

# Summary

**What is Spring?**

**The problem**

**The solution**

**Business focus**