

### Agenda

- Motivation
- Features
- Data Sets, APIs & Technologies
- Architecture
- Sample Query
- Live Demo
- Challenges



- Find concerts near your place
- Find out where your favorite artists perform





#### Current situation:

#### Enter Shikari in Substage

#### Mit Hacktivist



NOV Freitag, 8. November 2013 um 20.00 Uhr



In den Kalender eintragen



Substage

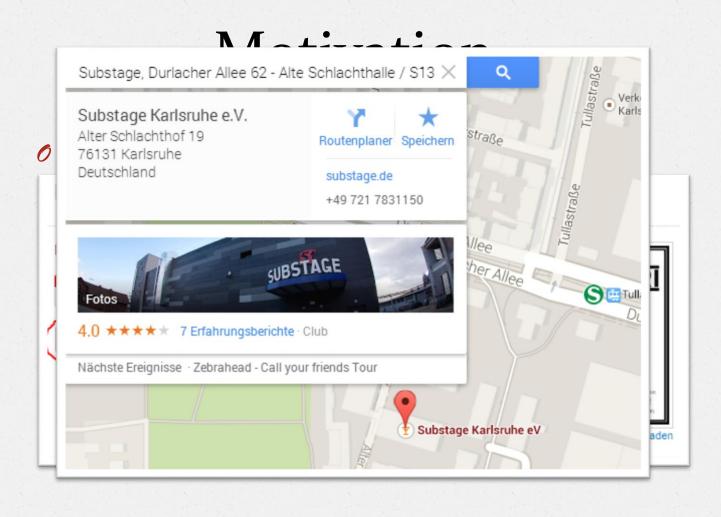
Durlacher Allee 62 - Alte Schlachthalle / S13 76131 Karlsruhe Deutschland

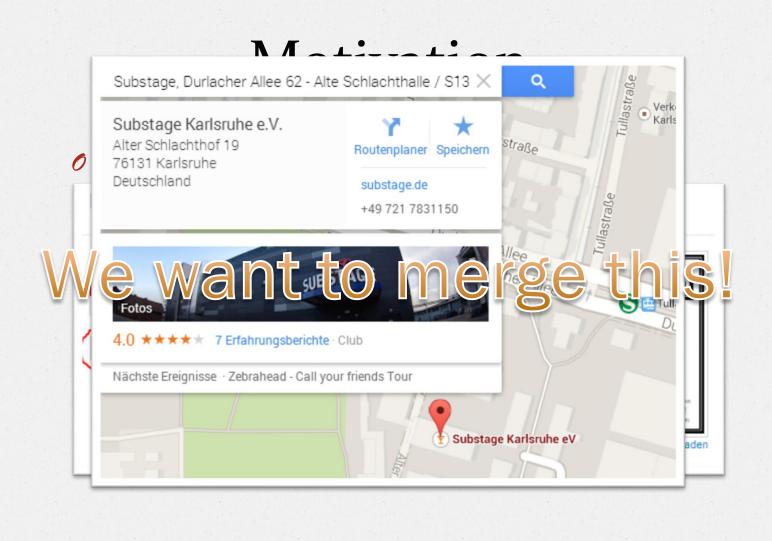
Auf der Karte zeigen

Tel: 0721 / 78 31 15 -0 Web: www.substage.de



Ein neues Poster hochladen





#### **Features**

- Search for bands or acts
  - Display all known events of the act on map
  - Display additional artist information
- Search for cities
  - Display all events taking place there (within a certain radius)
- Search for venues
  - Display all events taking place at one location
  - Display additional venue information

# Linked Open Data Sets





"LinkedBrainz"

#### **APIs**





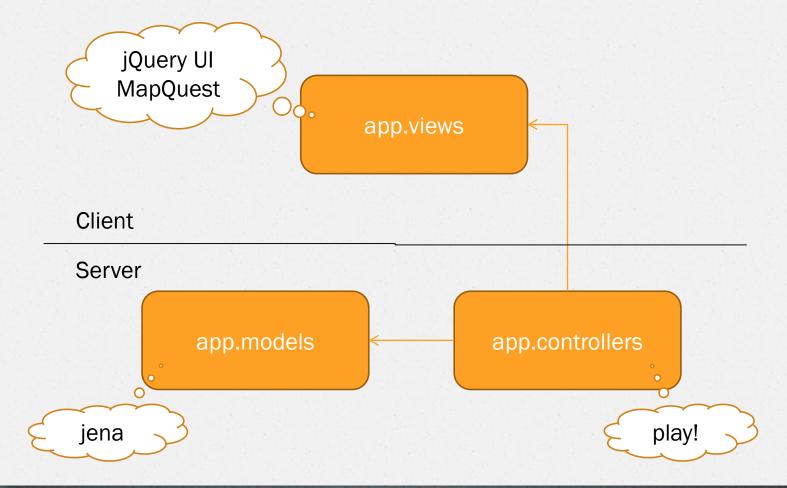


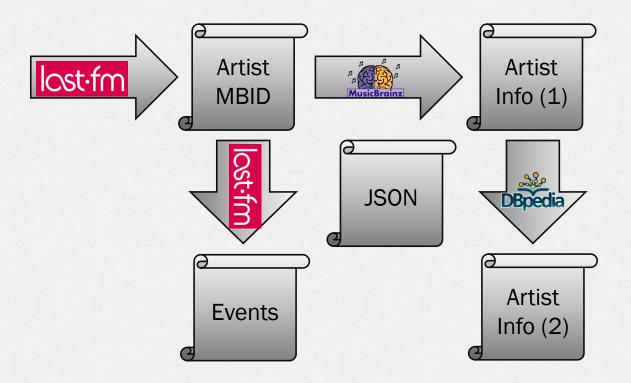
### **Technologies**





#### Architecture









```
SPARQL Query (Musicbrainz):
```

```
SELECT * WHERE {
    ?artist foaf:name "Volbeat";
    owl:sameAs ?same.
    FILTER(REGEX(STR(?same), "dbpedia.org/resource/")).
} LIMIT 1

SELECT * WHERE {
    ?artist mo:musicbrainz < http://musicbrainz.org/artist/4753fcb7-9270-493a-974d-8daca4e49125>;
    owl:sameAs ?same.
    FILTER(REGEX(STR(?same), "dbpedia.org/resource/")).
} LIMIT 1
```



Use Case: "Use Artist search to query e.g., Volbeat' events."

#### SPARQL results:

artist same

db:artist/4753fcb7-9270-493a-974d-8daca4e49125 @ <a href="http://dbpedia.org/resource/Volbeat\_%28band%29">http://dbpedia.org/resource/Volbeat\_%28band%29</a>

Use Case: "Use Artist search to query e.g., Volbeat' events."

#### SPARQL Query (DBPedia):

```
SELECT * WHERE {
    ?artist a <a href="http://schema.org/MusicGroup">http://schema.org/MusicGroup</a>.
    ?artist dbpedia2:name "Volbeat"@en.
    OPTIONAL { ?artist foaf:homepage ?homepage.}
    OPTIONAL {
        ?artist dbo:abstract ?abstract.
        FILTER(lang(?abstract) = "en").
    } OPTIONAL {
        ?artist dbo:hometown ?home.
        ?home a <a href="http://schema.org/Country">http://schema.org/Country</a>.
    }OPTIONAL { ?artist foaf:isPrimaryTopicOf ?wiki. }
    } LIMIT 1
```



SPARQL results:										
artis	t homepage	abstract	home	wiki						
:Volbea	it 윤 <http: www.volbeat.dk=""> 윤</http:>	"Volbeat is a Danish metal band which was formed in Copenhagen. They play a fusion of rock and roll, heavy metal, punk and rockabilly. They are inspired by classic rock and roll artists such as Elvis Presley and Johnny Cash, as well as modern hard rock, groove metal, alternative rock and hardcore groups. Their current line-up consists of vocalist and guitarist Michael Poulsen, bassis, anders Kjølholm, guitarist Rob Caggiano, and drummer Jon Larsen. The band is signed to Dutch label Mascot Records and has released four studio albums and one DVD. All of their studio albums have been certified certified gold in Denmark. Their second album Rock the Rebel/Metal the Devil received platinum status, and their 2010 release Beyond Hell/Above Heaven was subject to widespread international critical acclaim, receiving double platinum in Denmark, platinum in Finland and Germany, and gold in Sweden and Austria. Volbeat's fifth album entitled "Outlaw Gentlemen & Shady Ladies" is due to be released worldwide on April 9, 2013."@en	:Denmark &	<http: en.wikipedia.org="" volbeat="" wiki=""> 년</http:>						

#### Live Demo

# **SEM**Semantic Event Map

Volbeat			
Artist Locati	on		



- O Does the semantic web fit perfectly for all applications?
- Application needs up-to-date information
  - EventMedia last updated in September 2012
- Data sets not always reliable
  - LinkedGeoData SPARQL endpoint nearly permanently offline
- Missing experiences as web designer
- Some technical issues with github and play framework

### Questions?

