Intro to Digital Storytelling with Knight Lab Timeline

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Digital Integration Teaching Initiative (DITI)

HUSV3300   Principles and Practices of Trauma Informed Care

Cali Collin

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Workshop Agenda

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

Slides and handout available at: **bit.ly/sp26-collin-timeline**

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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 chronologically. Timelines can help you visualize or represent 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?**

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Timeline Example

Below is a timeline of historical traumatic events in the lifetime of Individuals of Mexican Ancestry in the United States (Orozco-Figueroa, 2021).

- As you view the timeline, here are some questions to consider: **Who is the audience? How is the timeline presented? What is included and what is missing? What would you change?**
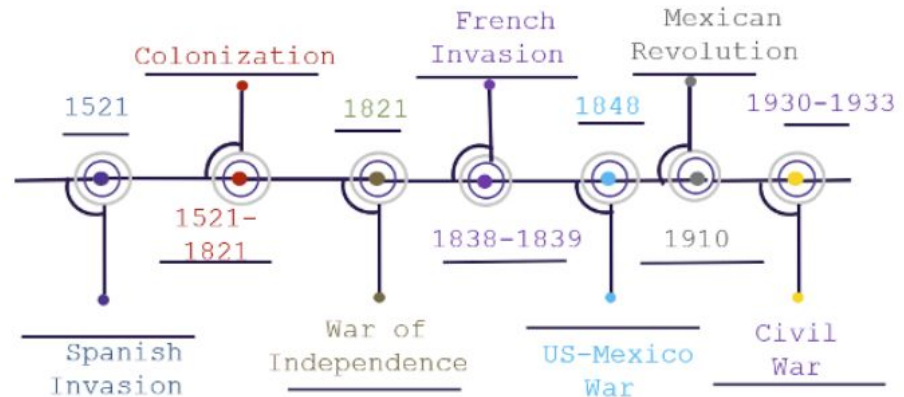
Trauma storytelling with timelines

Timelines can be used to tell a variety of stories, supported with chronological data to create a narrative:

- Life stories of a marginalized person
- Chronology of historical events
- Tracking developments of a policy
- Examining impacts of intervention

"[Maya Angelou's Autobiographies: A Timeline](#)" by DITI Fellow, Claire Lavarreda

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 consider about presenting information in clear chronological order?

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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?

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Example Projects Using Timelines to Tell Stories

- [Whitney Houston 1963-2012](#): Tells the life of Whitney Houston through key dates and events
- [Patrick Flanagan & WWI: Part I - Going to War](#): A multimedia story chronicling the World War I (WWI) through life of a soldier
- [NCCIH History:](#) An Interactive Timeline 2015-2020 of history of the National Collaborating Center of Indigenous Health.
- [Stories of Care and Control](#): A Timeline of the Medical Industrial Complex.

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Navigating TimelineJs

Begin Creating a Timeline

Go to timeline.knightlab.com

Click **Make a Timeline**

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

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1: Create Your Spreadsheet

Build a new Google Spreadsheet using [the template (Link to copy of Google spreadsheet)](#). 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.

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Using the TimelineJS Google Sheet

Link to copy Official TimelineJS template

Enter data and information into the appropriate cells

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

Timeline functions

Display info

Media data & descriptions

Customizations

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

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Slides

- Each row in the spreadsheet is one slide in the Timeline
- Each slide can contain:
  - **Date** (a single point or range in 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** (type of slide/options for grouping related events)
  - **Background** (a link to an image or a six-digit color code)

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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.)

Year	Month	Day	Time	End Year	End Month	End Day	End Time	Display Date
2023	1	13						2023
2023	1	16	14:16					2023
2023	1	16	00:00					2023
2023	1	18						2023

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Headlines and Text

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

- **Headline**: a brief title (typically 1–4 words)
- **Text**: explains the significance or context of the event on the timeline
- The **Text** column reads basic HTML (which supports creating links to other webpages/resources)
- Wrap text in <p></p> HTML tags to create line breaks and add sources underneath the main text.

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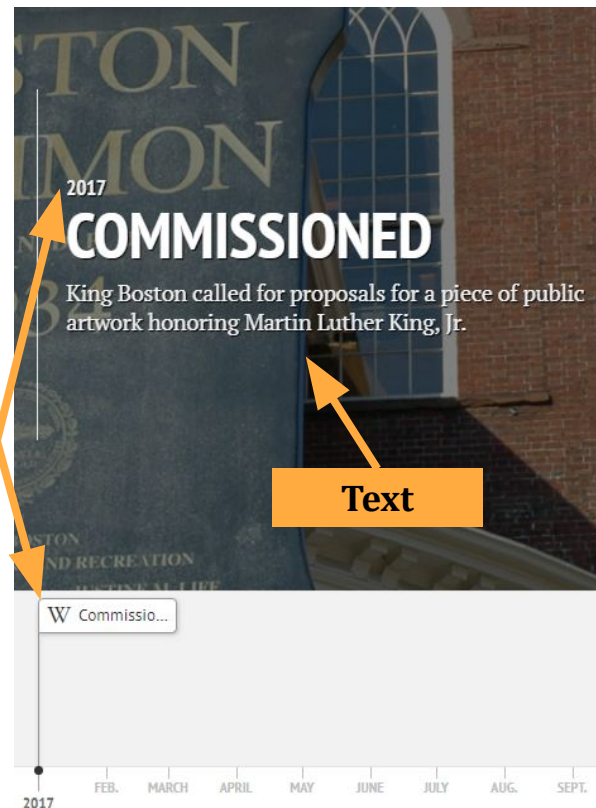
Media

TimelineJS lets you add a variety of media to your project (see the types at [Media Types on Knightlab.com](#))

- **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

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

L	M
Media	**Media Credit**
https://bloximages.n The Observer	
https://www.google. Google	

URL

```
<iframe
width="100%"
height="124"
scrolling="no"
frameborder="no"
src="https://player.
wbur.org/news/202
3/01/12/a-represen
tation-of-vulnerabili
ty-and-security-me
morial-honoring-th
e-kings-opens-on-
boston-common">
</iframe>                 WBUR
```

iframe

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Type

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

P

Type

title

title

era
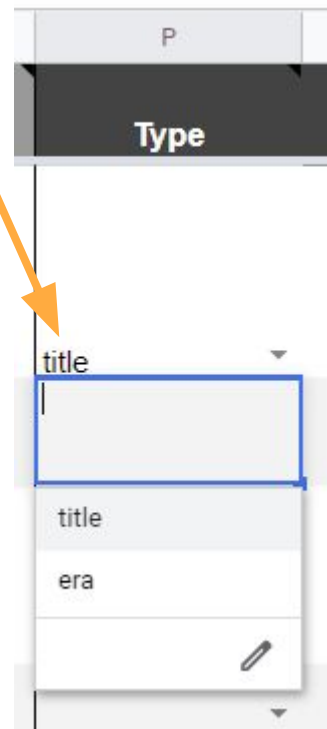
Group

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
- Think of these as subsections of your timeline

3 **Group** examples
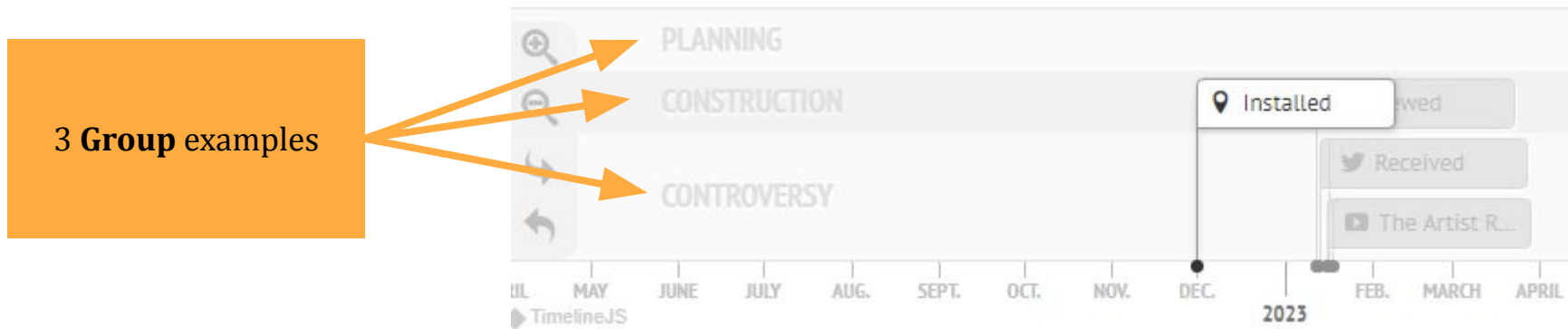
Background

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

- **Colors**: use hexadecimal color codes, generate them at [HTML Color Codes website](#) preceded by a #
- **Images**: paste a URL into the cell

R

Background

Background color

#008866

https://www.trolleytc

Background image

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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.
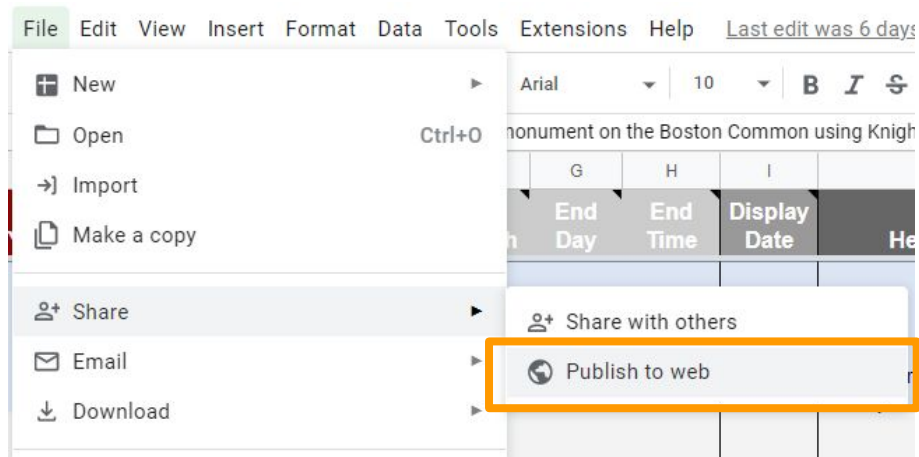
2.2: Publish to the Web

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-1vS6mNEUqilDmykt8tOVC

Or share this link using: M f 🐦

Note: Viewers may be able to access the underlying data for published charts. Learn more

Publish

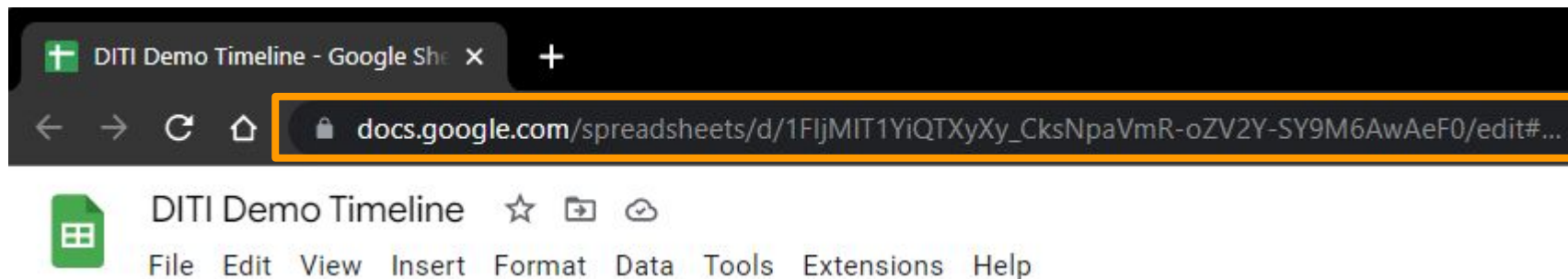▾ Published content & settings

Entire Document ▾

Stop publishing

☑ Automatically republish when changes are made

2.3: Publish to the Web

Close the popup window.
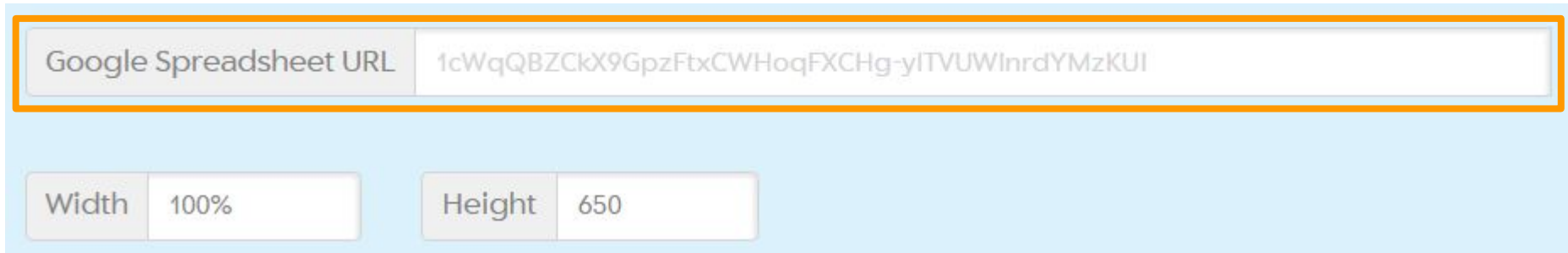
Copy the full URL from your browser's address bar.

(Do not copy the sharing URL from the popup window)

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3.1: Generate your Timeline

Return to timeline.knightlab.com

Paste the URL you copied from your browser into the box

Google Spreadsheet URL	1cWqQBZCkX9GpzFtxCWHoqFXCHg-ylTVUWInrdYMzKUI

Width	100%		Height	650

(Customize settings on the next slide)

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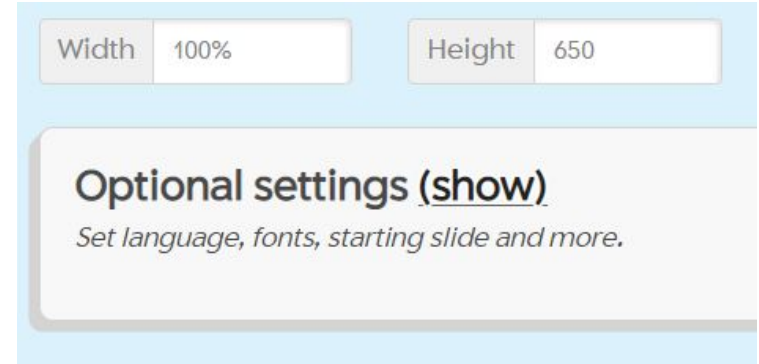**NULab for Digital Humanities and
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3.2: Generate your Timeline

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?

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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.

Share Link

Use this to link directly to your timeline.

If you're embedding on Medium.com or other oembed-aware services, just paste this link on a line by itself where you want your timeline to appear.

```
https://cdn.knightlab.com/libs/timeline3/latest/embed/index.html?
source=1xuY4upIooEeszZ_lCmeNx24eSFWe0rHe9ZdqH2xqVNk&font=Default&lang=en&initial_zoom=2&height=100%
```

Embed

Copy this embed code and paste it on your site where you want your timeline to appear (just like a YouTube video).

```
<iframe src="https://cdn.knightlab.com/libs/timeline3/latest/embed/index.html?
source=1xuY4upIooEeszZ_lCmeNx24eSFWe0rHe9ZdqH2xqVNk&font=Default&lang=en&initial_zoom=2&height=100%"
width="100%" frameborder="0"></iframe>
```

Preview   Open Preview in a new window

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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

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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 TimelineJS resources, NOT click here)

WAVE Accessibility Tool: shows the underlying structure of web pages
Color Contrast Checker: clarifies accessible levels of color contrast
DITI Handout on Accessibility: more info on accessible practices

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Your Turn!

Think about a proceeding of policy or a series of historical/cultural events that impacts marginalized groups. Create a timeline which:

- Has at least 4 slides
- Includes 2 forms of media (start with Wikimedia Commons (wikimedia.com))
- Changes the background for at least 1 slide
- Uses the 'group' feature
- Optionally, create 1 'era' in your timeline
- You may use one of the following example timeline:
  - Histories of Latino/a and Latinx Medicine in California:
  - Table 1 from "Roadmap for Trauma-Informed Medical Education: Introducing an Essential Competency Set" by Berman et al. 2023.

For Further Exploration

DITI Handout on Timeline

DITI Handout: Copyright and Fair Use

DITI Handout on Accessibility

DITI Handout on Data Ethics

DITI Handout on Data Privacy

DITI Handout on HTML

Thank you!

—**Developed by** Zhen Guo, Dipa Desai, Emily Sullivan, Claire Lavarreda, Ana Abraham, Chris McNulty, and Benjamin Grey

- For more information on DITI, please see: https://bit.ly/diti-about
- Schedule an appointment with us! https://bit.ly/diti-meeting
- If you have any questions, contact us at: nulab.info@gmail.com

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