

# Storytelling with Knight Lab TimelineJS

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**EESH 2000: Professional Development for Co-op**

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Spring 2023



**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:

[https://bit.ly/sp23\\_doherty\\_timeline](https://bit.ly/sp23_doherty_timeline)

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



# Timelines as a digital storytelling 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

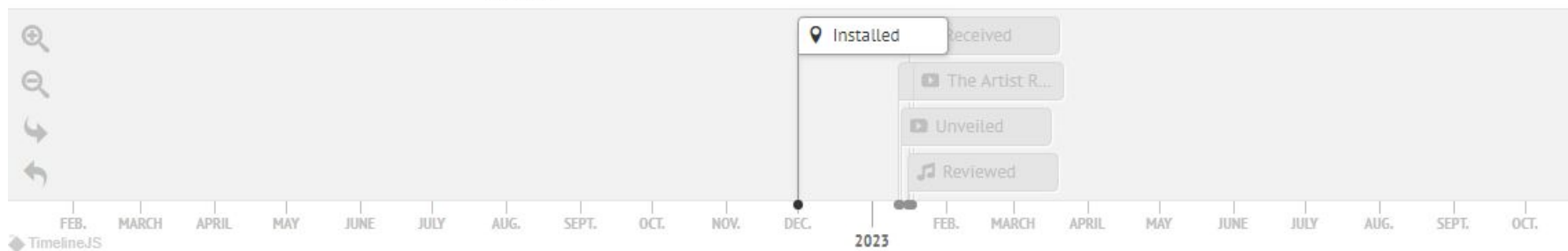


WBUR News

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



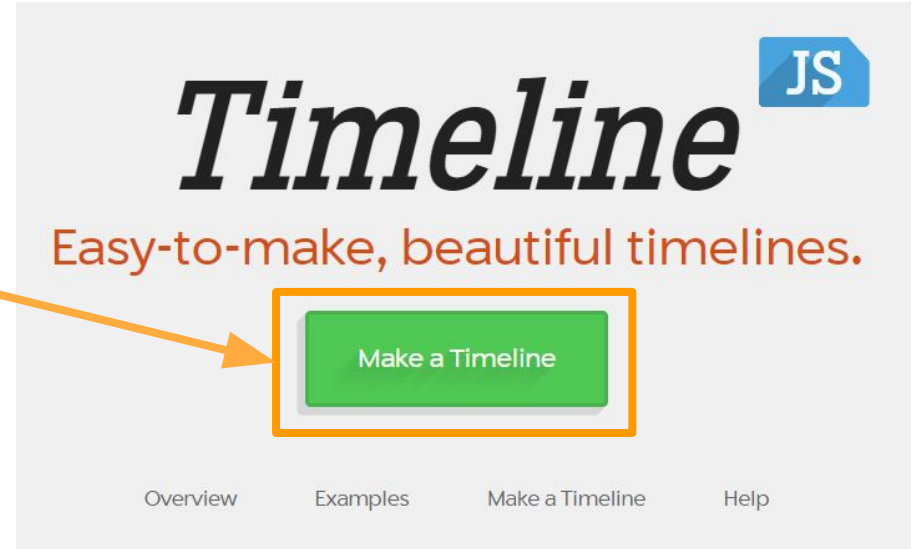
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*Feel free to ask questions at any point  
during the presentation!*

# Begin Creating a Timeline

Go to [timeline.knightlab.com](https://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.)

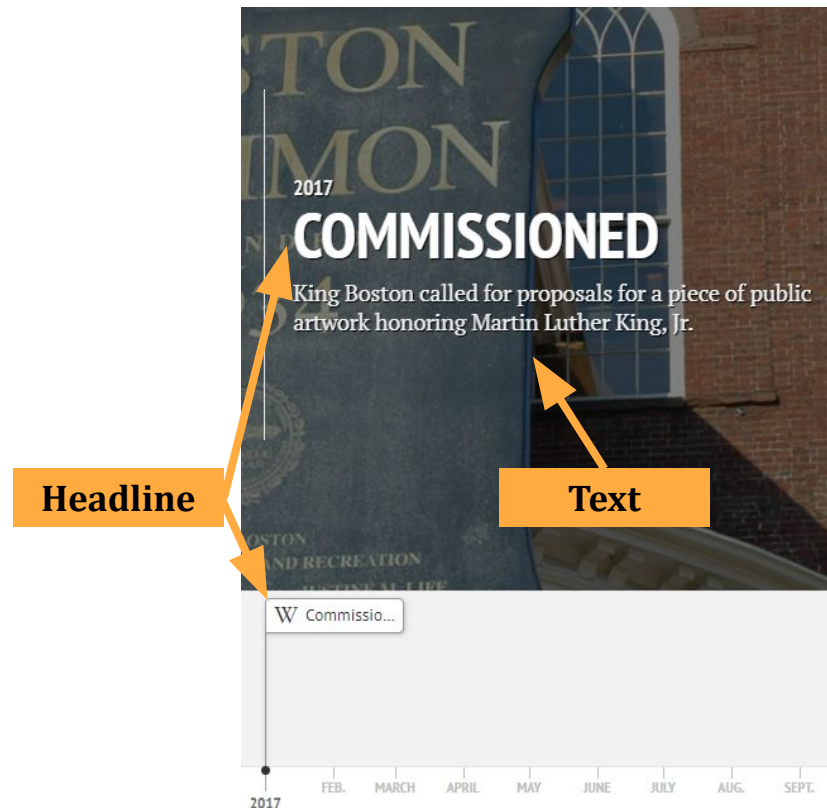
	A	B	C	D	E	F	G	H	I
1	Year	Month	Day	Time	End Year	End Month	End Day	End Time	Display Date
8	2023	1	13						2023
9									
10	2023	1	16	14:16					2023
11	2023	1	16	00:00					2023
12	2023	1	18						2023
13									
14									
15									
16									
17									



# 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
<a href="https://bloximages.r">https://bloximages.r</a>	The Observer	
<a href="https://www.google.">https://www.google.</a>	Google	
<pre>&lt;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"&gt;</pre>		WBUR





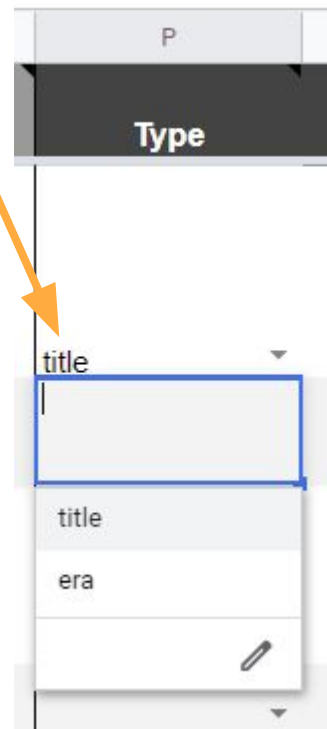
# Type

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

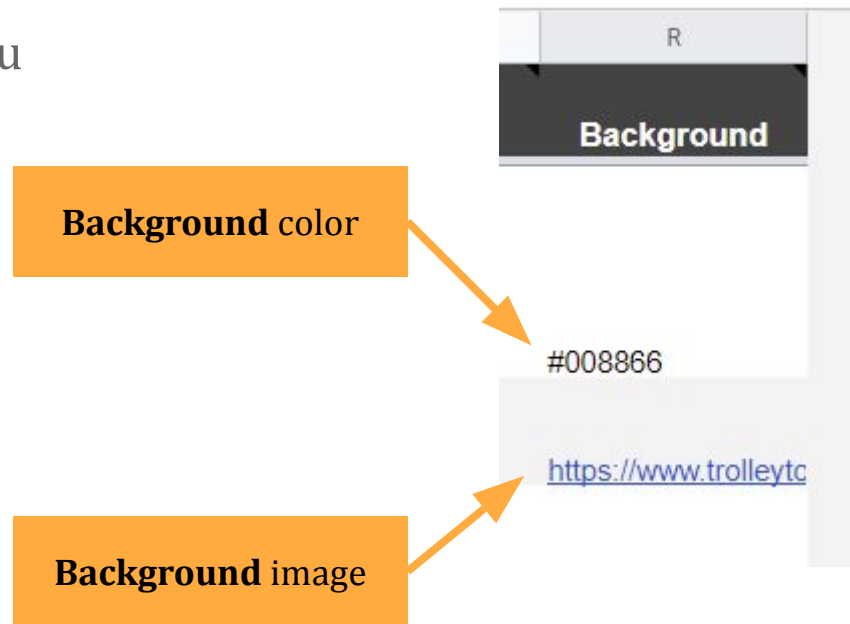
3 **Group** examples



# Background

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

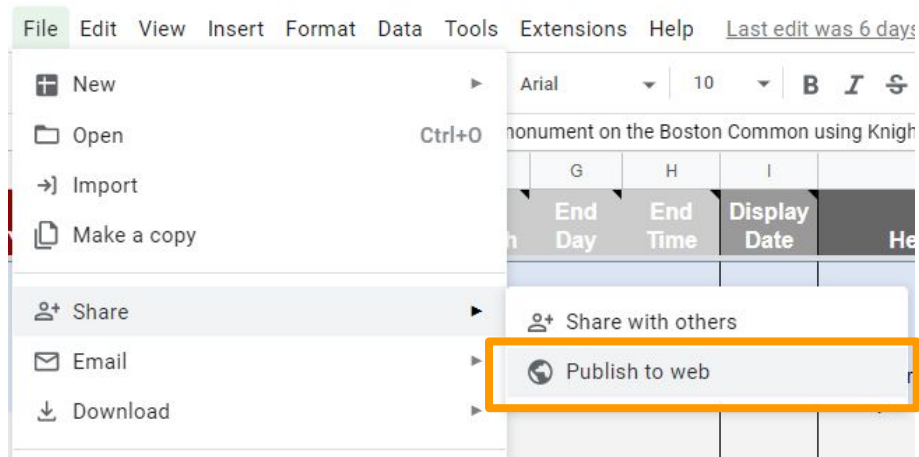
- **Colors:** use hexadecimal color codes ([generate them here](#)) preceded by a #
- **Images:** paste a URL into the cell



## 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

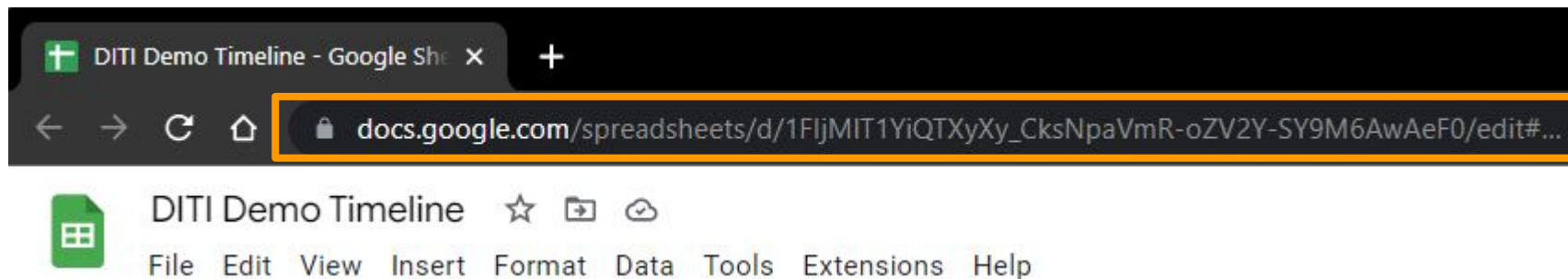
☒ Automatically republish when changes are made



## 2.3: Publish to the Web

Close the popup window.

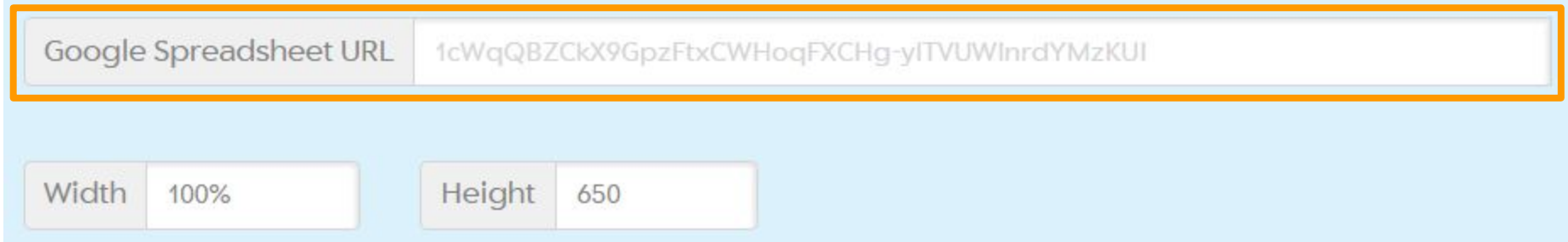
Copy the full URL from your browser's address bar.  
(Do not copy the sharing URL from the popup window)



# 3.1: Generate your Timeline

Return to [timeline.knightlab.com](https://timeline.knightlab.com)

Paste the URL you copied from your browser into the box



The screenshot shows the Knight Lab Timeline web interface. At the top, there is a light blue header bar. Below it, a large white input box with a thin orange border contains the text "Google Spreadsheet URL" followed by a long alphanumeric string: "1cWqQBZCkX9GpzFtxCWHoqFXCHg-yITVUWlnrdYMzKUI". Below the input box, there are two small white boxes with orange borders. The first box has "Width" on the left and "100%" on the right. The second box has "Height" on the left and "650" on the right.

(Customize settings on the next slide)

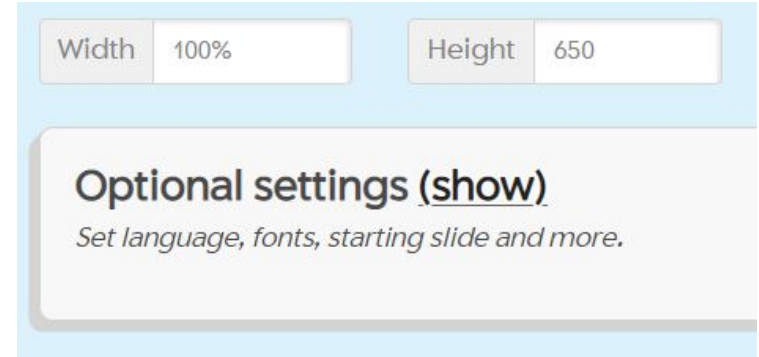


## 3.2: Generate your Timeline

**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



# 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



# Thank you!

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If you have any questions, contact DITI at [nulab.info@gmail.com](mailto:nulab.info@gmail.com)

Class materials: [https://bit.ly/sp23\\_doherty\\_timeline](https://bit.ly/sp23_doherty_timeline)

Have questions? Schedule an appointment with us! [calendly.com/diti-nu](https://calendly.com/diti-nu)

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