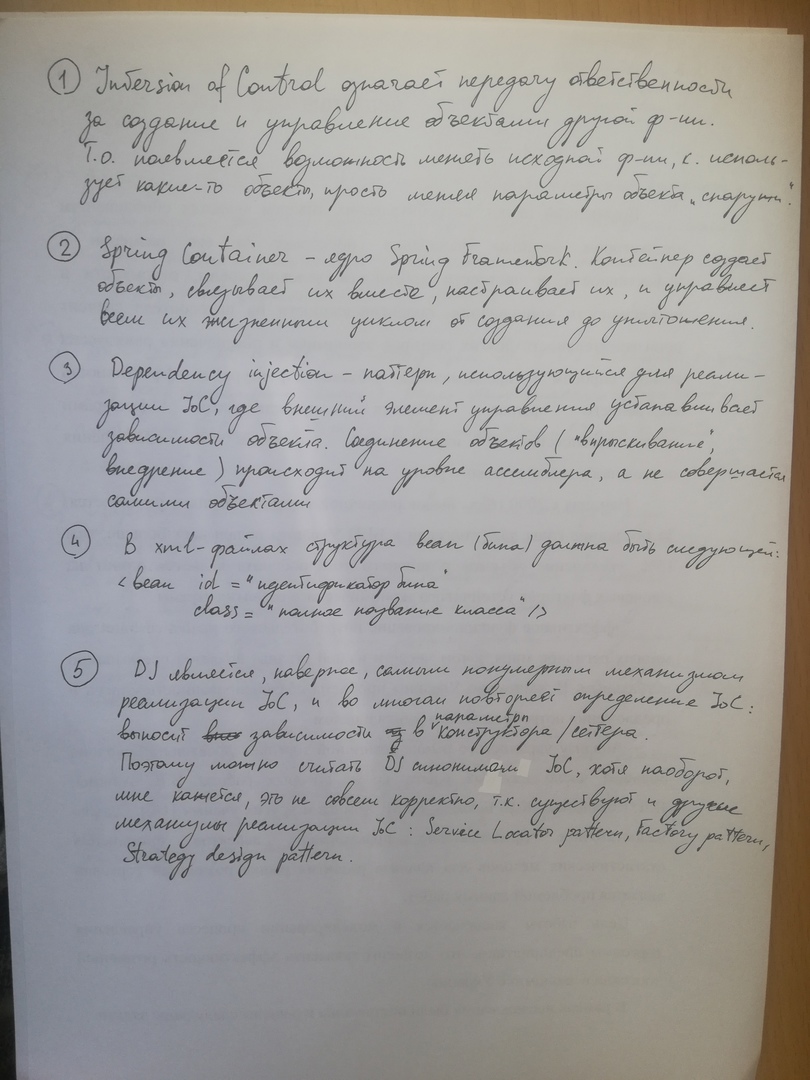
**ЛАБОРАТОРНАЯ РАБОТА №1**

**«**Создание проекта. Inversion of Control и Dependency Injection**»**

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**Цель:** научиться создавать проект Spring. Получить представление о том, зачем нужны IoC и DI. Создать простое приложение с применением IoC и DI.

**Контрольные вопросы:**

1. Что такое IoC?

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1. Назовите основные функции Spring Container?

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1. Что такое DI?

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1. Какие параметры необходимо указать для конфигурации bean?

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1. Почему, по вашему мнению, некоторые программисты считают термины IoC и DI взаимозаменяемыми?

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**ПРИЛОЖЕНИЕ**

Листинг «Employee.java»

package com.example.demo.spring;

public class Employee {

private Pet pet;

private Car car;

private String name;

private int age;

public void setName(String name) { this.name = name; }

public void setAge(Integer age) { this.age = age; }

public int getAge() { return age; }

public String getName() { return name; }

public Employee(Pet pet, Car car) {

this.pet = pet;

this.car = car;

}

public void restAtHome() {

System.out.println("[takes favourite toy to play with little friend]");

this.pet.say();

System.out.println("[both are filled with happiness]");

}

public void goToWork() {

System.out.println("[pours food to the pet]");

this.pet.say();

System.out.println("[close the door and start the engine]");

this.car.drive();

}

public void wentFromWork() {

this.car.drive();

System.out.println("[open the door]");

this.pet.say();

}

}

Листинг «beans.xml»

<?xml version="1.0" encoding="UTF-8"?>

<beans xmlns="http://www.springframework.org/schema/beans"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xmlns:context="http://www.springframework.org/schema/context"

xsi:schemaLocation="http://www.springframework.org/schema/beans

http://www.springframework.org/schema/beans/spring-beans.xsd

http://www.springframework.org/schema/context

http://www.springframework.org/schema/context/spring-context.xsd">

<bean id="myPet"

class="com.example.demo.spring.Dog">

</bean>

<bean id="oldCar"

class="com.example.demo.spring.Car">

</bean>

<bean id="lonelyMen"

class="com.example.demo.spring.Employee">

<constructor-arg name="pet" ref="myPet"/>

<constructor-arg name="car" ref="oldCar"/>

<property name="age" value="35"/>

<property name="name" value="Alee"/>

</bean>

</beans>