Museum Guidebooks

Team Data Science, HsH

2025 - 06 - 11

Table of contents

W	Velcome: Open Museum Guide	1
1	Guide: Public Art - Sprengel Museum	3
2	Guide: Architecture - Sprengel Museum	5
3	Guide: Exhibition Timeline - Sprengel Museum	7
	3.1 Timeline	7
\mathbf{A}	bout	9
	Wikibase - Making a Guide	10
	Foundational Assumptions / Ideal World Vision	
	Guide data model	11
	The Guide	11
	Guide Item	11
	Possible Additions	12
	Timeline	12

Welcome: Open Museum Guide

The idea! Museum have a calendar of exhibitions and a catalogue of what is on display in any give show. But this is not publishing in data repositories.

Welcome to 'Open Museum'! If museums made deposits of open data of what's on show - then their visitors could make 'play lists' of their favourite works and share them online.

The 'Open Museum' pitch is that the public take part in this cataloguing and a Citizen Science Experience.

The prototype 'Open Museum Guidebooks' has outlined the idea and is sharing the 'how to' model using Wikibase as a foundation. We believe all the infrastructure is already out there and with luck museums back catalogues could be online in no time (famous last words).

_

Inspired by the 1800s database - Corpus Johann Joachim Winckelmanns (1717–1768). Census.de

Chapter 1

Guide: Public Art -Sprengel Museum

<folium.folium.Map at 0x1ed53e66890>

Chapter 2

Guide: Architecture -Sprengel Museum

<folium.folium.Map at 0x1df1ce1f5d0>

Chapter 3

Guide: Exhibition Timeline

- Sprengel Museum

3.1 Timeline

Preview

<folium.folium.Map at 0x24d35afcb50>

8 CHAPTER 3. GUIDE: EXHIBITION TIMELINE - SPRENGEL MUSEUM

About

The idea! Museum have a calendar of exhibitions and a catalogue of what is on display in any give show. But this is not publishing in data repositories.

Welcome to 'Open Museum'! If museums made deposits of open data of what's on show - then their visitors could make 'play lists' of their favourite works and share them online.

The 'Open Museum' pitch is that the public take part in this cataloguing and a Citizen Science Experience.

The prototype 'Open Museum Guidebooks' has outlined the idea and is sharing the 'how to' model using Wikibase as a foundation. We believe all the infrastructure is already out there and with luck museums back catalogues could be online in no time (famous last words).

Inspired by the 1800s database - Corpus Johann Joachim Winckelmanns (1717–1768). Census.de

1. Use case

- A museum visitor makes a list of items that are significant to them and they want to share. The list shows the item on a map and as a table, with links to more information and data.
- A person finds the list online and make a visit to the museum.
- The public catalogues exhibition dates and information on Wikidata. The public catalogues items on display in an exhibition.

2. Value proposition

- The public can learn about chosen topics using museums.
- The public can learn data science skills.
- Museums can attract more visitors.
- Museums can support deep learning in their respective knowledge domains.
- A permanent record of museums work will be created.
- 3. Persona and storyboard (needs / blocking)

10 About

• Musuem visitor: Needs: The visitor want to share info with friends and family about their favourite artworks. Blocking: The museum has no data feed of exhibition dates or what is being exhibited. If the visitor wanted to share the information it would be a long, long, labour of love.

- Musuem exhibition organiser: Needs: Visitors and engagement. Blocking: No exhibition data available for people to find out about contemporary or past exhibitions. The museum should have all this data but is not making it public.
- Special interest group (Climate change education group): Need: Ensure
 access understanding of climate change is represented in regional museums. The group would contribute volunteer time to cataloging efforts and
 outreach. Blocking: Not able to find dates of exhibitions or information
 about what was exhibited.

4. Problem / solution

Problem: A museum visitor cannot share information about exhibitions or the exhited items as museums don't publish this data.

Solution: Support museums visitors to publish and use the data as a citizen science project 'Open Musuem'. The data is has two parts: A. A calendar of exhibitions, and B. A catalogue of items in an exhibition. Both of these data would be catalogues and indexed using Wikimedia infrastructure.

5. A schematic

Wikibase - Making a Guide

This is a workflow to create a museum guide based on an Linked Open Data utilising Wikidata, Wikimedia Commons, Wikibase, and Wikipedia.

The guide and its items are stored in a Wikibase instance. Most of the data used in the items are pulled from Wikimedia Commons. If Wikidata entries exist, they will be linked to the items.

The goal is to make existing data usuable for the museum and the generated information accessible to the public.

Foundational Assumptions / Ideal World Vision

The Open Museum (Idea World Vision)

- All artwork from exhibitions, architecture, and public art is databased with pictures and geolocation on *Wikimedia Commons*
- Some items have Wikidata and Wikipedia entries
- A calendar of a museums exhibitions exists in Wikidata

Guide data model 11

Guide data model

Our example guide has 9 items. Because 9 is a magic number!

(= has 9 Guide items)

The Guide

- Title / ID (mandatory)
- Authors
- Creation date
- Description
- List of guide items (mandatory)
- Location
- Category (from Wikimedia Commons?)

Label	Example Value	Datatype	Note
Title	Sprengel Guide or Q001	Text	mandatory. can be a Q-number
Author	Erika Mustermann	String, or maybe Item if we have user accounts	optional, repeatable.
Creation	n <i>2025-04-07</i>	Point in Time	optional
Date			
Descrip	tiGuide to the public art around Sprengel museum.	String	optional
Guide	Another Twister	Item	mandatory, repeatable. for 9 items we need 9 of
Item			these entries
Locatio	n $Hanover$	String	optional
Categor	yImages of	String	optional
Sculptures			

Guide Item

(= part of Guide object)

- Title
- Picture
- Geolocation / coordinates
- Description
- Wikidata ID (if available)
- \rightarrow ideally, all this info can be taken from Wikimedia Commons

12 About

Label Example Value	Datatype Note		
Title Another Twister or $Q20$	String		
PictureAnother_Twister.jpg	Commons automatically searches the <i>File:</i> media namespace on Commons file		
Geoloc á 2 0163442,	Geographic		
9.739542	coordi- nates		
Descrip Simul pture by Alice Aycock	String		
Wikida Q 523722	External can be used to get additional		
ID (transforms to https://www.wikidata	identi- information, such as links to digg/wiki/QWAKTBENIa. the property has to be set up with a formatter URL		

Possible Additions

Timeline

- \rightarrow for an overview of architecture
- \rightarrow take one building (Sprengel museum) and document when its individual buildings were added