

Zenodo Data Archive

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CS 4624 Multimedia, Hypertext, and Information Access

Virginia Tech

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Goals at the beginning of the semester:

- Set up a data archive application (Zenodo) on a server running CentOS 7 operating system
- Configure and populate archive with datasets
- Create detailed Admin / User Guide
- Add additional scripts for bulk uploads

➤ All goals completed!

Timeline

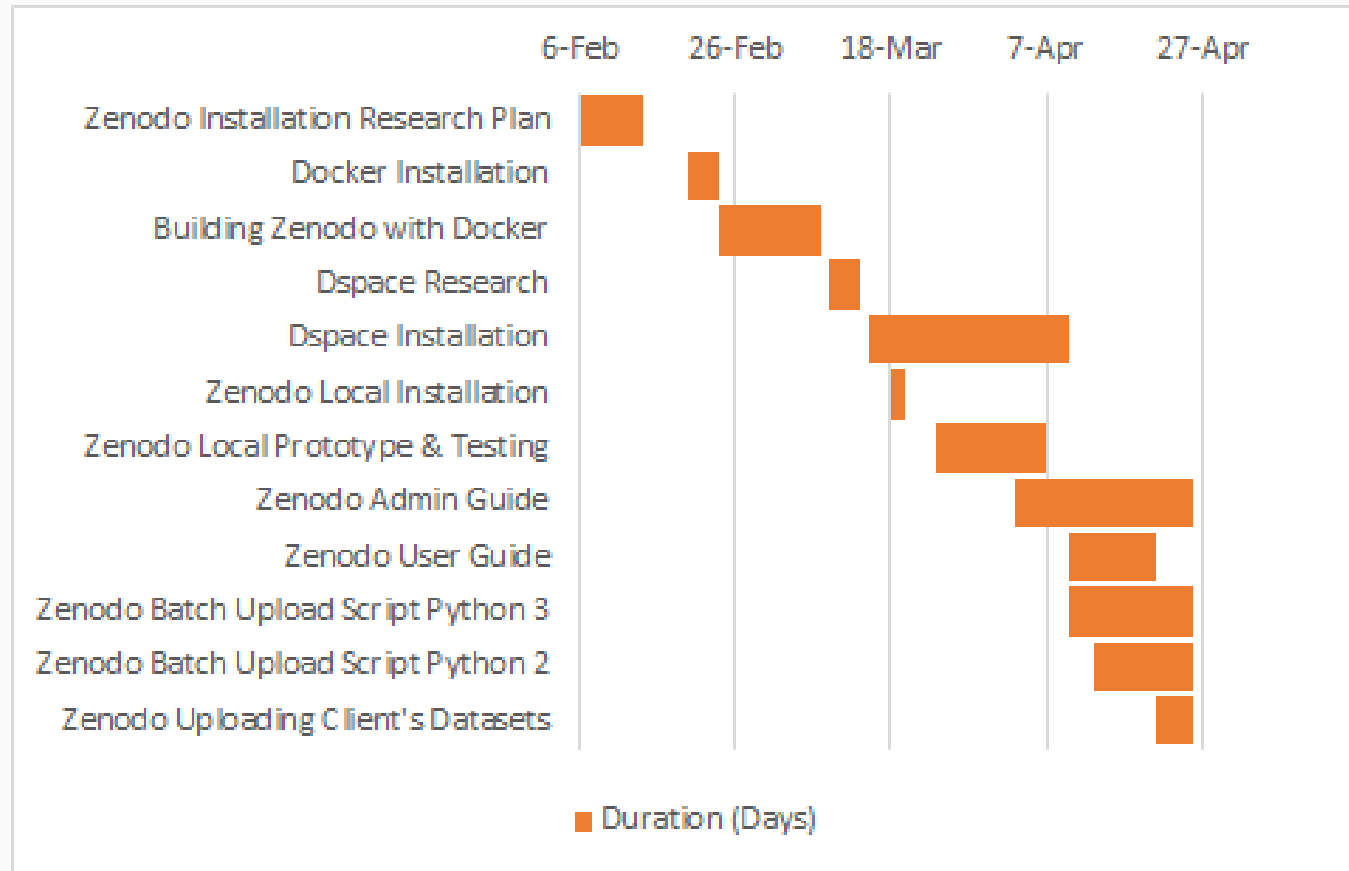


Figure: Gantt Chart representing the timeline of our project

Design

Tools Used:

Linux CentOS

SSH

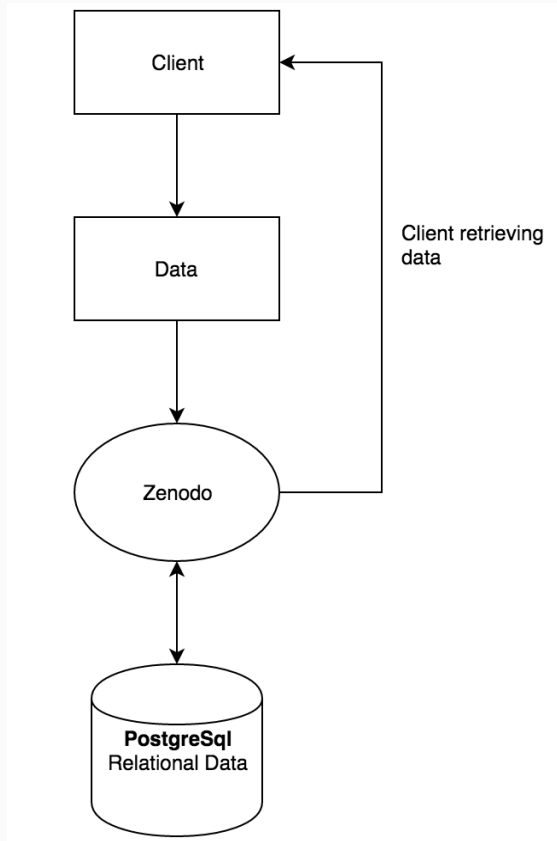
Zenodo

DSpace

PostgreSQL

Python

Zenodo Developer API



Data Flow Design

Refinement

Python Scripts

Zenodo Developer API

Single Upload

Bulk Upload

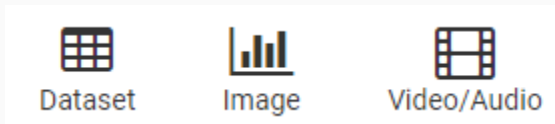
Python 2 v Python 3

Delete?

```
>>> data = {
...     'metadata': {
...         'title': 'My first upload',
...         'upload_type': 'poster',
...         'description': 'This is my first upload',
...         'creators': [{'name': 'Doe, John',
...                         'affiliation': 'Zenodo'}]}
...     }
... }
>>> r = requests.put('https://zenodo.org/api/deposit/depositions/%'
...                   params={'access_token': ACCESS_TOKEN}, data=j
...                   headers=headers)
>>> r.status_code
200
```

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Upload different types of data



Search for different data sets

Create communities and upload to them

Export Metadata

Create additional scripts

April 6, 2017

Dataset Closed Access

Test Data

John Sizemore

Dublin Core Export

```
<?xml version='1.0' encoding='utf-8'?>
<oai_dc:dc xmlns:dc="http://purl.org/dc/elements/1.1/" xmlns:oai_dc="http://www.openarchives.org/OAI/2.0/oai_dc/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.openarchives.org/OAI/2.0/oai_dc/ http://www.openarchives.org/OAI/2.0/oai_dc.xsd">
  <dc:creator>John Sizemore</dc:creator>
  <dc:date>2017-04-06</dc:date>
  <dc:description>&lt;p&gt;This is test data.&lt;/p&gt;</dc:description>
  <dc:identifier>10.1234/foo.bar</dc:identifier>
  <dc:identifier>https://zenodo.org/record/45450</dc:identifier>
  <dc:identifier>oai:zenodo.org:45450</dc:identifier>
  <dc:rights>info:eu-repo/semantics/closedAccess</dc:rights>
  <dc:subject>test</dc:subject>
  <dc:subject>data</dc:subject>
  <dc:title>Test Data</dc:title>
  <dc:type>info:eu-repo/semantics/other</dc:type>
</oai_dc:dc>
```

Administrator Guide

Installation

Configuration

API Information

Adding Scripts

General User Guide

Account Creation

Search

Upload

Communities

Metadata Export

Demo

Local Zenodo Installation

Upload a dataset

Basic information

Licensing information

Search for a dataset

Exporting metadata

Automated Python Scripts

Single upload

Batch upload

Publishing option

Lessons Learned

- Planning Effectively for a Large Technical Project
 - Short term
 - Long term
 - Unforeseen issues
 - Port issues
- The Importance of Communication
 - Long distance communication
 - Dynamic project goals in accordance with client's needs
- Attention to Detail

Acknowledgements



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[3]

Dr. Seungwon Yang
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