# Reading Records from the Database



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### cRud



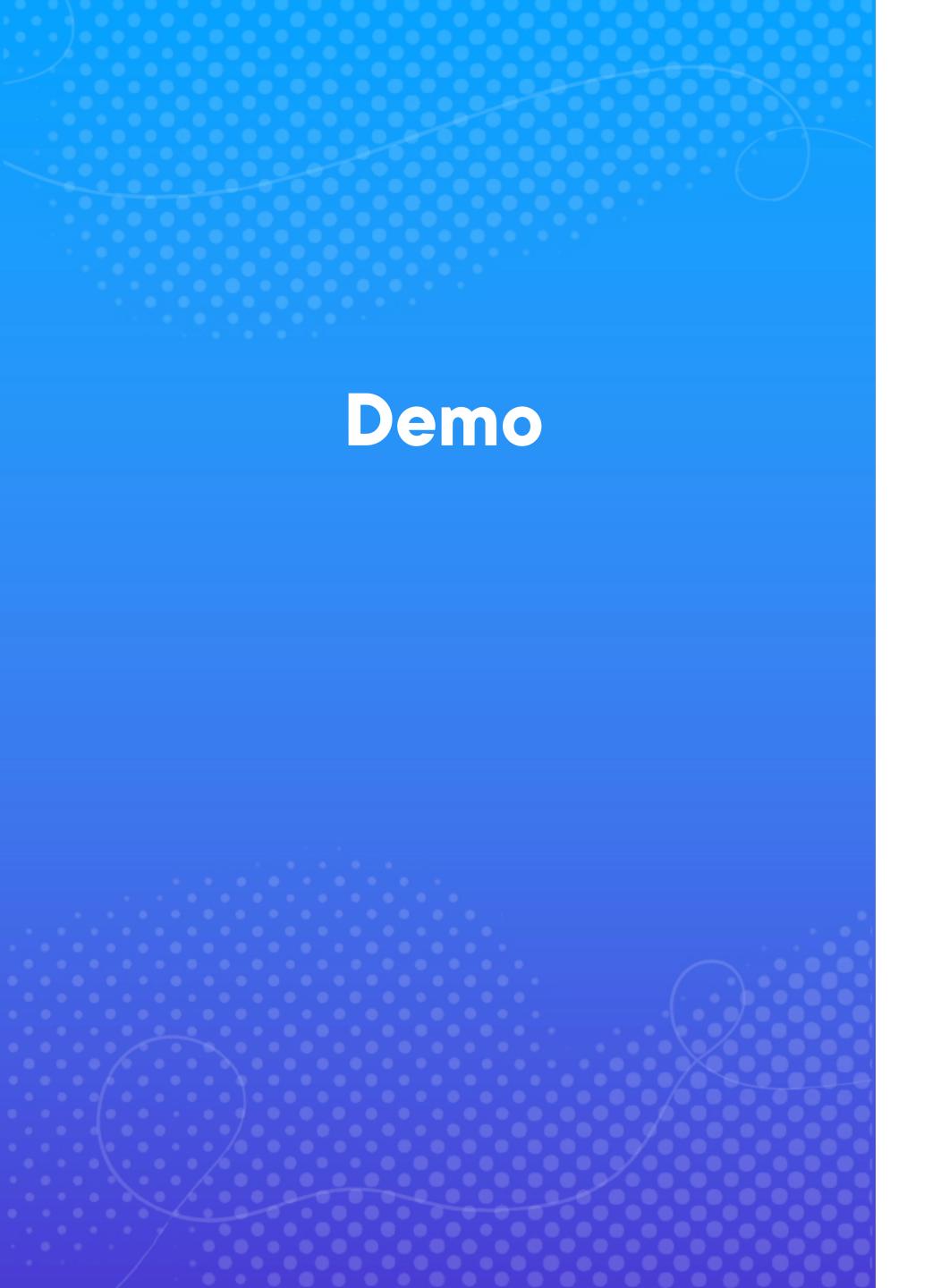
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**JdbcTemplate** 

RowMapper

SimpleJdbcCall



**Select All** 

**Modify Test** 

RowMapper

**Create Read** 

**Modify Create** 

### Read All

```
List <Speaker> speakers = jdbcTemplate.query("select *
from speaker", new
RowMapper<Speaker>() {
@Override
  public Speaker mapRow(ResultSet rs, int rowNum) throws
SQLException {
    Speaker speaker = new Speaker();
    speaker.setId(rs.getInt("id"));
    speaker.setName(rs.getString("name"));
    return speaker;
} });
```

# **Modify Test**

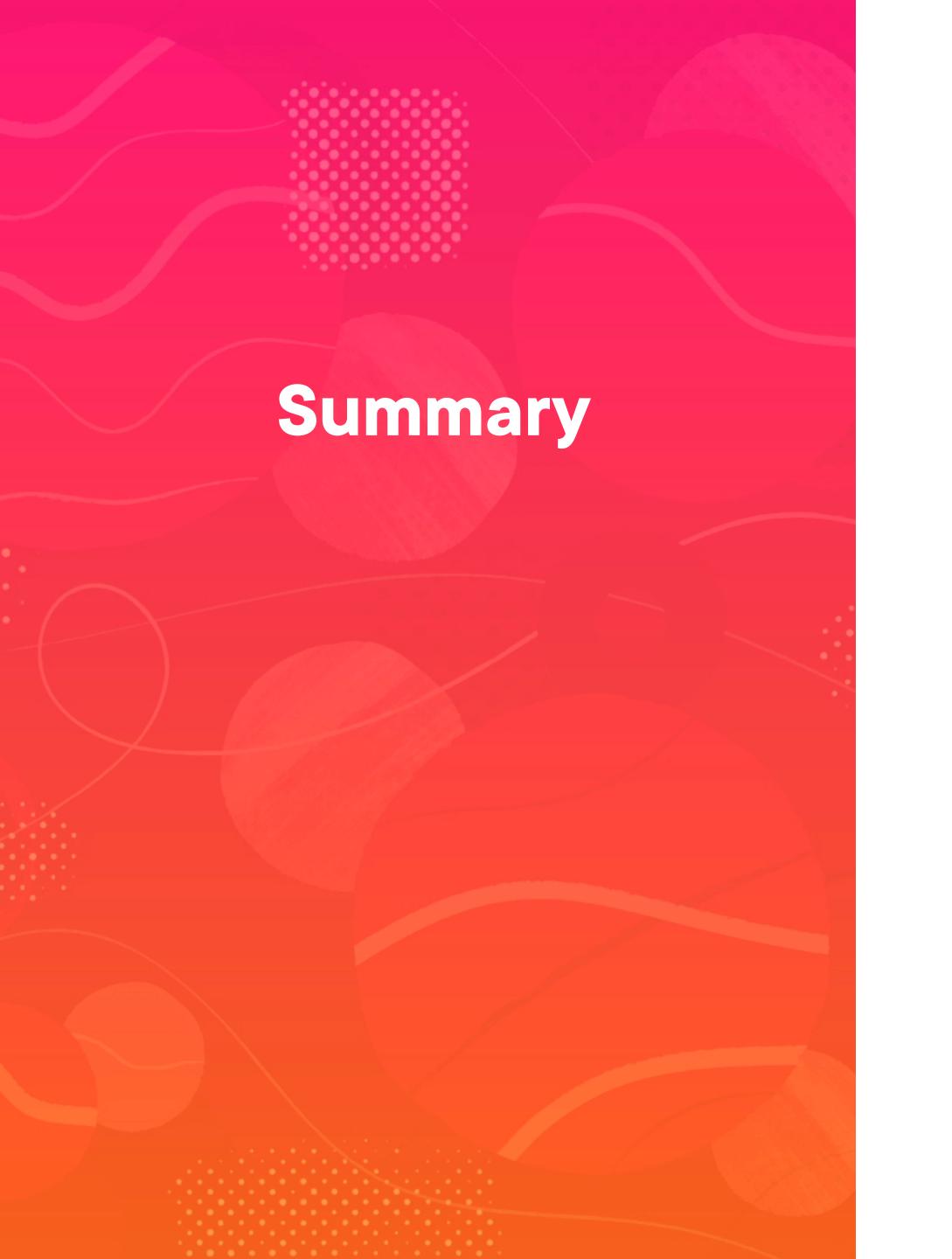
```
@Test
public void testCreateSpeaker() {
     RestTemplate restTemplate = new RestTemplate();
     Speaker speaker = new Speaker();
     speaker.setName("John Henry");
     restTemplate.put("http://localhost:8080/
speaker", speaker);
```

## RowMapper

```
public class SpeakerRowMapper implements RowMapper<Speaker> {
 @Override
 public Speaker mapRow(ResultSet rs, int rowNum) throws
SQLException {
    Speaker speaker = new Speaker();
    speaker.setId(rs.getInt("id"));
    speaker.setName(rs.getString("name"));
   return speaker;
```

# **Modify Create Speaker**

```
KeyHolder keyHolder = new GeneratedKeyHolder();
jdbcTemplate.update(new PreparedStatementCreator() {
    public PreparedStatement
createPreparedStatement(Connection con) throws SQLException {
       PreparedStatement ps =
         con.prepareStatement("insert into speaker (name)
values (?)", new String[] {"id"});
       ps.setString(1, speaker.getName());
       return ps;
},keyHolder);
```



Select All

**Update Tests and Controller** 

RowMapper

PreparedStatementCreator

SimpleJdbcInsert