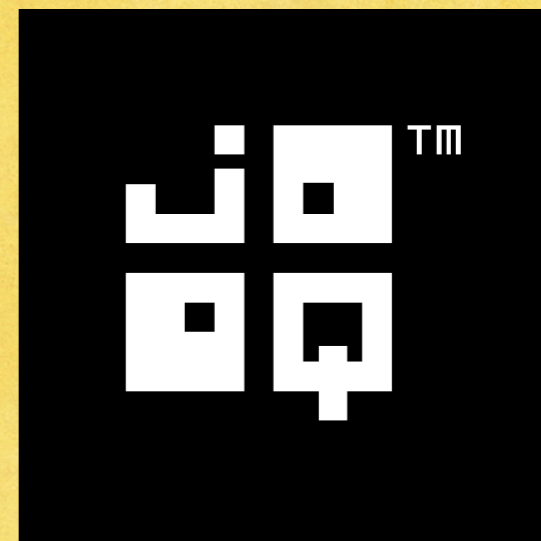


# Building Realtime Data Apps with jOOQ

TCF IT Professional Conference  
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# Who's Mike?

- BS in CS from **RUTGERS**  
THE STATE UNIVERSITY OF NEW JERSEY
- “Petrochemical Research Organization”
- Java Queue News Editor, InfoQ
- Ai-Logix, Inc. (now AudioCodes)
- Amateur Computer Group of New Jersey



# Objectives

- What is jOOQ?
- Why jOOQ?
- Database Support
- Get Started Building an Application
  - Live Demo (yea!)
- jOOQ Resources

# What is jOOQ (I)?

*“jOOQ generates Java code from your database and lets you build type-safe SQL queries through its fluent API.”*

jOOQ website, <https://www.jooq.org/>

# What is jOOQ (2)?

- First introduced in October 2009
- Latest version: 3.10.5
- Generates Java classes from a databases schema
- Built-in internal DSL that emulates SQL in Java

# How Do I Pronounce jOOQ?



dʒu:k

jOOQ website, <https://www.jooq.org/how-to-pronounce-jooq>

# Why jOOQ? (I)

*“SQL was never meant to be abstracted. To be confined in the narrow boundaries of heavy mappers, hiding the beauty and simplicity of relational data. SQL was never meant to be object-oriented. SQL was never meant to be anything other than...SQL!”*

jOOQ website, <https://www.jooq.org/>

# Why jOOQ? (2)

- Database First
- Type Safe SQL
- Code Generation
- Active Records
- Multi-Tenancy
- Standardisation
- Query Lifecycle
- Procedures

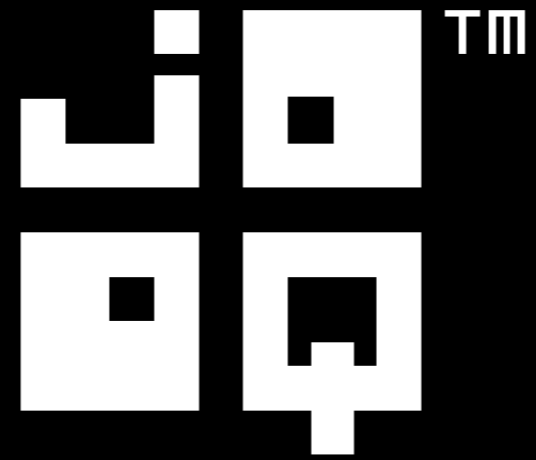


# jOOQ Editions

- Open Source
- Express (small startup or individual)
- Professional (small-to-medium company)
- Enterprise (large company)

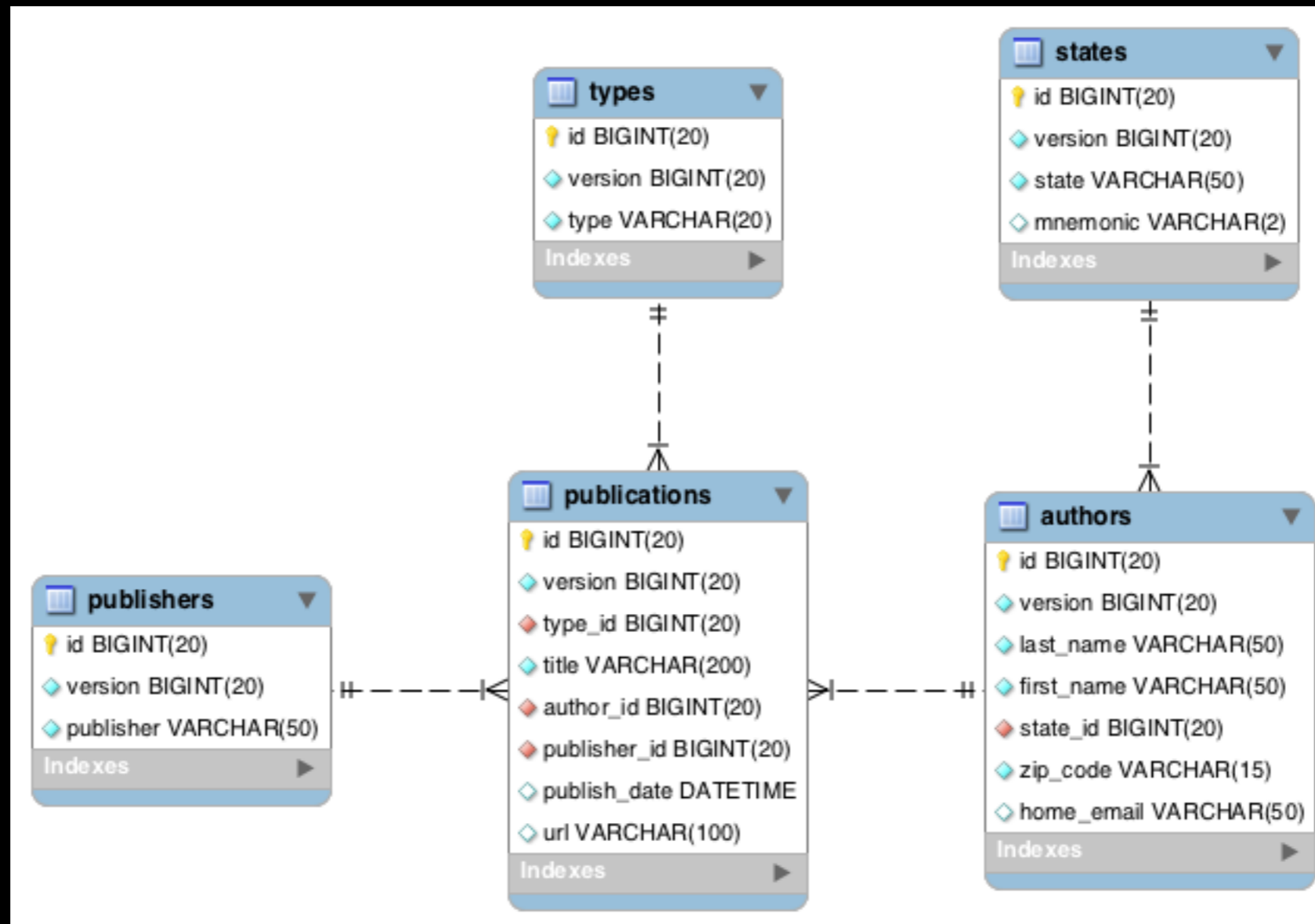
# jOOQ Open Source

- CUBRID 8.4+
- Derby 10.10+
- Firebird 2.5, 3.0
- H2 1.3, 1.4
- HSQLDB 2.2+
- MariaDB 5.2+
- MySQL 5.5+
- PostgreSQL 9.3+
- SQLite 3



Let's Get Started...

# Example Database



# Generate Code (I)

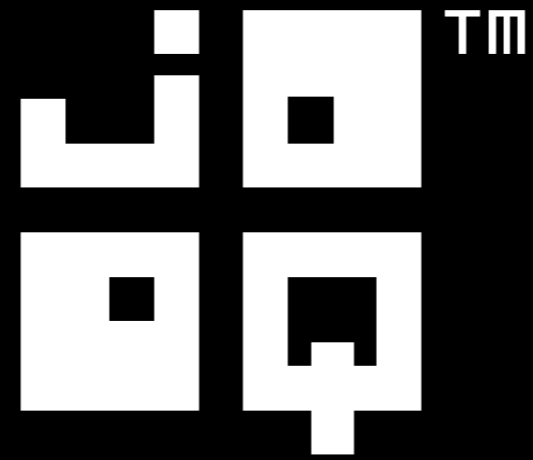
```
<generator>  
  <database>  
    <name>org.jooq.util.mysql.MySQLDatabase</  
name>  
    <includes>.*</includes>  
    <excludes></excludes>  
    <inputSchema>publications</inputSchema>  
  </database>  
</generator>
```

# Generate Code (2)

```
<generator>  
  <target>  
    <packageName>  
      org.redlich.pubs.model  
    </packageName>  
    <directory>src/main/java</directory>  
  </target>  
</generator>
```

# Generate Code (3)

```
<executions>  
  <execution>  
    <goals>  
      <goal>generate</goal>  
    </goals>  
  </execution>  
</executions>
```



Let's Build That App...



# jOOQ Resources

- [jooq.org](http://jooq.org)
- [jooq.org/tuesdays](http://jooq.org/tuesdays)
- [jooq.org/translate](http://jooq.org/translate)
- [blog.jooq.org](http://blog.jooq.org)
- <https://www.infoq.com/news/2017/02/data-geekery-releases-jooq-3-9>

# Acknowledgements

- Data Geekery, GmbH
- Lukas Eder, Founder and CEO at Data Geekery

# Upcoming Events

- ACGNJ Java Users Group
  - Dr. Venkat Subramaniam
  - Monday, March 19, 2018
  - Dorothy Young Center for the Arts, Room 106
  - Drew University
  - 7:30-9:00pm
  - “Twelve Ways to Make Code Suck Less”

# Thanks!

`mike@redlich.net`

`@mpredli`

`redlich.net`

`slideshare.net/mpredli01`

`github.com/mpredli01/j00Q`

# Upcoming Events



Trenton Computer Festival

- March 17-18, 2017
- [tcf-nj.org](http://tcf-nj.org)



**EMERGING TECHNOLOGIES**  
FOR THE ENTERPRISE

- April 18-19, 2017
- [phillyemergingtech.com](http://phillyemergingtech.com)

**SOLD OUT**