


Evangelium Nicodemi (a database application)

**Data
Application
Demonstration
Next Steps**

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Evangelium Nicodemi (a database application)

Data

Source

Page 12:

Manuscripts of the Evangelium Nicodemi : a census

CENSUS OF MANUSCRIPTS

1. **AACHEN**, Germany. Stadtarchiv
MS KK Regulierherren Nr. 9 (formerly Hs. 66)
160 ff. 210 x 280 mm. Saec. XV. **Contents** ...; *EN*; *SN*; *De passione domini nostri Iesu Christi*; etc.
I/E* **Title 80^{ra} *Incipiunt gesta domini saluatoris que inuenit Theodosius imperator in atrio Poncii Pilati, scripta in codicellis publicis, a Nychodemo composita.* 80^{rb} *Ewangelium Nichodemi.* **Prol. II** 80^{rb} *Factum est in anno xix^o Tyberii cesaris, imperatoris Romanorum, et Herodis filii Herodis imperatoris Galilee...mandauitque ipse Nychodemus litteris hebraicis.* **Text** *Annas et Cayphas, Gamaliel et Iudas, Leui et Neptalim et reliqui...* Ch. I,1- . *SN* ...91^{ra} *sicut Iosephus describit qui tunc ibidem erat et presenciam domini vidit et exterminacionem Hebreorum etc.* Ch. -IV,1. **Closing** 91^{ra} *Explicit passio domini.*
SS **Corresp.** †Dr. Thomas Kraus.
2. **ALBA IULIA**, Rumania. Biblioteca Batthyaneum
MS R I 57
Paper. 202 ff. 295 x 210 mm. Saec. XV in. (ca. 1407). Scr. Five scribes. Poss. Bohemia (at the back a fragment of a letter dated 1394 in Praha); Levoča, Slovakia, probably Spiš chapter library (cf. note on 1^r, saec. XV). **Contents** Hugo de s. Caro; sermons; Fabius Fulgentius; sermons; *Dialogus b. Mariae et Anselmi*; *EN*; *Puncta sermonum*; various notes.
I/E **Text** 191^{rb} *Secundum Nicodemum in illo tempore, cum Ioseph ab Arymathia deposuisset Ihesum de cruce...191^{ra} in Arymathiam collocavit.* Ch. XII- . **Closing** 191^{rb} *Et sic est finitum ewangelium Nychodemi etc.*
SS **Bibl.** †Sopko, 1982, pp. 158-9. **Corresp.** Dr. Iacob Mârza.
3. **ALBA IULIA**, Rumania. Biblioteca Batthyaneum
MS R II 66
Paper. 297 ff. 305 x 220 mm. Saec. XV/1. **Orig.** Bohemia (cf. script; a letter dated in Praha). Scr. Six scribes; *EN* by Mecznerus de Lubschicz. Poss. Levoča, Slovakia (saec. XVIII). **Contents** Caldobrandini de Cavalcantibus; miscellaneous texts; Alexander de Villa Dei; *De canone missae*; *EN*; *EP*; *Glossa hymnorum*.
I/E **Prol. II** 173^{ra} *Factum est in anno decimo octavo, imperii Typerii Cesaris, imperatoris Romanorum, Herodis, filii Herodis imperatoris Gallilee...quanta post crucem et passionem deo hystoriatu est Nychodemus...* **EP** ...178^{ra} *omnia, que gesta sunt cum domino, in pretorio vidi etc.* **Closing** 178^{ra} *Explicit Ewangelium Nychodemi per manus Meczneri de Lubschicz.*
SS **Bibl.** †Sopko, 1982, pp. 220-2. **Corresp.** Dr. Iacob Mârza.

Pages 5-8 explain structure of the data

Location:
City
Country
Library

All *Census* entries are numbered consecutively with arabic numerals. Each entry comprises five types of information: *location of the manuscript*; *shelf-mark (MS)*; *codicological information*; *incipits and explicits (I/E)* of the *EN* and of its satellite texts; and *sources of information (SS)*.

Location of the manuscript. The present location of the manuscript is specified in the following order:

- city
- country
- library

I followed P.O. Kristeller (1965a) in giving all foreign place-names in their original forms.

Shelf-mark. All shelf-marks are signalled by the abbreviation MS. Whenever possible, they have been confirmed through correspondence with the respective library.

Codicological information. The *Census* provides information—extracted from printed or handwritten sources or from correspondence—regarding the following:

- writing material (parchment, paper, or both)
- number of folios or pages
- size of the volume in inches or millimetres
- Saec.: century and year, if known, when the manuscript was written; if it was written at different times, the date of the *EN* is indicated by **bold typeface**

5 types of information:

- Location
- Shelf-mark
- Codicological info
- Incipits & explicits
- Sources

Pages 5-8 explain structure of the data

Origin



- **Orig.:** place (scriptorium, city, diocese, region, or country) where it was written

Scribes



- **Scr.:** number and names of scribes who contributed to the volume; the name of the scribe who wrote the *EN*

Owners



- **Poss.:** medieval and later owners, users, or whereabouts of the manuscript; ownership and donation notes; any references to the manuscript in medieval book lists

Contents



- **Contents:** contents of the volume, with a list of major authors or works contained in it (ellipses indicate that additional texts are present in the manuscript); whenever possible, texts combined with or adjacent to the *EN* as well as other apocrypha have been identified; names of authors and titles of works have been standardized to the extent allowed by sometimes scanty information provided by catalogues

Uses



- use of the manuscript by earlier editors of the *EN* or of the satellite texts

Incipits/Explicits



- any significant discrepancies among the sources of information
Incipits and explicits (I/E) of the *EN* and of its satellite texts. Because

Consider entry # 1 on page 12

1. **AACHEN**, Germany. Stadtarchiv
MS KK Regulierherren Nr. 9 (formerly Hs. 66)
160 ff. 210 x 280 mm. Saec. XV. Contents ...; EN; SN; *De passione domini nostri Iesu Christi*; etc.
- *I/E Title 80^{ra} *Incipiunt gesta domini saluatoris que inuenit Theodosius imperator in atrio Poncii Pilati, scripta in codicellis publicis, a Nychodemo composita. 80^{rb} Ewangeliium Nichodemi. ProL II 80^{rb} Factum est in anno xix^o Tyberii cesaris, imperatoris Romanorum, et Herodis filii Herodis imperatoris Galilee...—...mandauit-que ipse Nychodemus litteris hebraicis. Text Annas et Cayphas, Gamaliel et Iudas, Leui et Neptalim et reliqui... Ch. I,1- . SN ...91^{ra} sicut Iosephus describit qui tunc ibidem erat et presenciam domini vidit et exterminacionem Hebreorum etc. Ch. - IV,1. Closing 91^{ra} Explicit passio domini.*
- SS Corresp. †Dr. Thomas Kraus.

Consider entry # 1 on page 12

There are pieces of information

Siglum

City

Country

Repository

Century

I. AACHEN, Germany. Stadtarchiv

MS KK Regulierherren Nr. 9 (formerly Hs. 66)

160 ff. 210 x 280 mm. Saec. XV. Contents ...; EN; SN; *De passione domini nostri Iesu Christi*; etc.

Shelf
mark

*I/E Title 80^{ra} *Incipiunt gesta domini saluatoris que inuenit Theodosius imperator in atrio Poncii Pilati, scripta in codicellis publicis, a Nychodemo composita. 80^{rb} Ewangeliium Nichodemi. ProL II 80^{rb} Factum est in anno xix^o Tyberii cesaris, imperatoris Romanorum, et Herodis filii Herodis imperatoris Galilee...—...mandauit-que ipse Nychodemus litteris hebraicis. Text Annas et Cayphas, Gamaliel et Iudas, Leui et Neptalim et reliqui... Ch. I,1- . SN ...91^{ra} sicut Iosephus describit qui tunc ibidem erat et presenciam domini vidit et exterminacionem Hebreorum etc. Ch. - IV,1. Closing 91^{ra} Explicit passio domini.*

SS Corresp. †Dr. Thomas Kraus.

Well-structured documents

- Each entry can be represented using key/value pairs.
- For example Entry #1:
 - ◆ Siglum = 1
 - ◆ City = Aachen
 - ◆ Country = Germany
 - ◆ Century = 15
 - ◆ ...

Well-structured documents

- Can be stored in a database in a number of ways
 - The approach we are using is JSON
 - JavaScript Object Notation
- Example: presentation information for Réunion Annuelle 2017
 - Consider first presentation
 - 20 h. 30 Isabel IRIBARREN (Université de Strasbourg), Utilisations et fonctions des écrits apocryphes dans l'œuvre de Jean Gerson.

Example of data expressed in JSON

- 20 h. 30 Isabel IRIBARREN (Université de Strasbourg), Utilisations et fonctions des écrits apocryphes dans l'œuvre de Jean Gerson.

- In JSON {

```
Time: {  
  Hour: 20  
  Min: 30  
}
```

```
Name: {  
  First: Isabel  
  Last: IRIBARREN  
}
```

```
University: "Université de Strasbourg",  
Title: "Utilisations et fonctions des  
écrits apocryphes dans l'œuvre  
de Jean Gerson."
```

```
}
```



JSON, JavaScript Object Notation

- Self-describing
- A syntax for storing and exchanging data
- Human readable

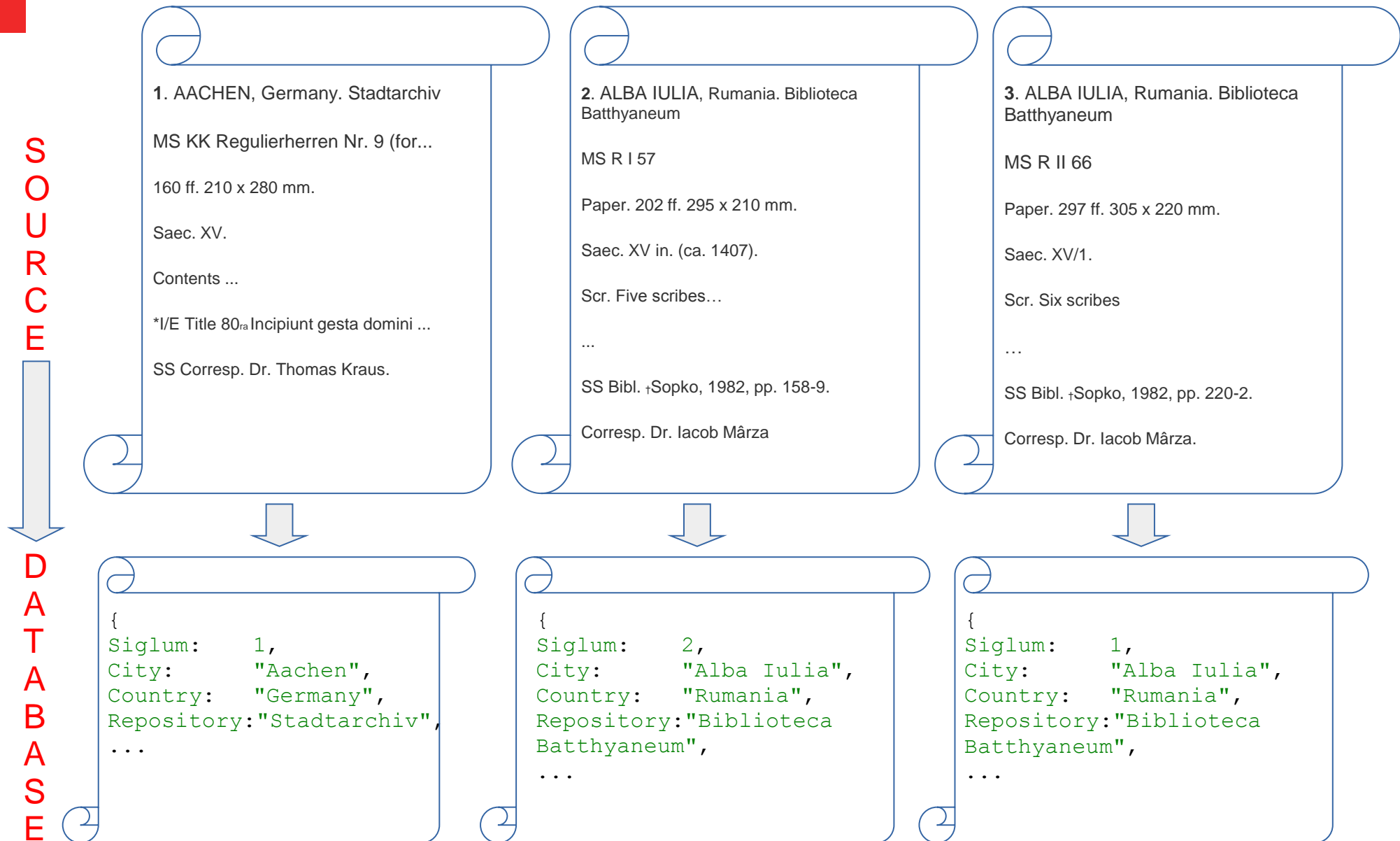
Databases


- Two broad categories
- Relational
 - Since the 1970s
 - IBM, Oracle, Microsoft, PostgreSQL...
 - The standard for decades
 - Standard database query language: SQL
 - Requires a solid database schema definition
- NoSQL – non relational
 - key-value, column family, document and graph stores
 - **MongoDB**, CouchDb, Cassandra, PostgreSQL ...
 - Strong roots in open source
 - Do not need a rigorous database definition

MongoDB

- The choice for our project
- Popular + experience in our department
- A so-called *document* database
- Easily insert documents, in JSON format, into the database
- Each entry in Census of Manuscripts is a document
- 436 documents organized in a MongoDB *collection*
 - Database comprises many collections
 - Each collection has many documents

JavaScript used to parse/translate an MS Word copy of the text into JSON notation



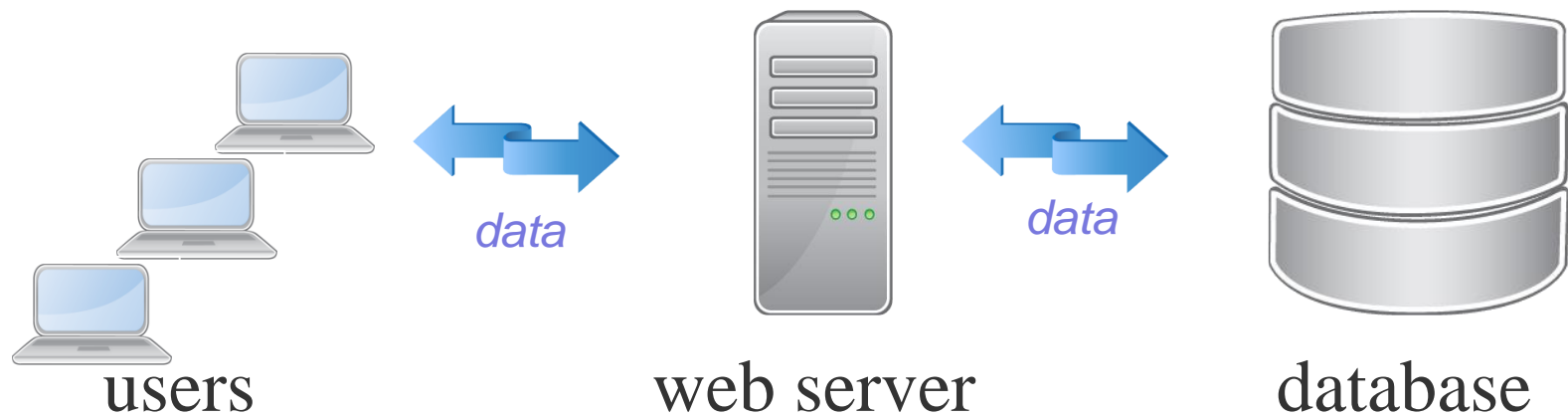


Evangelium Nicodemi, a database application

Application

Application

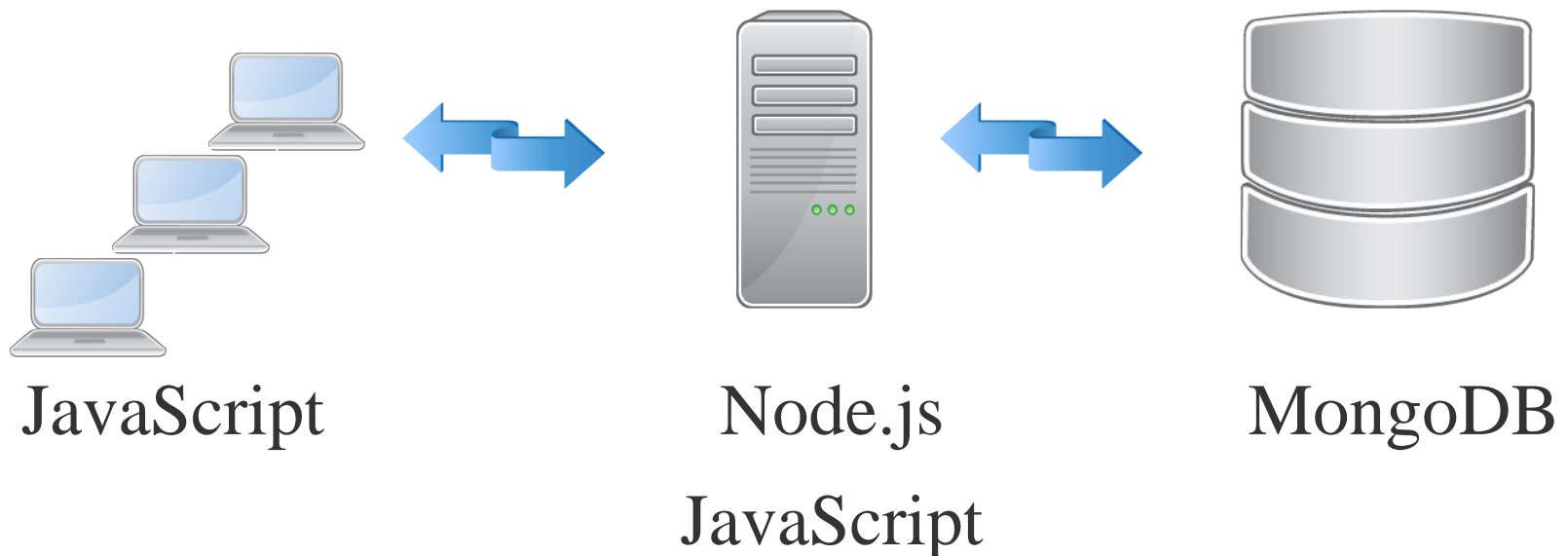
- Primarily a search tool
- An administrative side to control database content



[evangelium.acs. ...](#)

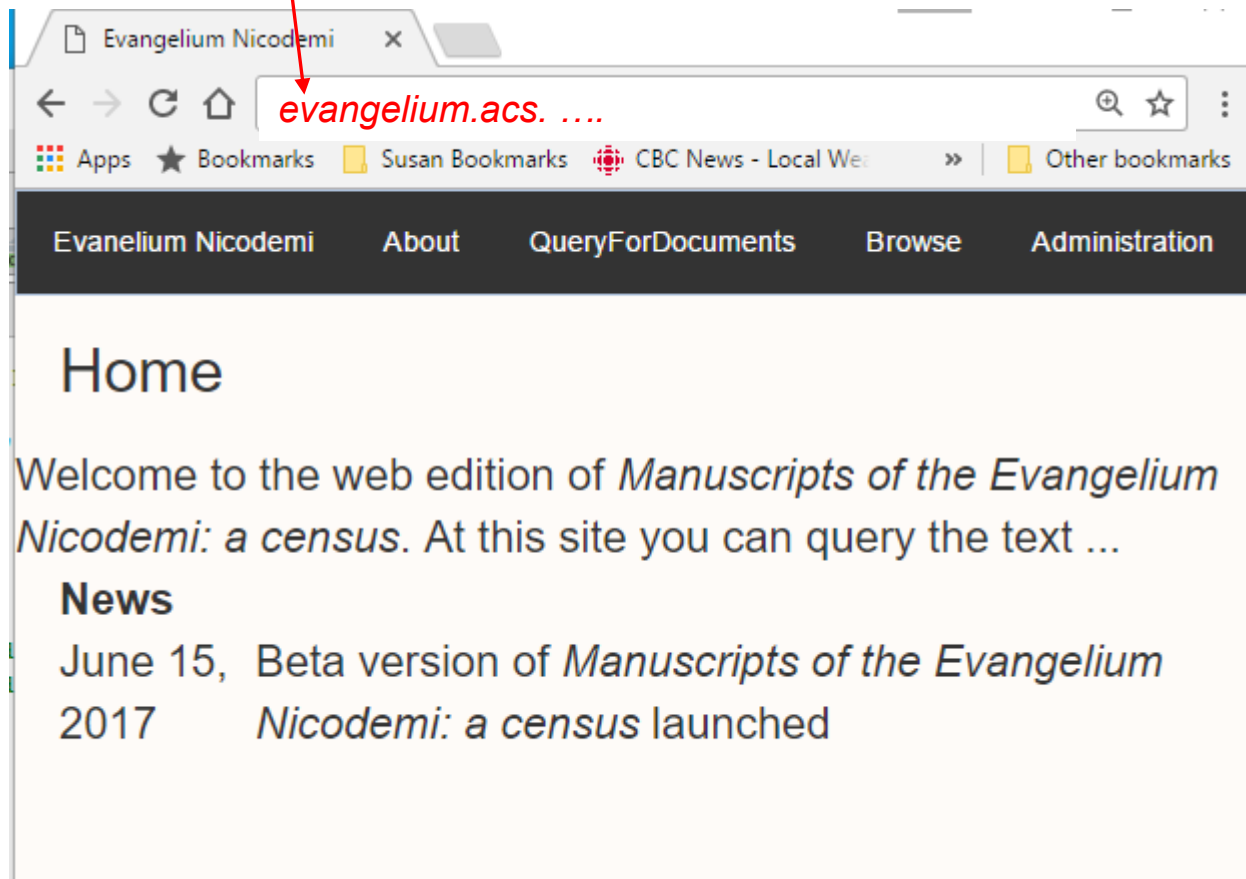
Technical framework for application

- Our development framework involves Webstorm, Meteor, JavaScript, Node, MongoDB
 - Webstorm: provides an editing and execution environment for testing
 - Meteor: provides a framework for integrating JavaScript, Node, MongoDB, etc.



Example: user connects to application

- User enters URL in web browser and chooses one of: Home, About, Search, Browse, Administration



Example: user constructs a search

User enters criteria

Switzerland

Clicks Search button

← → ↻ 🏠 🔍 Evangelium

📱 Apps ★ Bookmarks 📁 Susan Bookmarks 📡 CBC News - Local We 📺 Javanotes 7.0 --

Evangelium Nicodemi About Search Administration

Search for Documents

Siglum:

City:

Country: **Switzerland**

Repository:

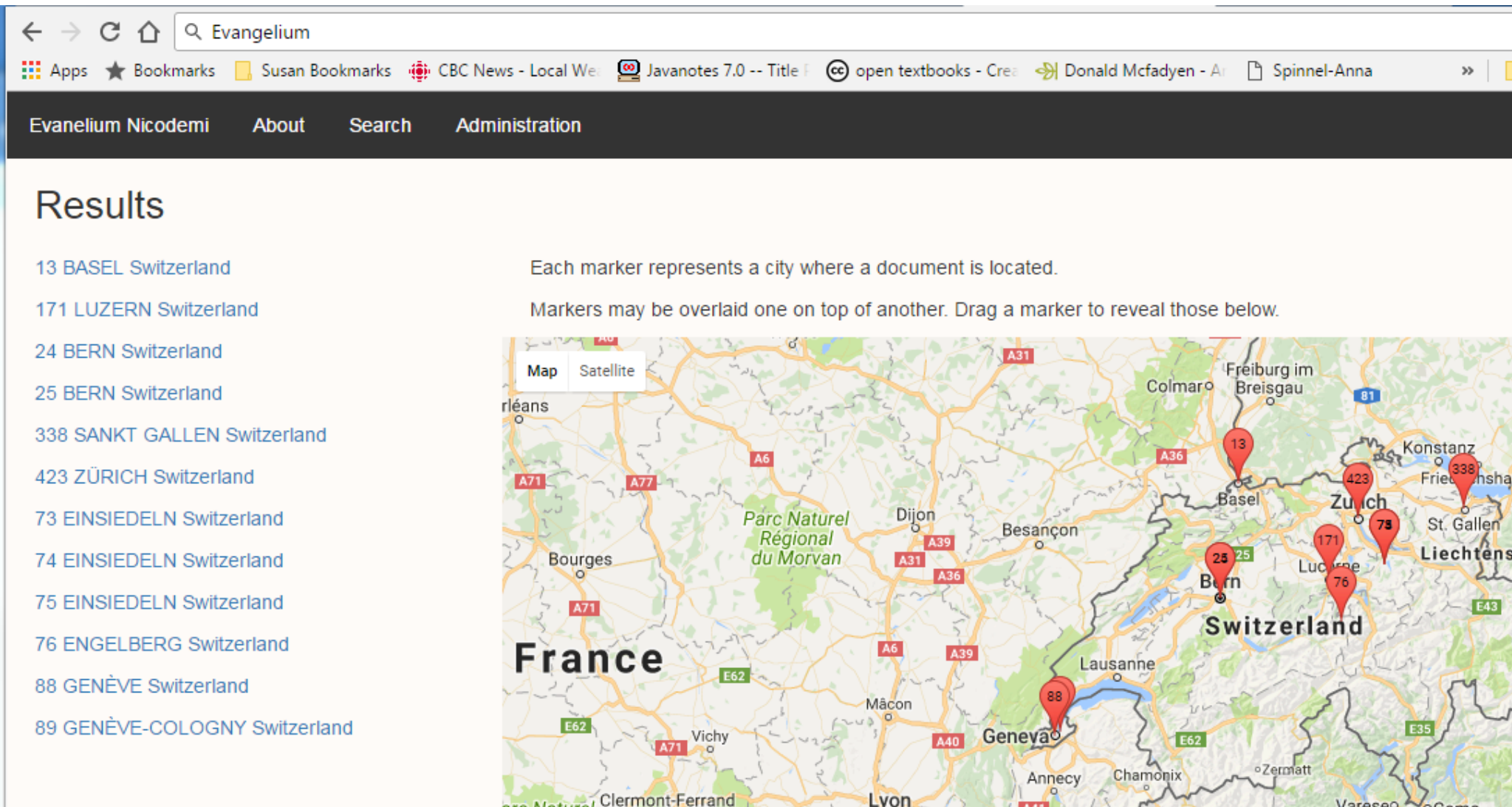
century:

Year:

from year: up to, but not including:

search

Example: application responds with *hits*



← → ↻ 🏠

📱 Apps ★ Bookmarks 📁 Susan Bookmarks 📡 CBC News - Local We: 📄 Javanotes 7.0 -- Title F 📄 open textbooks - Crea 📄 Donald Mcfadyen - Ar 📄 Spinnel-Anna »


Evangelium Nicodemi About Search Administration

Results

- 13 BASEL Switzerland
- 171 LUZERN Switzerland
- 24 BERN Switzerland
- 25 BERN Switzerland
- 338 SANKT GALLEN Switzerland
- 423 ZÜRICH Switzerland
- 73 EINSIEDELN Switzerland
- 74 EINSIEDELN Switzerland
- 75 EINSIEDELN Switzerland
- 76 ENGELBERG Switzerland
- 88 GENÈVE Switzerland
- 89 GENÈVE-COLOGNY Switzerland

Each marker represents a city where a document is located.

Markers may be overlaid one on top of another. Drag a marker to reveal those below.



Example: user sees more moving the mouse over a hit

The screenshot shows a web browser window with the search term 'Evangelium' in the address bar. The browser's bookmark bar is visible, showing various sites like 'Susan Bookmarks', 'CBC News - Local We...', 'Javanotes 7.0 -- Title F', 'open textbooks - Crea...', 'Donald Mcfadyen - Ar', and 'Spinnel-Anna'. Below the browser, a navigation menu contains 'Evanelium Nicodemi', 'About', 'Search', and 'Administration'. The main content area is titled 'Results' and lists 13 search results, each with a count and a location: '13 BASEL Switzerland', '171 LUZERN Switzerland', '24 BERN Switzerland', '25 BERN Switzerland', '338 SANKT GALLEN Switzerland', '423 ZÜRICH Switzerland', '73 EINSIEDELN Switzerland', '74 EINSIEDELN Switzerland', '75 EINSIEDELN Switzerland', '76 ENGELBERG Switzerland Stiftsbibliothek 44', '88 GENÈVE Switzerland', and '89 GENÈVE-COLOGNY Switzerland'. The entry for '76 ENGELBERG Switzerland Stiftsbibliothek 44' is highlighted in yellow, and a mouse cursor is pointing at it. To the right of the list, there is a map of Switzerland and parts of France and Liechtenstein. The map shows several red location markers with numbers: 13, 23, 25, 73, 76, 77, 88, 171, 225, 338, 423, and 443. Text above the map states: 'Each marker represents a city where a document is located. Markers may be overlaid one on top of another. Drag a marker to reveal those below.' The map also shows major cities like Dijon, Besançon, Bourges, Geneva, Lausanne, Bern, Lucerne, Zurich, Basel, Freiburg im Breisgau, Colmar, and St. Gallen, along with various roads and geographical features like 'Parc Naturel Régional du Morvan'.

Example: clicking a hit produces the complete entry

The image shows two browser windows side-by-side. The left window displays search results for 'Evangelium'. A blue arrow points from the entry '76 ENGELBERG Switzerland' to the right window, which shows the complete entry details.


Search Results (Left Window):

- 13 BASEL Switzerland
- 171 LUZERN Switzerland
- 24 BERN Switzerland
- 25 BERN Switzerland
- 338 SANKT GALLEN Switzerland
- 423 ZÜRICH Switzerland
- 73 EINSIEDELN Switzerland
- 74 EINSIEDELN Switzerland
- 75 EINSIEDELN Switzerland
- 76 ENGELBERG Switzerland
- 88 GENÈVE Switzerland
- 89 GENÈVE-COLOGNY Switzerland

Complete entry is (Right Window):


To see a location on a map... highlight the place and then right-click

<u>_id</u>	xwojzamHsz4HTeyTp
Siglum	76
City	ENGELBERG
Country	Switzerland
Repository	<u>Stiftsbibliothek</u>
<u>Shelf mark</u>	44
Material	Parchment
<u>No of leaves pages</u>	No 121 ff pp ff.
Size	
Dimensions	286-280 x 190-184 mm.
Dating	
Century	
Numeral	13
Descriptor	early



Evangelium Nicodemi, a database application

DEMONSTRATION



Evangelium Nicodemi, a database application

Next Steps

Next Steps

1. Complete the prototype

- Implement more searching techniques

Complex search

Logical expressions with *and*, *or*, *not*

- Handling of dates (years)

- Partial search

Search for word fragments

- Make corrections to existing document entries

- Adjust the document schema

tags, data types, structure, arrays

- Add security to the Administration side

Next Steps

2. Evaluate

- Consider a next iteration of prototype
- If required implement in another database management system
e.g. PostgreSQL

3. Consider other database designs

- Data warehousing ... Star schemas
- Relational