

APPENDIX 2: TIMELINES TECHNICAL SPECIFICATION

1. Software

Use the Simile Timeline (ST) software (<http://code.google.com/p/simile-widgets/wiki/Timeline>)

- Appears to fulfil requirements of this work package (see “Functional requirements” below); avoid re-inventing the wheel.
- Under active development.
- Already widely used in variety of contexts.
- If modifications required, can customise the open-source code and feed this back into the upstream source if potentially useful for others.

2. Functional requirements

Briefly assessing ST against the list of functional requirements in KL’s work package outline:

1. The user to select one or more datasets

This can be achieved dynamically with ST’s JavaScript API (e.g. Topher’s Breakfast Cereal Characters” <http://simile.mit.edu/exhibit/examples/cereals/cereal-characters.html> – switch view to “Timeline” and select one or more “Brands”.)

2. Datasets to be visually represented on a timeline

This is the primary purpose of ST.

3. Items on a timeline may lead to further information (e.g. an item in the archive)

ST’s data format allows for URL’s to be stored for each item in the dataset, and its visual representation displays these as HTML links.

4. Individual datasets to be distinguishable

ST supports display of multiple datasets, each with their own visual style, on the same timeline.

5. To be able to export the timelines as html / jpg

ST has a built-in export function which includes dynamic (client-side) conversion of data to HTML. It would also be straightforward to use the same datasets to generate (server-side) HTML-only views. Export to JPEG is not a built-in function of ST, so feasibility of developing such would require further investigation.

3. Data format

Datasets will be stored as either XML or JSON (to be determined during development) for use by Simile.

Fields:

1. Title – required
2. Description – optional, but preferable
3. Link – optional URL, e.g. URL of CONTENTdm item
4. Start date – required, needs to be a full date, i.e. “10/07/1915” is OK, “07/1915” and “1915” are not; if item has an exact date (not a date range) it goes in this field.
5. End date – optional, needs to be a full date.

4. Data sources

For datasets exported from CONTENTdm, its CSV output can later be converted to XML or JSON by the developer.

For datasets manually compiled by experts, use of spreadsheet software is acceptable. This can later be converted to XML or JSON by the developer. Such a spreadsheet would need columns for all the fields mentioned in “Data format” above.

5. Accessibility

Would need to assess the accessibility of the Simile Timeline software. If it presents significant obstacles to accessibility, try to adapt the source code to address these.

The timelines will also be provided as HTML representations of the datasets, useful for making hard copies and widely accessible; these may serve as an adequate answer to accessibility concerns.

6. Deliverables

- Datasets in format readable by ST
- Web page integrating ST API to display datasets as timeline
- Visual customisation of ST widget in line with website design

7. Ideas for improved integration

- Use images for each point on the timeline. For the manuscript datasets, these would be small thumbnails of the associated CONTENTdm image where one exists. (E.g. “Steven Spielberg's Movies by Release Dates” <http://tinyurl.com/dh9jdr>)
- Could consider including additional metadata for each item to enable dynamic filtering by the user (e.g. the “Decades” and “Countries” attributes in the example in note 2)
- Integrate with the PCT, i.e. allow users to visualise pathways as a timeline.