

Exercise METS 2

The Postcard

Information about the postcard

- Each side digitized as separate hi-res TIFF images along with derived PNG thumbnail images
- A TEI transcription of the text written on the back
- MODS descriptive metadata record for the postcard
- Basic technical metadata for all files is available: format, size, checksum



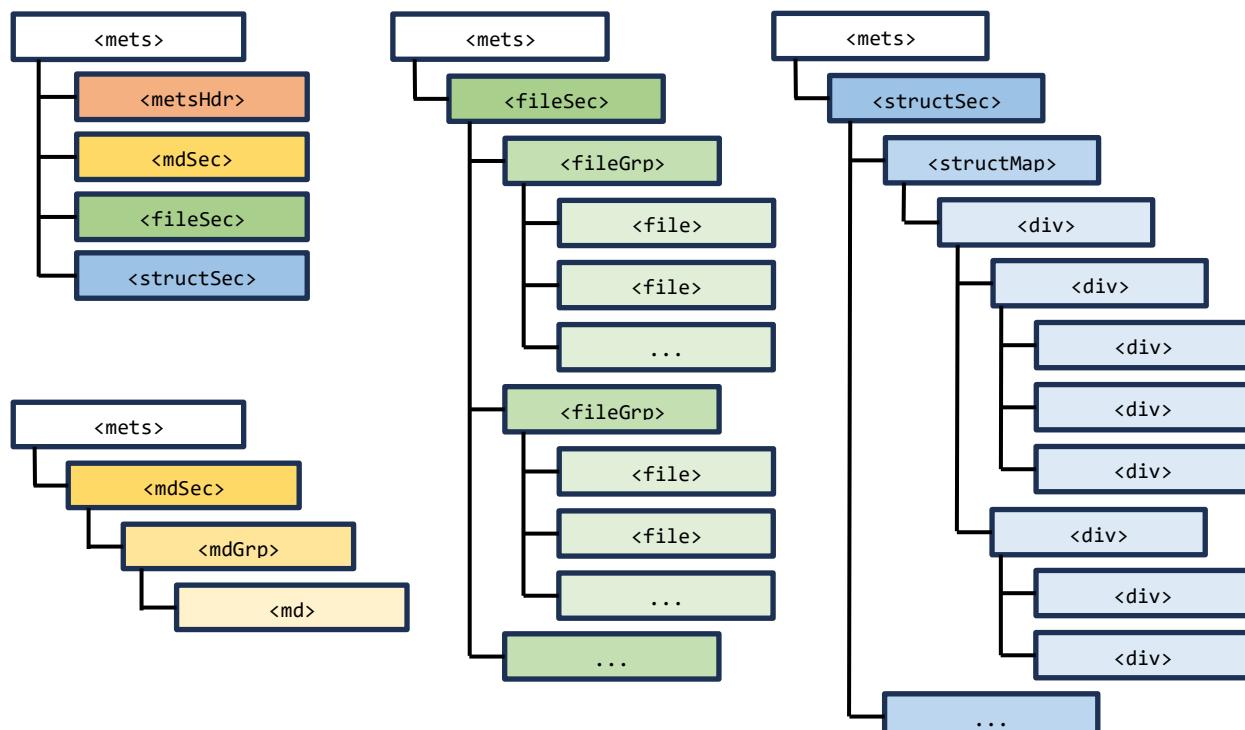
Folder and the files for the postcard:

Postcard_Hemingway_001

- front.tif
- back.tif
- front.png
- back.png
- back.tei
- mods.xml

Elements to use

- METS 2 White Paper: <https://github.com/mets/METS-schema/blob/mets2/METS2.md>
- METS 2 Schema Documentation: https://mets.github.io/METS_v2_Docs/mets.html





Metadata Encoding & Transmission Standard

My solution



The Postcard, one solution

There exist lots of correct solutions. Here is one of them. The solution contains references to the MODS metadata and the actual postcard files. The basic technical metadata of the files is given in the file section.

```
<?xml version="1.0" encoding="UTF-8"?>
<mets xmlns="http://www.loc.gov/METS/v2"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xsi:schemaLocation="...">

<mdSec>
    <md USE="DESCRIPTIVE" ID="DMD1">
        <mdRef MDTYPE="MODS" LOCTYPE="URI" LOCREF="mods.xml"
               CHECKSUM="1234567890ABCDEF" CHECKSUMTYPE="MD5"
               MIMETYPE="application/mods+xml" SIZE="800" />
    </md>
</mdSec>
<fileSec>
    <fileGrp USE="HIRES_IMAGES">
        <file ID="FRONT_TIFF" CHECKSUM="1234567890ABCDEF" CHECKSUMTYPE="MD5"
              MIMETYPE="image/tiff" SIZE="123456">
            <FLocat LOCTYPE="URI" LOCREF="front.tif" />
        </file>
        <file ID="BACK_TIFF" CHECKSUM="1234567890ABCDEF" CHECKSUMTYPE="MD5"
              MIMETYPE="image/tiff" SIZE="123456">
            <FLocat LOCTYPE="URI" LOCREF="back.tif" />
        </file>
    </fileGrp>
    <fileGrp USE="LORES_IMAGES">
        <file ID="FRONT_PNG" CHECKSUM="1234567890ABCDEF" CHECKSUMTYPE="MD5"
              MIMETYPE="image/png" SIZE="1234">
            <FLocat LOCTYPE="URI" LOCREF="front.png" />
        </file>
        <file ID="BACK_PNG" CHECKSUM="1234567890ABCDEF" CHECKSUMTYPE="MD5"
              MIMETYPE="image/png" SIZE="1234">
            <FLocat LOCTYPE="URI" LOCREF="back.png" />
        </file>
    </fileGrp>
    <fileGrp USE="TRANSCRIPTS">
        <file ID="BACK_TEI" CHECKSUM="1234567890ABCDEF" CHECKSUMTYPE="MD5"
              MIMETYPE="application/tei+xml" SIZE="1234">
            <FLocat LOCTYPE="URI" LOCREF="back.tei" />
        </file>
    </fileGrp>
</fileSec>
<structSec>
    <structMap>
        <div LABEL="Postcard from Ernest Hemingway to Gertrude Stein" MDID="DMD1">
            <div LABEL="Front of Postcard">
                <fptr FILEID="FRONT_TIFF" />
                <fptr FILEID="FRONT_PNG" />
            </div>
            <div LABEL="Back of Postcard">
                <fptr FILEID="BACK_TIFF" />
                <fptr FILEID="BACK_PNG" />
                <fptr FILEID="BACK_TEI" />
            </div>
        </div>
    </structMap>
</structSec>
</mets>
```



The Postcard, another solution

In this solution, we have created PREMIS preservation metadata for the files. When the PREMIS metadata contains the basic technical metadata (e.g. format, checksum, size), it is not necessary to repeat it in METS side. Please note that the checksums in `<mdRef>` elements refer to the linked metadata files, not to the postcard objects. Here, we also use metadata grouping similar to metadata structure in METS 1.

```
<?xml version="1.0" encoding="UTF-8"?>
<mets xmlns="http://www.loc.gov/METS/v2"
      xmlns:premis="http://www.loc.gov/premis/v3"
      xmlns:mods="http://www.loc.gov/mods/v3"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:schemaLocation="...">
  <mdSec>
    <mdGrp USE="DESCRIPTIVE">
      <md ID="DMD1">
        <mdRef MDTYPE="MODS" LOCTYPE="URI" LOCREF="mods.xml"
               CHECKSUM="1234567890ABCDEF" CHECKSUMTYPE="MD5"
               MIMETYPE="application/mods+xml" SIZE="800" />
      </md>
    </mdGrp>
    <mdGrp USE="ADMINISTRATIVE">
      <md ID="TMD1" USE="TECHNICAL">
        <mdRef MDTYPE="PREMIS:OBJECT" LOCTYPE="URI" LOCREF="premis1.xml"
               CHECKSUM="1234567890ABCDE1" CHECKSUMTYPE="MD5"
               MIMETYPE="application/xml" />
      </md>
      <md ID="TMD2" USE="TECHNICAL">
        <mdRef MDTYPE="PREMIS:OBJECT" LOCTYPE="URI" LOCREF="premis2.xml"
               CHECKSUM="1234567890ABCDE2" CHECKSUMTYPE="MD5"
               MIMETYPE="application/xml" />
      </md>
      <md ID="TMD3" USE="TECHNICAL">
        <mdRef MDTYPE="PREMIS:OBJECT" LOCTYPE="URI" LOCREF="premis3.xml"
               CHECKSUM="1234567890ABCDE3" CHECKSUMTYPE="MD5"
               MIMETYPE="application/xml" />
      </md>
      <md ID="TMD4" USE="TECHNICAL">
        <mdRef MDTYPE="PREMIS:OBJECT" LOCTYPE="URI" LOCREF="premis4.xml"
               CHECKSUM="1234567890ABCDE4" CHECKSUMTYPE="MD5"
               MIMETYPE="application/xml" />
      </md>
      <md ID="TMD5" USE="TECHNICAL">
        <mdRef MDTYPE="PREMIS:OBJECT" LOCTYPE="URI" LOCREF="premis5.xml"
               CHECKSUM="1234567890ABCDE5" CHECKSUMTYPE="MD5"
               MIMETYPE="application/xml" />
      </md>
    </mdGrp>
  </mdSec>
  <fileSec>
    <fileGrp USE="HIRES_IMAGES">
      <file ID="FRONT_TIFF" MDID="TMD1">
        <FLocat LOCTYPE="URI" LOCREF="front.tif" />
      </file>
      <file ID="BACK_TIFF" MDID="TMD2">
        <FLocat LOCTYPE="URI" LOCREF="back.tif" />
      </file>
    </fileGrp>
    <fileGrp USE="LORES_IMAGES">
      <file ID="FRONT_PNG" MDID="TMD3">
```

```
<FLocat LOCTYPE="URI" LOCREF="front.png" />
</file>
<file ID="BACK_PNG" MDID="TMD4">
    <FLocat LOCTYPE="URI" LOCREF="back.png" />
</file>
</fileGrp>
<fileGrp USE="TRANSCRIPTS">
    <file ID="BACK_TEI" MDID="TMD5">
        <FLocat LOCTYPE="URI" LOCREF="back.tei" />
    </file>
</fileGrp>
</fileSec>
<structSec>
    <structMap>
        <div LABEL="Postcard from Ernest Hemingway to Gertrude Stein" MDID="DMD1">
            <div LABEL="Front of Postcard">
                <fptr FILEID="FRONT_TIFF" />
                <fptr FILEID="FRONT_PNG" />
            </div>
            <div LABEL="Back of Postcard">
                <fptr FILEID="BACK_TIFF" />
                <fptr FILEID="BACK_PNG" />
                <fptr FILEID="BACK_TEI" />
            </div>
        </div>
    </structMap>
</structSec>
</mets>
```