4-29 实现考勤成功页面（业务层）

上一小节，我们在Dao中声明了三个抽象的方法，于是现在我们要在业务层定义三个方法，分别对应Dao的三个抽象方法。

编写 `CheckinService.java` 接口，声明三个抽象方法。

```
1. public interface CheckinService {
2.     ……
3.     public HashMap searchTodayCheckin(int userId);
4.     public long searchCheckinDays(int userId);
5.     public ArrayList<HashMap> searchWeekCheckin(HashMap param);
6. }
```

在 `CheckinServiceImpl.java` 类中，实现三个抽象方法。

```java
1.  public class CheckinServiceImpl implements CheckinService {
2.      ……
3.      @Override
4.      public HashMap searchTodayCheckin(int userId) {
5.          HashMap map = checkinDao.searchTodayCheckin(userId);
6.          return map;
7.      }
8.      @Override
9.      public long searchCheckinDays(int userId) {
10.         long days = checkinDao.searchCheckinDays(userId);
11.         return days;
12.     }
13.     @Override
14.     public ArrayList<HashMap> searchWeekCheckin(HashMap param) {
15.         ArrayList<HashMap> checkinList = checkinDao.searchWeekCheckin(param);
16.         ArrayList<String> holidaysList = holidaysDao.searchHolidaysInRange(param);
17.         ArrayList<String> workdayList = workdayDao.searchWorkdayInRange(param);
18.         DateTime startDate = DateUtil.parseDate(param.get("startDate").toString());
19.         DateTime endDate = DateUtil.parseDate(param.get("endDate").toString());
20.         DateRange range = DateUtil.range(startDate, endDate, DateField.DAY_OF_MONTH);
21.         ArrayList list = new ArrayList();
22.         range.forEach(one -> {
23.             String date = one.toString("yyyy-MM-dd");
24.             //查看今天是不是假期或者工作日
25.             String type = "工作日";
26.             if (one.isWeekend()) {
27.                 type = "节假日";
28.             }
29.             if (holidaysList != null && holidaysList.contains(date)) {
30.                 type = "节假日";
31.             } else if (workdayList != null && workdayList.contains(date)) {
32.                 type = "工作日";
33.             }
34.             String status = "";
35.             if (type.equals("工作日") && DateUtil.compare(one, DateUtil.date()) <= 0) {
36.                 status = "缺勤";
37.                 boolean flag=false;
38.                 for (HashMap<String, String> map : checkinList) {
39.                     if (map.containsValue(date)) {
40.                         status = map.get("status");
41.                         flag=true;
42.                         break;
43.                     }
44.                     DateTime endTime=DateUtil.parse(DateUtil.today()+" "+constants.attendanceEndTime);
45.                     String today=DateUtil.today();
46.                     if(date.equals(today)&&DateUtil.date().isBefore(endTime)&&flag==false) {
47.                         status="";
48.                     }
49.                 }
50.             }
51.             HashMap map = new HashMap();
52.             map.put("date", date);
53.             map.put("status", status);
```

```
54.            map.put("type", type);
55.            map.put("day", one.dayOfWeekEnum().toChinese("周"));
56.            list.add(map);
57.        });
58.        return list;
59.    }
60. }
```