JYVÄSKYLÄN YLIOPISTO
UNIVERSITY OF JYVÄSKYLÄ

Working with Koha REST API: Making Things Easier

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Open Science Centre / University of Jyväskylä

University of Jyväskylä

/ One of the top universities in Finland

/ Student recruitment across Finland and internationally

/ 160-year history (Teacher Seminary in 1863)

/ Unique campus near the city centre

University of Jyväskylä key figures

6
Faculties

14,300
Degree students

+ 26,000
Students in the Open University

2,800
Employees

850
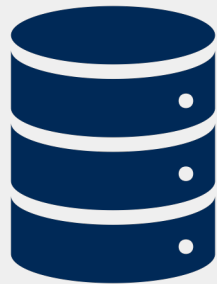Researchers

Around **222** M€
Total income

Open Science Centre (OSC)

- coalition of Jyväskylä University Library and University Museum

- educates the JYU community in information seeking and open science practices

- collects and preserves research materials and publications of the university

- collects, preserves, studies and exhibits items related to the past and present of the university, cultural history and the diversity of nature

OSC Development and System Support Team

Development around/between OSC:s core systems
(Institutional repository, research information
system, library system, museum system.)

"In API We Trust and Open Source Is Our friend"

About Koha Rest API

- "An application programming interface (API) is a way for two or more computer programs to communicate with each other." (Wikipedia contributors. (2023, August 6). API. In Wikipedia, The Free Encyclopedia. Retrieved 07:53, August 8, 2023, from https://en.wikipedia.org/w/index.php?title=API&oldid=1168939831)

- "Representational state transfer (REST) is a software architectural style that was created to guide the design and development of the architecture for the World Wide Web." (Wikipedia contributors. (2023, August 3). Representational state transfer. In Wikipedia, The Free Encyclopedia. Retrieved 08:01, August 8, 2023, from https://en.wikipedia.org/w/index.php?title=Representational_state_transfer&oldid=1168609319)

Koha REST AP

Version 1 - OpenAPI 2.0

Introduction This API is documented i
following authentication mechanisms * H
Cookie-based Both _Basic authenticatio
preferences. ## Errors The API uses stan
API call. The body of the response will be
prevent the passed due date to be applie
offer additional attributes in their error res
Filtering responses The API allows for
syntax. The query can be added to the re
special header `x-koha-query` For simple
the fieldname matches one of the fields a
refine that with more complex matching
"clause": "value" } }`. Available matching
can filter on multiple fields by adding ther
in an "AND" query, whilst combining the
"field2": "value2" }` will filter the response
field2 containing value2 for example. Add
response one can query on the related d

Applications developed at OSC based on the Koha REST API

- Mobile library card for MyJYU mobile app
- Bulk marc record importer
- Script that writes off expired fines
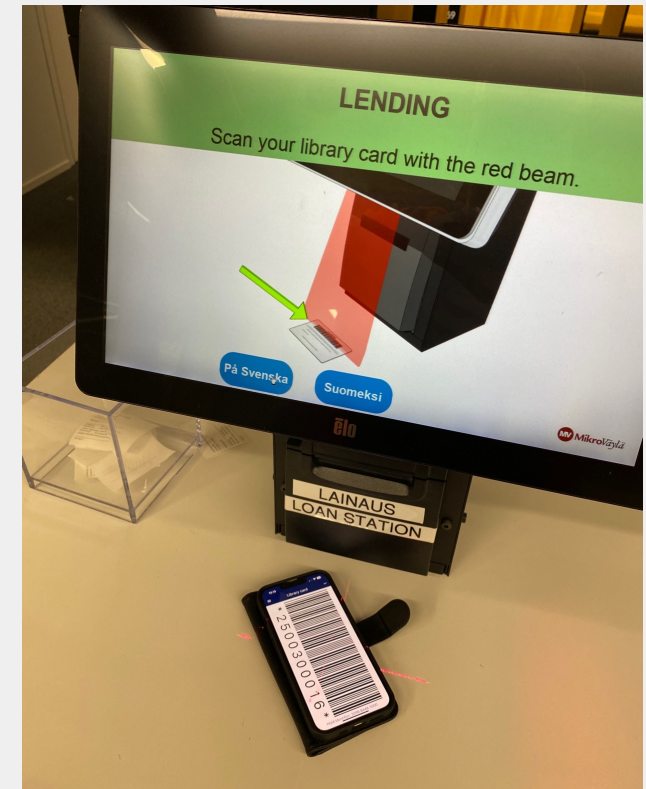
MyJYU - mobile app

- Student application that staff can also use.
- Daily schedules, campus restaurants, campus map, etc.
- Developed by JYU's Digital Services.
- OSC developed a connection to Koha.

MyJYU as a library card

- Students and staff members can register themselves as new patrons.

- The program checks using the Finnish personal identification number whether an existing account can be found.

- It retrieves the existing library card barcode or creates a new account.

Marcceri

Marcceri - a bulk MARC record importer

It combines a web interface with USEMARCON (a rule-based MARC record manipulation program https://www.kiwi.fi/display/Marc21/USEMARCON) and imports converted MARC records into Koha via REST API.

Marc-tiedosto (mrc-, xml- tai

Choose file 20230731_33...

Toimittaja

Ebc-dda

Muunna

Aloita alusta

Marcceri in action

Script that writes off expired fines

- Expired payments are not eligible for collection.

- Previously, expired payments were manually removed based on a Koha report. Now, a scheduled script handles the removal of payments.

Conclusion

- A functional and comprehensive API enables streamlining workflows and developing new functionalities outside the library system.

- Software development can be done using different programming languages, which expands the pool of available experts.

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Thank You !