

# Scaling down: IIF at small scale

Presenting personal collections using IIF

# About me

- 👉 Collector of printed materials...
  - 👉 Books, magazines, postcards
- 👉 ...from different fields
  - 👉 Art, architecture, fashion, (interior) design, children's books, printed patterns, type faces and many more
- 👉 Professional background in digital libraries (15+ years)



# About my projects

👉 Spring 2020: "Stay at home"

👉 Catalogued my books

👉 Digitized some material using a mobile phone and rescanned everything later on...



# Technical requirements

## Very high level

### Must have

 Low cost (only domain names and maybe storage)

 Offline generation of derivatives, manifests and site (HTML)

### Should have

 Workflow automation / integration of own scripts

 Version Management

 HTTPS



# Infrastructure

👉 GitHub

👉 GitHub Actions

👉 GitHub Pages

👉 Hosting provider (Host Europe) for Domains and additional storage



# GitHub Actions

## Example

- 👉 Remove unneeded dependencies from the runner to free up some space
- 👉 Install required dependencies (Docker images, Python, Node JS)
- 👉 Generate IIF derivatives
- 👉 Deploy them to external storage, if necessary
- 👉 Generate additional files (Images, Node dependencies)
- 👉 Run Hugo to create the site itself
- 👉 Deploy to GitHub Pages



# GitHub Limitations

## 👉 Storage!

👉 Size of pages can't exceed 3.5 GB

👉 Solution: Deploy generated derivatives somewhere else using `rsync / ssh`

👉 Storage of Action Runner is limited

👉 Solution: Segment derivative generation and deployment

👉 Repository storage is limited

👉 Possible Solution: Switch from JPEG to JPEG XL

## 👉 Runtime

👉 Action runs are killed after 60 min



# Tools

## Content generation and storage

- 👉 ScanTailor (for post processing of scans)
- 👉 LibVIPS (for derivatives) as a Docker Image
  - 👉 JPEG Images (JPEG XL Demo working)
- 👉 Hugo (static site generator)
  - 👉 YAML (also source for manifests)
  - 👉 Markdown
- 👉 Git





# Tools

## Presentation

👉 OpenLayers

👉 Mirador (with some patches)

👉 jQuery

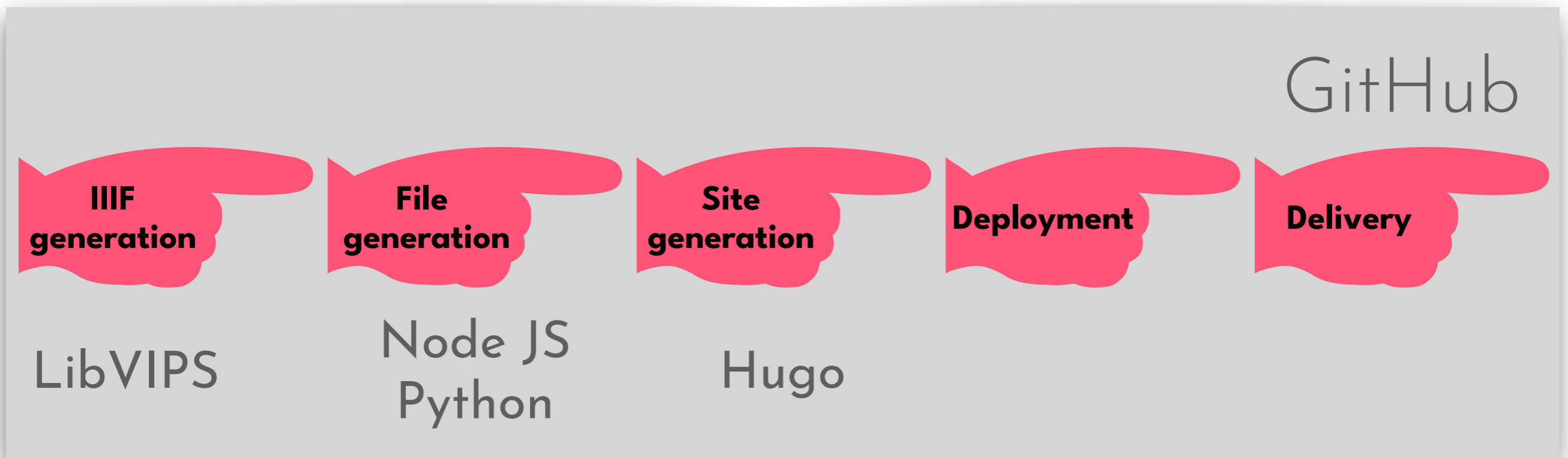
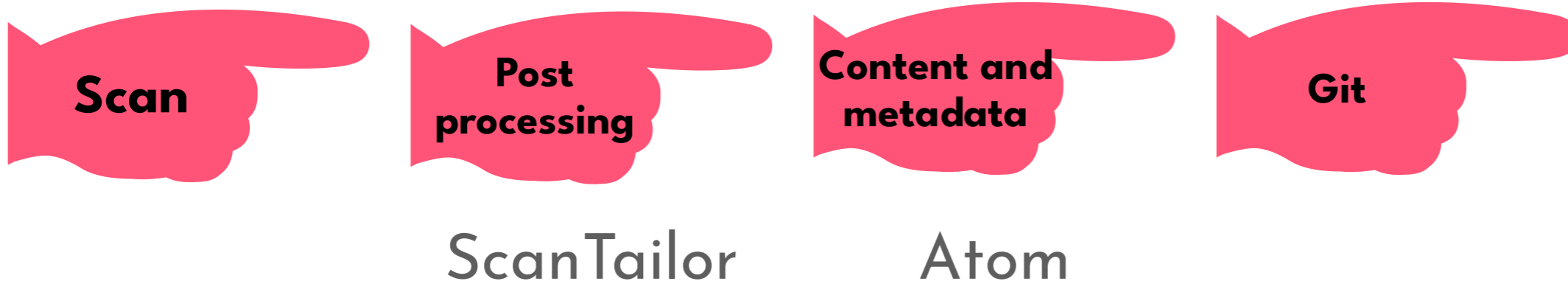
👉 Bootstrap

👉 And some other CSS / JS frameworks



# Workflow

Generalized and simplified



# Lessons learned

- 👉 Doesn't scale into the realm of digital libraries
  - 👉 But good enough for personal collections!
  - 👉 Great solution for experiments
- 👉 Choosing a IIIF (viewer) implementation could be easier
  - 👉 Compatibility matrix / implementation levels or certification?



# Next steps

👉 More functionality

👉 Interaction with materials

👉 Maps

👉 More media types

👉 Stereoscopic images

👉 Better metadata - for data donation to WikiSource



# Demo



# Thanks for your time!

## Any questions?

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