Perseus Digital Library
Scaife Viewer

James K. Tauber
Eldarion, Inc.

@jtauber

https://jktauber.com/

Outline

- History and Motivation

- **Tour of Scaife Part 1**

- Text Pipeline, CTS URNs, CapiTainS

- Architecture

- **Tour of Scaife Part 2**

- **Some Code Examples**

- How to Contribute

- Roadmap for Future Work

History and Motivation

- Perseus Digital Library

- P4 "Hopper"

- Make it much easier to add new texts

- Make a more open and extensible platform

- Scaife Viewer

Scaife Viewer

- Part of the Open Greek and Latin Project

- Funded by the Humboldt Chair of Digital Humanities at the University of Leipzig

- Developed by Eldarion, Inc.

- Open Source under an MIT License

- Named for Ross Scaife (1960–2008)

Tour of Scaife
Part 1

First1KGreek Pipeline

- Lace OCR

- Markup (TEI XML / EpiDoc / CapiTainS)

- GitHub

- Existing Perseus Digital Library

- Other repositories

CTS URNs

cts namespace   **work identifier**   **passage reference**

urn:cts:greekLit:tlg0012.tlg001.perseus-grc2:1.1-1.7

tlg0012.tlg001.perseus-grc2

text group   **work**   **edition / translation**

TEI XML (EpiDoc)

- Text Encoding Initiative

  `http://www.tei-c.org/index.xml`

- EpiDoc

  `http://www.stoa.org/epidoc/gl/latest/`

- Markup

- Transcription

- Metadata

CapiTainS

- Software suite and guidelines for Citable Text

  `http://capitains.org/`

- Directory Structure

- Metadata Files

- References Declaration

Directory Structure

```
data/
   └─  <textgroup>/
          ├─  __cts__.xml
          └─  <work>/
                 ├─  __cts__.xml
                 ├─  <work-identifier-1>.xml
                 └─  <work-identifier-2>.xml
```

References Declaration

1.7

```
<TEI xmlns="http://www.tei-c.org/ns/1.0">
   ...

   <text xml:lang="grc">
      <body>
         <div type="edition" ... >
            <div type="textpart" subtype="Book" n="1">
               ...

                  <l n="7">Ἀτρεΐδης τε ἄναξ ἀνδρῶν καὶ δῖος Ἀχιλλεύς.</l>


   /TEI/text/body/div/div[@n="1"]//l[@n="7"]
```
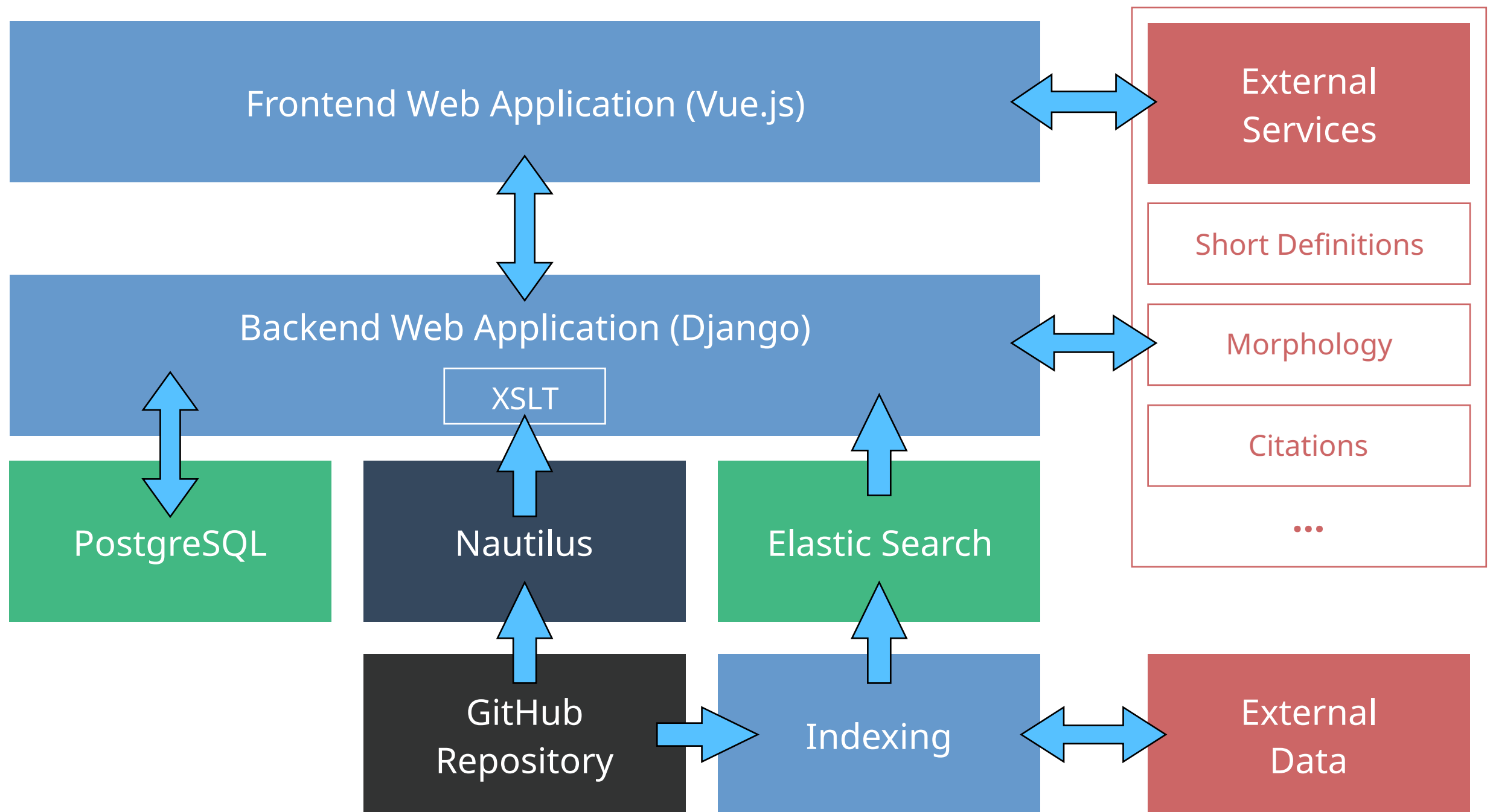
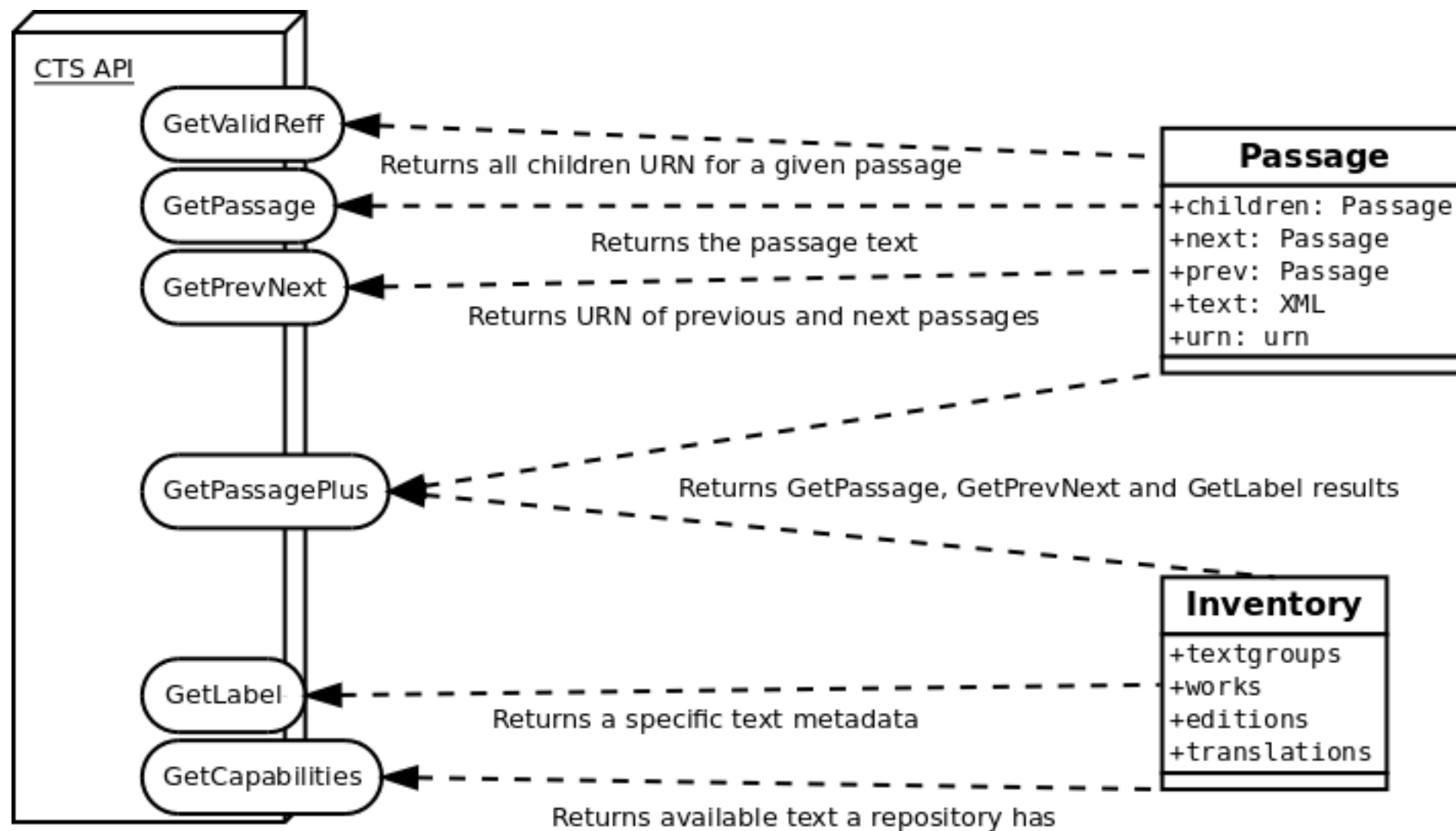# References Declaration

1.7

```
<refsDecl n="CTS">
  <cRefPattern
    n="line" matchPattern="(\w+).(\w+)"
    replacementPattern="#xpath(/TEI/text/body/div/div[@n='$1']//l[@n='$2'])">
    <p>This pointer pattern extracts Book and Line</p>
  </cRefPattern>
  <cRefPattern
    n="book" matchPattern="(\w+)"
    replacementPattern="#xpath(/TEI/text/body/div/div[@n='$1'])">
    <p>This pointer pattern extracts Book</p>
  </cRefPattern>
</refsDecl>
```

/TEI/text/body/div/div[@n="1"]//l[@n="7"]

Architecture

Nautilus and the CTS Protocol

Tour of Scaife
Part 2

Widget Architecture

- Vue.js components

- Inherit from Widget component

- Internal state

- Shared reader state

- Calls to external services

Some Widget Code Examples

How to Contribute

https://github.com/scaife-viewer/scaife-viewer

- Look at Issues

- Join our Slack workspace

- New and Improved Texts

- Internationalisation and Localisation

- New Widgets (and/or external services)

- Core Architecture

Roadmap

- Localisation

- Personalisation

- Reading Lists

- Note Taking

- Text Alignment

- Tree Banks

- External Citations

- Images