

# DAO Testing

*Note 1: In a slight change of order, we will be doing Data Security tomorrow. There will be reading for data security, but no quiz, no tutorial, and most exciting of all, no exercises.*

*Note 2: Due to family circumstances, I will be flying to Boston on Friday. There will probably be no review day, but there will be pairs work for the weekend. I will be largely unavailable.*

## DAO sequence to understand

*/\* Create a string which is your SQL command, using a ? for each parameter \*/*

```
String sql = "SELECT meetup_id, name FROM meetup WHERE meetup_id = ?";
```

*/\* If you want rows back, use jdbcTemplate.queryForRowSet with one parameter per ? \*/*

```
SqlRowSet results = jdbcTemplate.queryForRowSet(sql, meetupId);
```

*/\* If you expect to receive multiple rows, use while \*/*

```
while (results.next()) {  
    meetups.add(mapRowToMeetup(results));  
}
```

*/\* If you only expect one row, use if \*/*

```
if (results.next()) {  
    meetup = mapRowToMeetup(results);  
}
```

*/\* For INSERT INTO, use the RETURNING part and jdbcTemplate.queryForObject \*/*

```
String sql = "INSERT INTO project (name, from_date, to_date) VALUES (?, ?, ?)  
RETURNING project_id;";
```

```
Long newId = jdbcTemplate.queryForObject(sql, Long.class,  
    newProject.getName(),  
    newProject.getFromDate(),  
    newProject.getToDate());  
return getProject(newId);
```

*/\* For dates that might be null, get the date then the \*/*

```
Date myDate = rowSet.getDate("date_established");  
if (myDate != null) {  
    park.setDateEstablished(myDate.toLocalDate());  
}
```

