

Intro to Digital Storytelling with Knight Lab Timeline

HIST2430: Digital Histories of Ethnic Boston

Prof. Nick Brown Spring 2023

Taught By: Benjamin Grey & Chris McNulty



Northeastern University
NULab for Texts, Maps, and Networks

*Feel free to ask questions at any point
during the presentation!*

Workshop Agenda

- Learn about Timeline as a mode of conveying data and content
- Questions to consider before building
- Steps for using KnightLab TimelineJS
- Best practices and accessibility concerns
- Start building!

Slides and handout available at: bit.ly/sp23-brown-timeline

[Brief handout/instructions](#) from today's workshop



Timelines as a Tool



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What is a “timeline”?

Timelines are useful when you want to situate various points of a process, narrative, or history in their contextual circumstances chronologically.

Timelines can help you visualize the progression of time in an ordered and easily understandable way.

- Where have you seen a timeline used before? (In-person or digitally)
- How did you interact with it?
- How might it have influenced your experience?



Components of an Effective Timeline

- Engaging content (not just a list!)
- A clear series of events and periods (pick stories with a strong chronological narrative!)
- A general theme relating the events to each other
- Media elements

What might a timeline not be effective for? What should we as historians consider about presenting information in clear chronological order?



Questions to Consider Before Building

- What story am I trying to tell? What is the message I want to convey?
- What are the key events and processes?
- Which items will require additional detail or context?
- What kinds of media will I need? (photographs, text, maps, videos, etc.)
- Who is my audience?
 - How can I write for this audience?
- Am I omitting context or events intentionally? If so, why?



Knight Lab TimelineJS Examples

- [Whitney Houston 1963-2012](#): Telling the life of Whitney Houston through key dates and events.
- [Revolutionary User Interfaces](#): Tracing the development of computers and their increased accessibility, showing the influence of various people and agencies.
- [How Wine Colonized the World](#): see how wine grapes have taken root in every continent except Antarctica.



DITI's TimelineJS Example

The Embrace

Monument: a short history of the monument on the Boston Common to exhibit the tool's features and functions

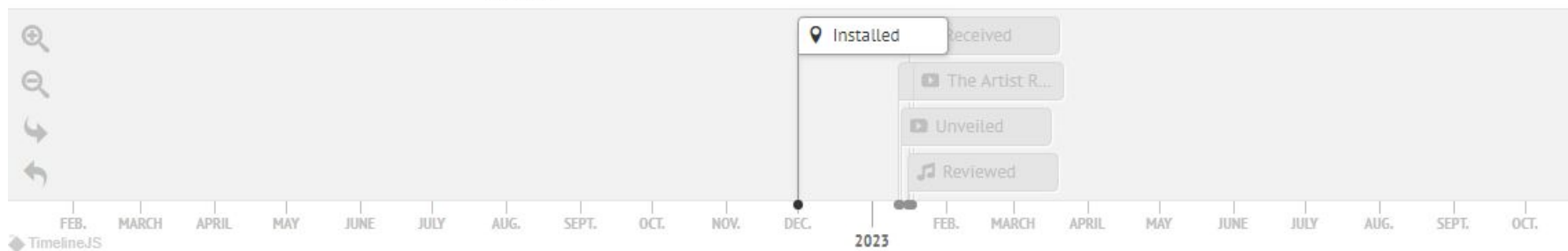


WBUR News

The Embrace

THE EMBRACE: A SHORT HISTORY

This is a short history of The Embrace monument on the Boston Common using Knight Lab Timeline, created by DITI fellows to exhibit the tool's features and functions.



Learning the Basics



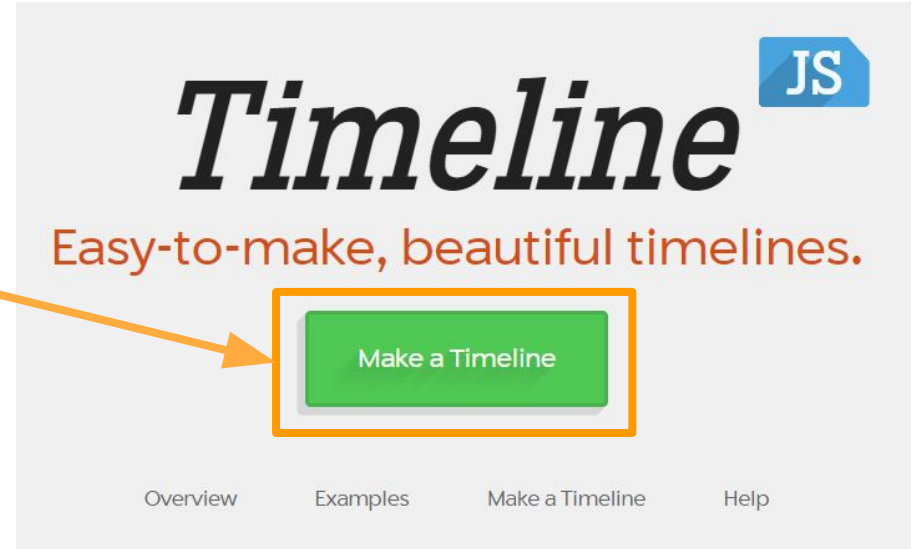
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Begin Creating a Timeline

Go to timeline.knightlab.com

Click **Make a Timeline**



You don't need a KnightLab account to create a timeline



1 Create Your Spreadsheet

Build a new Google Spreadsheet using the template. You'll need to copy the template to your own Google Drive account by clicking **Make a Copy**.

Get the Spreadsheet Template 

Drop dates, text and links to media into the appropriate columns.

Note: Don't change the column headers, don't remove any columns, and don't leave any blank rows in your spreadsheet.



Using the TimelineJS Google Sheet

[Template available online](#)

Enter data and information into the appropriate cells

Do not change any of the column headers (Timeline needs these to function)

TIP: Hovering over the header of a column tells you if the data is optional and what types of information can be entered

Timeline functions

Display info

Media data & descriptions

Customizations

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	Year	Month	Day	Time	End Year	End Month	End Day	End Time	Display Date	Headline	Text	Media	Media Credit	Media Caption	Media Thumbnail	Type	Group	Background
2																		
3																		
4																		
5																		
6																		
7																		
8																		



Slides

- Each row in the spreadsheet is one slide in the Timeline
- Each slide can contain:
 - **Date** (a single point or range to time)
 - **Headline** and **Text**
 - **Media** (images, videos, sound files, maps, etc.)
 - Only **one** media file can be uploaded per slide.
 - Special columns in the spreadsheet are dedicated to incorporating the media onto the slide.
 - **Type/Group** (title designation/related events)
 - **Background** (a link to an image or a six-digit color code)



Dates

Slides in the final timeline follow the *order of the dates* (not the order of your spreadsheet rows)

- You can choose how specific you want to make your dates
- Entering the end date is optional
- The **Display Date** is useful when the exact date is unknown to you or unknowable

Required

Optional (if you have an end month, you need a start month, etc.)

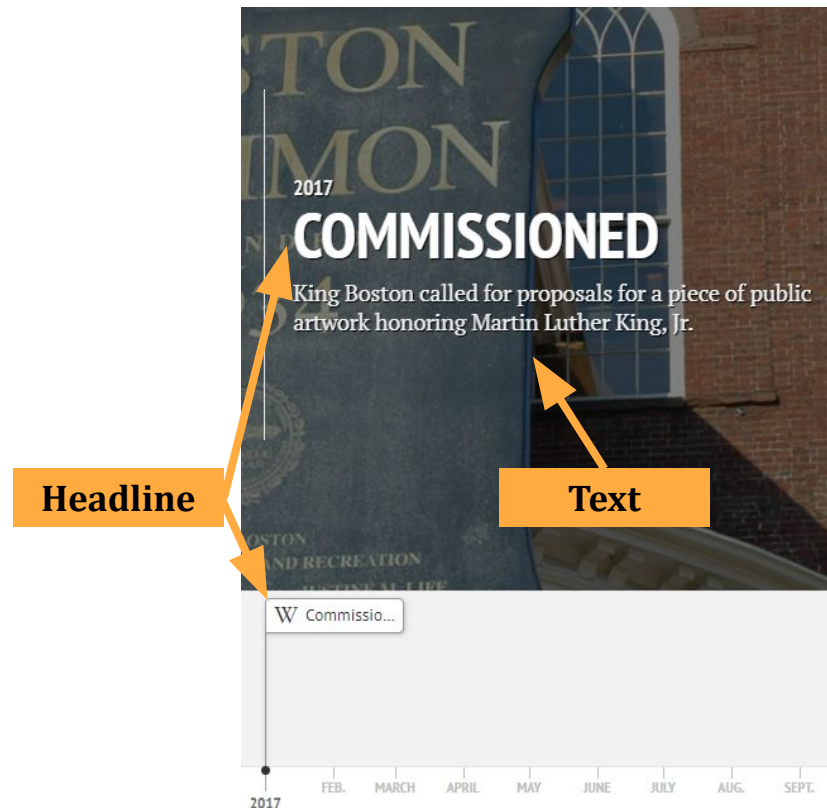
	A	B	C	D	E	F	G	H	I
1	Year	Month	Day	Time	End Year	End Month	End Day	End Time	Display Date
8	2023	1	13						2023
9									
10	2023	1	16	14:16					2023
11	2023	1	16	00:00					2023
12	2023	1	18						2023
13									
14									
15									
16									
17									



Headlines and Text

These are the most basic way to communicate information to your viewers

- **Headline:** a brief title (typically 1-4 words)
- **Text:** explain the significance or context of the event on the timeline
- The **Text** column reads basic HTML (which allows for creating links to other webpages/resources)



Media

TimelineJS lets you add a variety of media to your project ([see the options online](#))

- **Add with URL:** copy the web address from your browser (this works for most media types)
- **Add via iframe:** use when the media does not work with a URL (follow this [guidance to embed an iframe](#))

NOTE: you cannot upload media directly to a Timeline project (it has to already be online)

URL

iframe

L	M	
Media		Media Credit
https://bloximages.r	The Observer	
https://www.google.	Google	
<pre><iframe width="100%" height="124" scrolling="no" frameborder="no" src="https://player. wbur.org/news/202 3/01/12/a-represen tation-of-vulnerabi ty-and-security-me morial-honoring-th e-kings-opens-on- boston-common"></pre>		WBUR



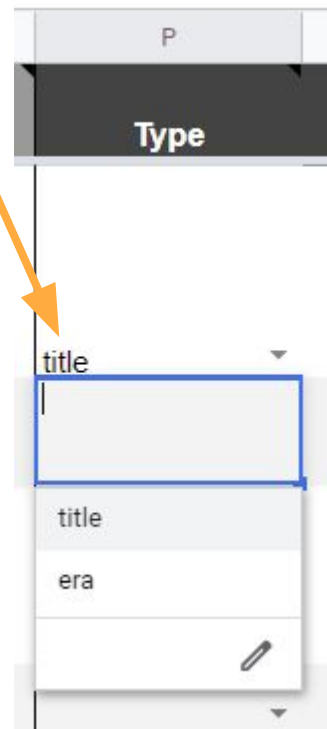
Type

Standard spreadsheet rows convey information for each point in the timeline. Use **Type** to designate a row to add organizational elements to your timeline

- **Title:** always comes first in the timeline *and* contains no date information
- **Era:** contains *only* date information and a **Headline** (isn't shown as a slide)
 - Must include a start and end **Year**, **Month**, and **Day**

Title or **Era:** this cell should be blank for most slides

NOTE: **Title** and **Era** type slides are optional and not required for TimelineJS to work



Group

Use this option to assign **Group** labels to multiple slides

- Works best as a single keyword
- Stacks all members of the group into a section on the timeline
- This of these as subtitles of your timeline

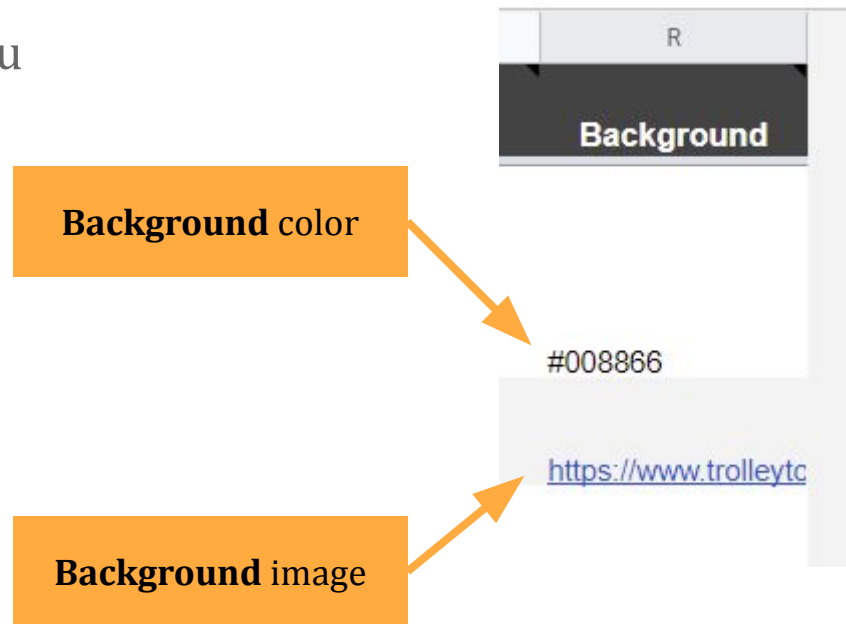
3 **Group** examples



Background

Timeline's default background is white. You can replace this with static images or different colors

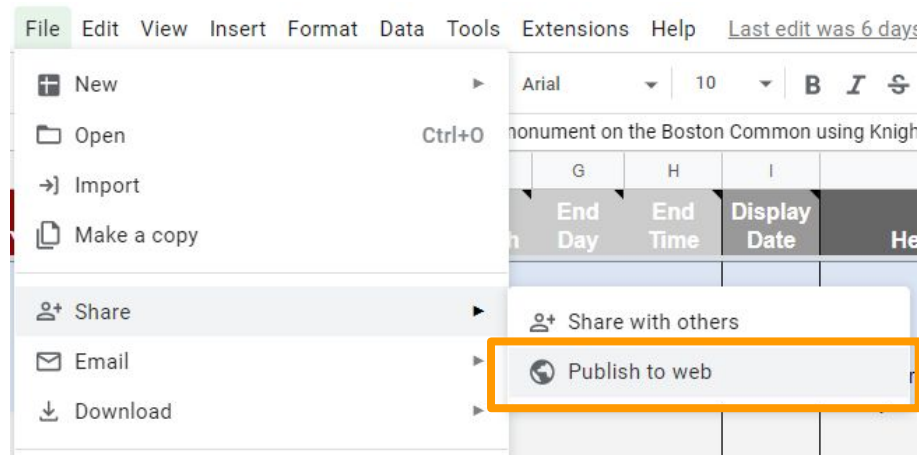
- **Colors:** use hexadecimal color codes ([generate them here](#)) preceded by a #
- **Images:** paste a URL into the cell



2.1 Publish to the Web

In your spreadsheet go to:
File > Share > Publish to web

Tip: Only adjust the sharing settings if working in a group.



2.2 Publish to the Web

In the new window click **Publish**

In the dropdown menu, make sure **Automatically republish when changes are made** is checked

Publish to the web

This document is published to the web.

Make your content visible to anyone by publishing it to the web. You can link to or embed your document. [Learn more](#)

Link Embed

Entire Document Web page

<https://docs.google.com/spreadsheets/d/e/2PACX-1vS6mNEUqilDmykt8t0VC>

Or share this link using:

Note: Viewers may be able to access the underlying data for published charts. [Learn more](#)

Publish

Published content & settings

Entire Document

Stop publishing

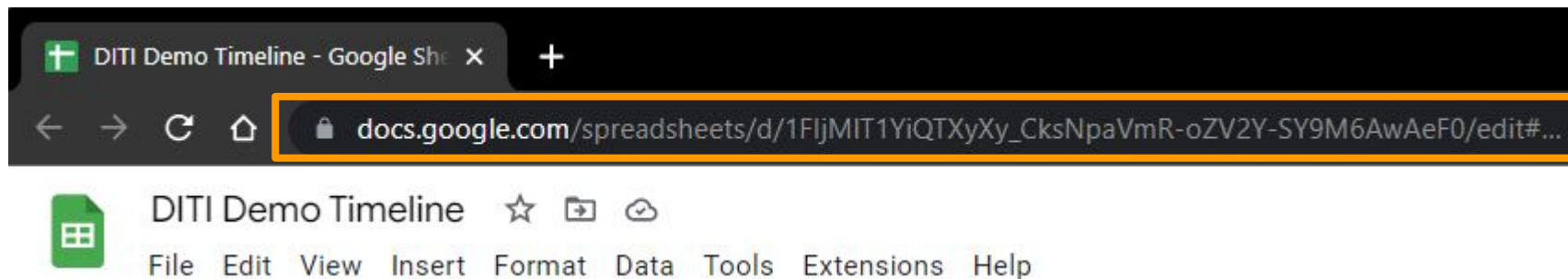
☒ Automatically republish when changes are made



2.3 Publish to the Web

Close the popup window.

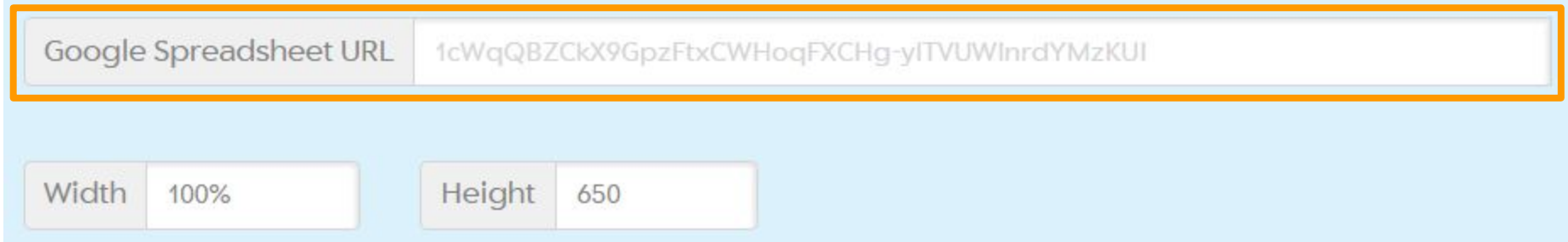
Copy the full URL from your browser's address bar.
(Do not copy the sharing URL from the popup window)



3.1 Generate your Timeline

Return to timeline.knightlab.com

Paste the URL you copied from your browser into the box



The screenshot shows the Knight Lab Timeline interface. At the top, there is a large text input box with an orange border. Inside this box, the text "Google Spreadsheet URL" is on the left, and a long alphanumeric string "1cWqQBZCkX9GpzFtxCWHoqFXCHg-yITVUWlnrdYMzKUI" is pasted on the right. Below this main input box, there are two smaller input boxes for "Width" and "Height". The "Width" box contains "100%" and the "Height" box contains "650".

(Customize settings on the next slide)

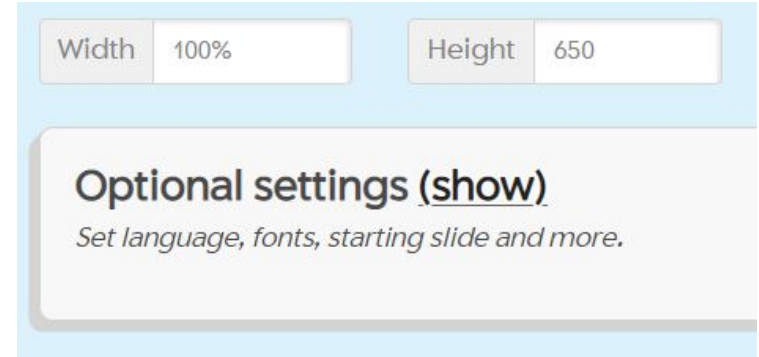


3.2 Generate your Timeline

Width is a percent of total screen size

Height is measured in pixels

Use the **Optional settings** for high-level customizations



Width 100% Height 650

Optional settings (show)
Set language, fonts, starting slide and more.

Things to Consider:

Which fonts might be appropriate for your audience?

What zoom level best shows your information?

Should your timeline's navigation be on top or at the bottom?



4 Share Link

After choosing the settings you want, the links below will update automatically.

Copy the top option to share your timeline on its own.

Use the bottom option only if embedding in a website.

If you're embedding on Medium.com or other oembed-aware sites, you want your timeline to appear.

```
https://cdn.knightlab.com/libs/timeline3/latest/embed/  
source=1xuY4upIooEeszZ_1CmeNx24eSFWe0rHe9ZdqH2xqVNk&f
```

Embed

Copy this embed code and paste it on your site where you

```
<iframe src="https://cdn.knightlab.com/libs/timeline3/  
source=1xuY4upIooEeszZ_1CmeNx24eSFWe0rHe9ZdqH2xqVNk&f  
width="100%" frameborder="0"></iframe>
```



Best Practices and Accessibility



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Best Practices

- Think carefully about the **audience** you are trying to reach with your timeline. This will impact your language and the media that you choose.
- Think also about the **tone of the timeline**: the visual style of TimelineJS can be seem very upbeat and informal, and that may not match the content you are sharing (think, for example, about changing colors or fonts)
- **Test your timeline** after you have created it, to make sure that all the narrative points flow and that the language is clear and concise



Consider accessibility concerns

Interactive multimedia is frequently effective, but not always accessible to all users. Take time to make your project as accessible as possible:

- Add rich textual descriptions which complement images/media
- Choose colors with high contrast for backgrounds and text
- Communicate information in ways beyond color differences
- Include transcripts of embedded audio
- Provide descriptive links ([more Timeline|S resources](#), NOT [click here](#))

[WAVE Accessibility Tool](#): shows the underlying structure of web pages

[Color Contrast Checker](#): clarifies accessible levels of color contrast



Your Turn!

Use the resources available at:

The Massachusett Tribe at Ponkapoag's website (massachusetttribe.org)

Create a timeline which:

- Has at least 5 slides
- Includes 2 forms of media
- Changes the background for at least 1 slide
- Uses the 'group' feature
- (Optionally create 1 'era' in your timeline)



Thank you!

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If you have any questions, contact DITI at nulab.info@gmail.com

Find the [handout](#). Slides and data available at bit.ly/sp23-brown-timeline

Have questions? Schedule an appointment with us! calendly.com/diti-nu

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