CERN OSPO **OSSC**
Software @CERN

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VHS presenting.

12-months tech. student @CERN

Fruit of labour …

1. the OSPO logo
2. OSPO promo. Material
3. OSPO catalogue

Thanks for being here. ☺

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AGENDA for today.

01

background

Brief reminder of the OSPO.

02

details

The design of the catalogue, in more detail.

03

conclusion

Summary and answering questions.

01

BACKGROUND

Axel Naumann spoke of the OSPO, 21 OCT.

WHO: CERN'S **OSPO**

PROJECT EXPOSURE
Embrace projects and bring attention to them – Be it soft- or hardware.

BEST PRACTICES
Train CERN's community on best practices, tools, licenses, strategies...

DUE DILIGENCE
Facilitate due diligence on Open Source dissemination.

GUIDANCE & ADVICE
Provide guidance and recommendations on implementations.

"… the OSPO is *mandated to provide a catalogue of CERN's open source* that is **accessible**, and **guide** interested (external) parties to opportunities, projects, and experts through the public catalogue …"

CERN OSPO mandate
30/05/2023

GOALS of the catalogue.

OBJECTIVE

Developing an **public, searchable catalogue** for CERN's open-source software projects.

APPROACH

1	2	3
front-end	**back-end**	**database**
User-centred, accessible UI.	Simple to maintain, least effort.	Remains relevant for the long-term.

02

DETAILS

What makes up the catalogue?

CATALOGUE
overview

Complete overview of the catalogue.

User Interface

Presentation Layer

GitLab Pages

Application Layer

Hugo

Static page generation

Python

Data exporting

Data retrieval

Communication Layer

Python - FastAPI

hCaptcha

Form interaction

Data fetch & update

Data Layer

PostgreSQL
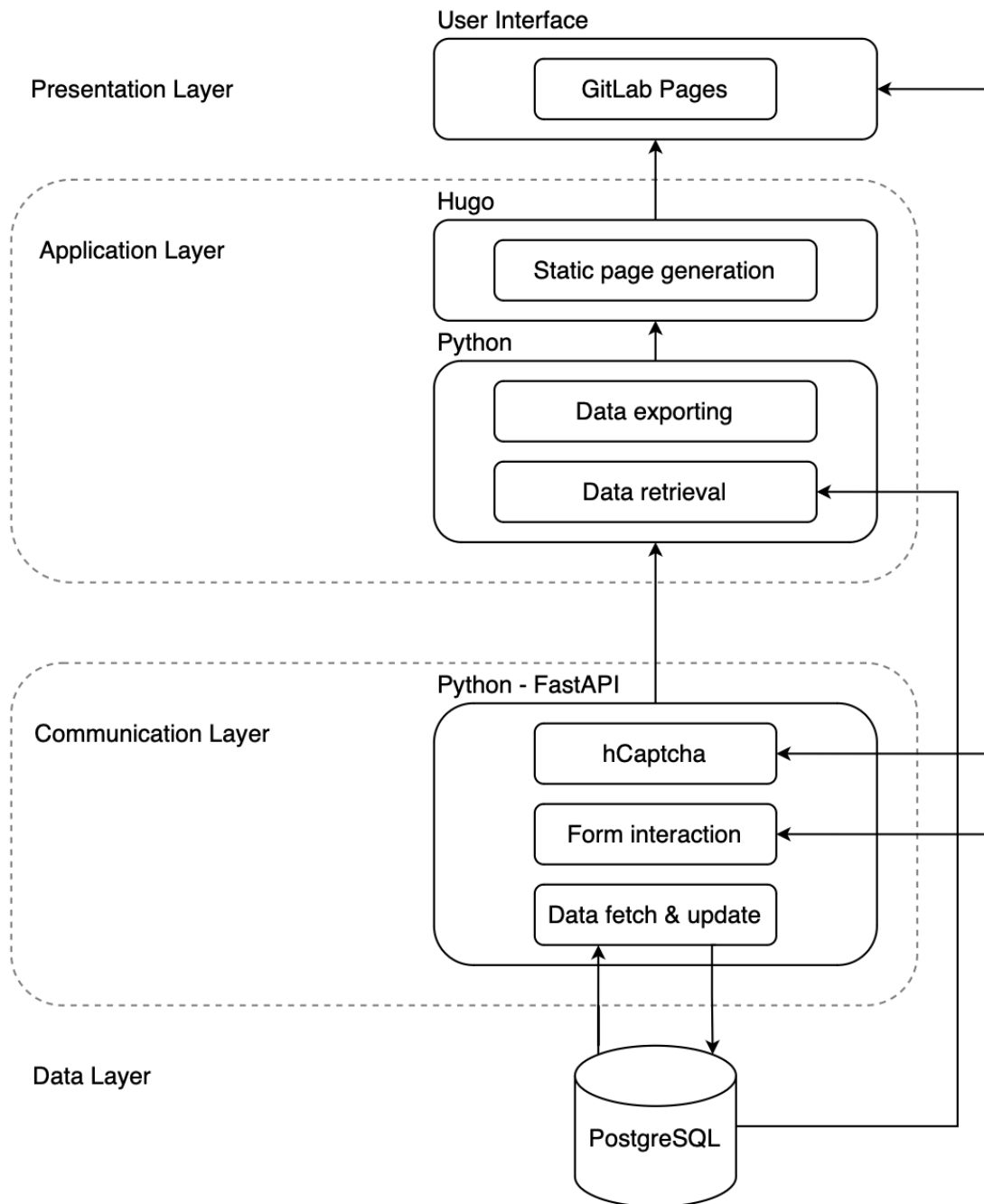
the **FRONT-END**

OBJECTIVE

- search, filter, tags
- essential info.
- submission forms
- content managing

the **ISSUE**

>>   **Project ready? Submit it!**

An issue is created. The OSPO reviews it. And...

FRONT-END lifecycle

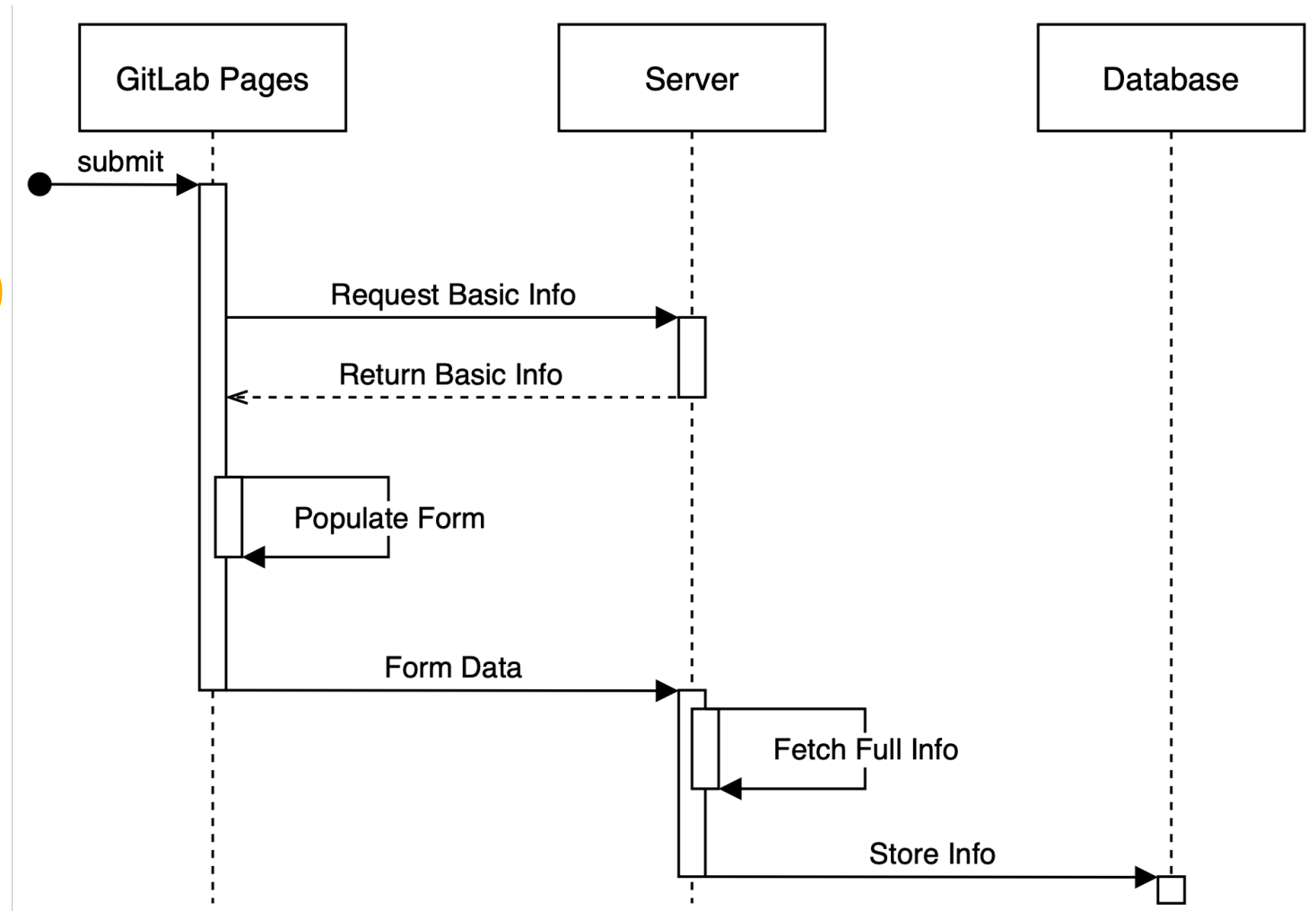Fetching information to-and-from database to a *static* webpage.

Fig. 8: Sequence diagram of the project submission form.

the **BACK-END**

1   **API integration**

Interactions between the client/UI and the API server.

2   **GitLab & GitHub data handling**

DataHandler classes for each instance required to retrieve and update any information for display.

3   **usage of CI/CD**

Pipelines help in keep code integrity and keep data fresh & up to date.

BACK-END lifecycle
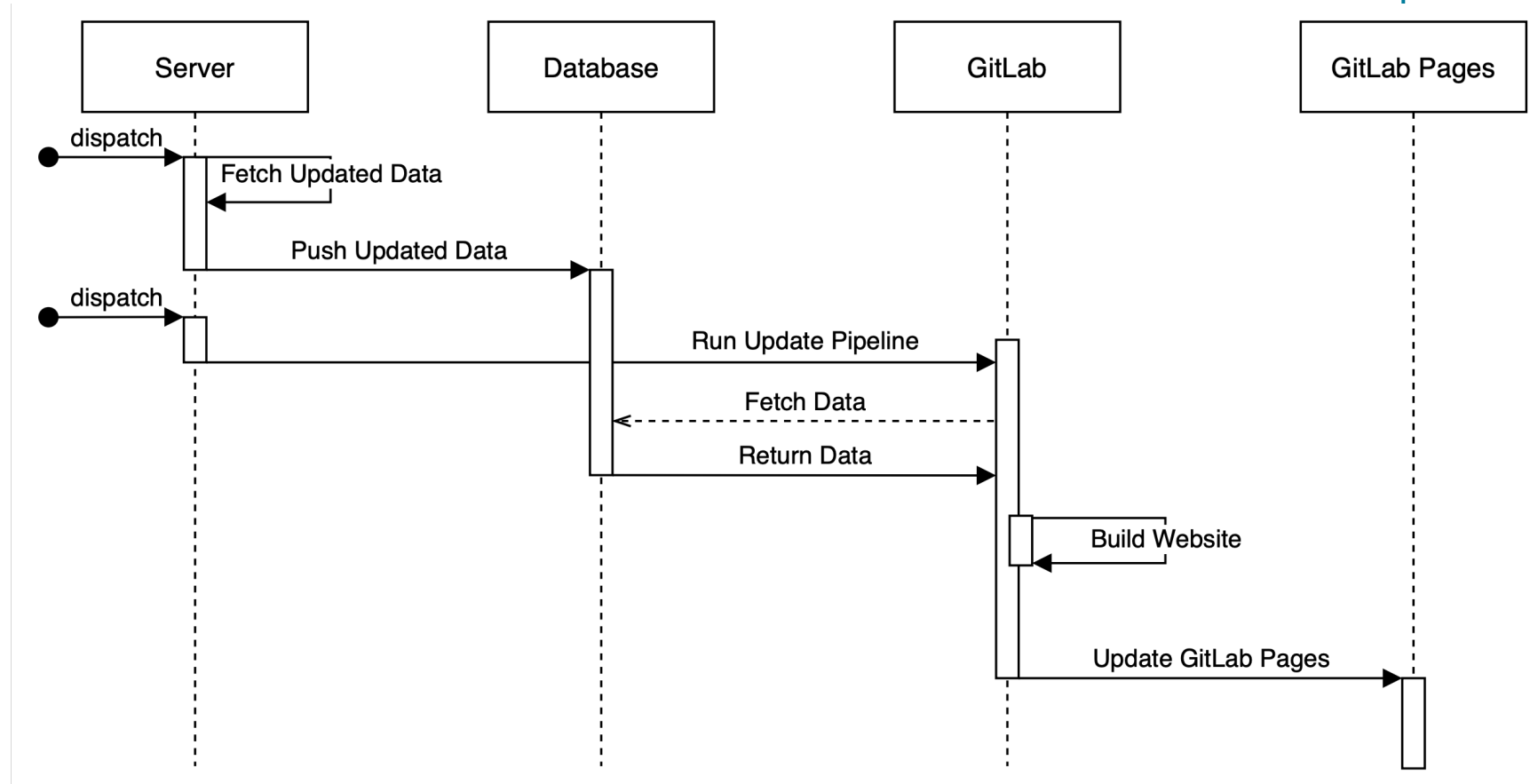
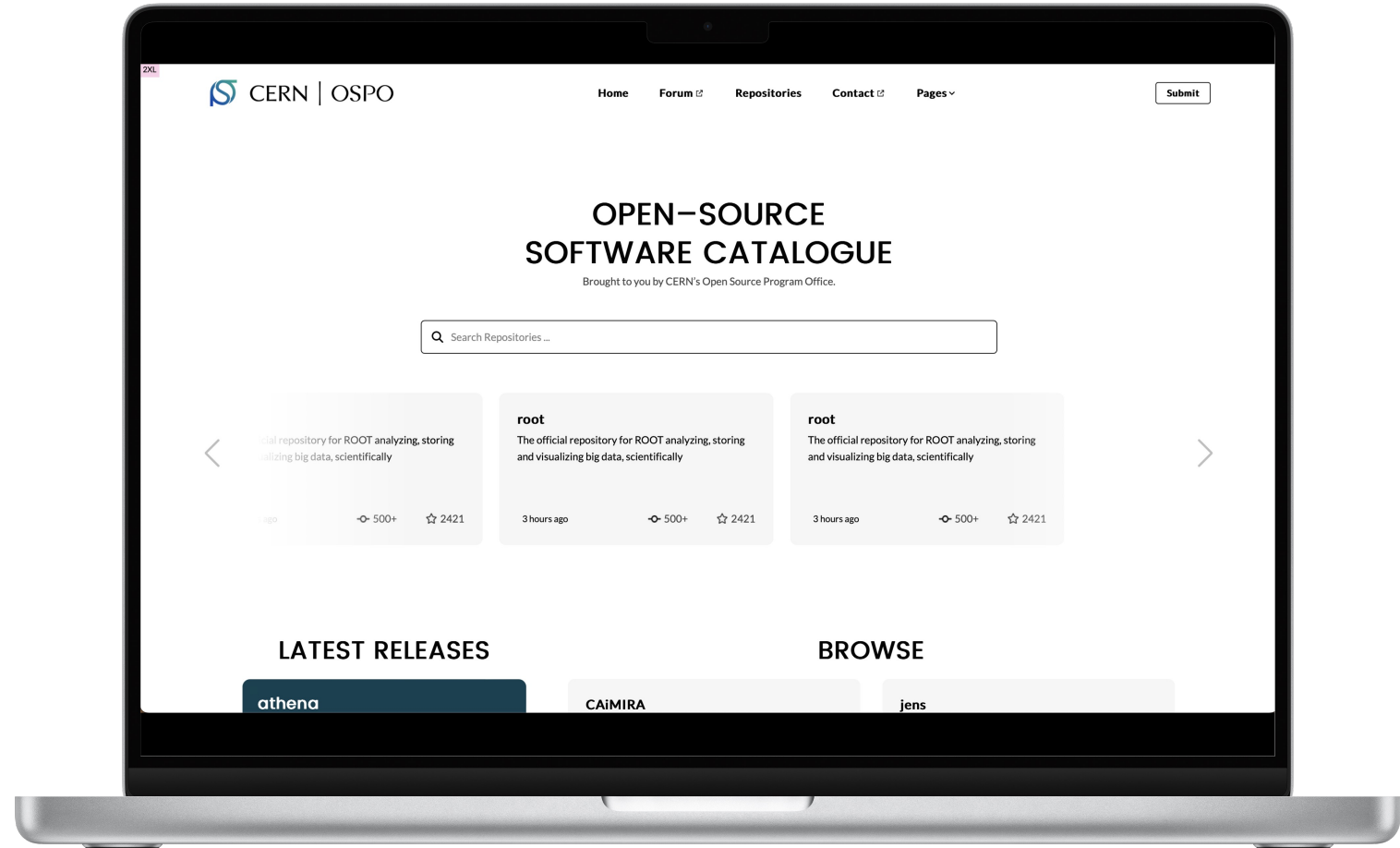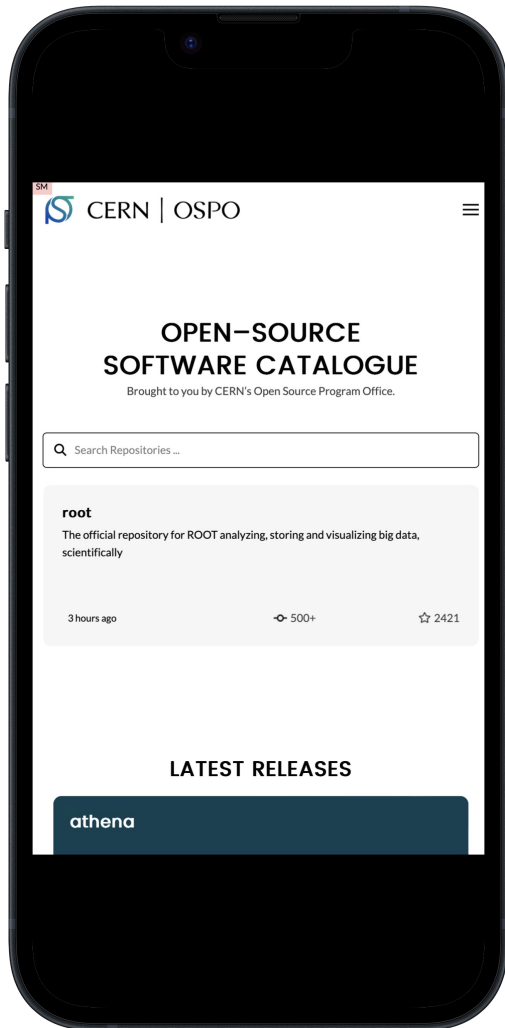Keeping all information on the catalogue fresh & up-to-date.

Fig. 9: Sequence diagram of the webpage's updating mechanism requirement.

03

CONCLUDING

Wrapping up, time for questions.

view on **ANY DEVICE.**

what the catalogue **IS**

a. **A platform to bring exposure to your projects.**

Consult the OSPO to get your project out there for the world to see.

b. **A place to find similar projects, to build collaboration.**

Build a better idea together – multiple minds have infinitely more potential than one.

c. **A guide for external parties to find an interesting project.**

To fund, to follow the development of, or to apply to their work.

what the catalogue **IS NOT**

a. **A public library of all existing open-source in the world.**

Made in CERN, for CERN. All projects go through the CERN OSPO.

b. **A holder of projects that exist in plentiful supply.**

The OSSC holds criteria for the projects that could be uploaded.

c. **Version control platform.**

Unlike GitHub or GitLab, the catalogue holds a copy (or card) of the source project.

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THANKS!

QUESTIONS?

... contact the CERN OSPO
Open.Source@cern.ch
https://opensource.web.cern.ch
OSPO forum (*CERN log-in*)

... contact me
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