

IDV460

INTERACTIVE DATA VIZ SPRING 16

TIMELINES

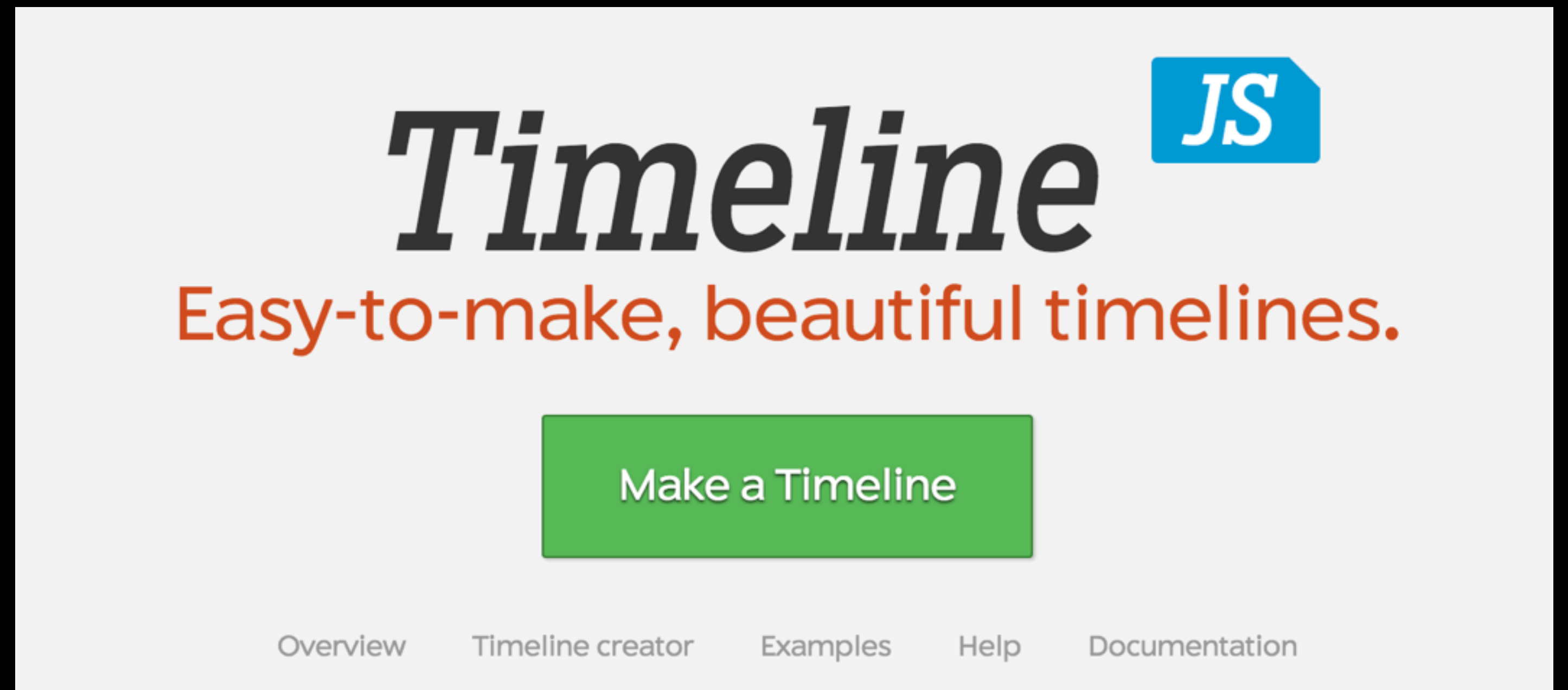
CHECKPOINT!

Your grade for your own site is 30 percent of your grade for this class. I will out your site through the first checkpoint on WEDNESDAY (since I did not post this slide previously). Here is what you will need to earn 100 percent.

- **index.html** (home page) with image and bio
- **class.html** page with listing of our in-class activities as sections, along with working links to this pages:
 - **cong.html, deluna,html, quiz1.html, time.html, primary.html, timeline.html**
- working pages and working CSS throughout

TIMELINES

Today, we will be creating a timeline for the presidential race based on another online tool: TimelineJS, from Knight Lab. With this tool, you will create an interactive timeline using a Google spreadsheet and some images from your own site.



The screenshot shows the homepage of TimelineJS. At the top right is a blue icon with the letters 'JS' in white. The main heading is 'Timeline' in a large, bold, black serif font. Below it is the tagline 'Easy-to-make, beautiful timelines.' in a smaller, orange sans-serif font. A prominent green button with the text 'Make a Timeline' is centered below the tagline. At the bottom of the page, there is a navigation menu with five links: 'Overview', 'Timeline creator', 'Examples', 'Help', and 'Documentation', all in a small, grey sans-serif font.

<https://timeline.knightlab.com/index.html>

TIMELINES

Before we do this, a few notes about timeline construction.



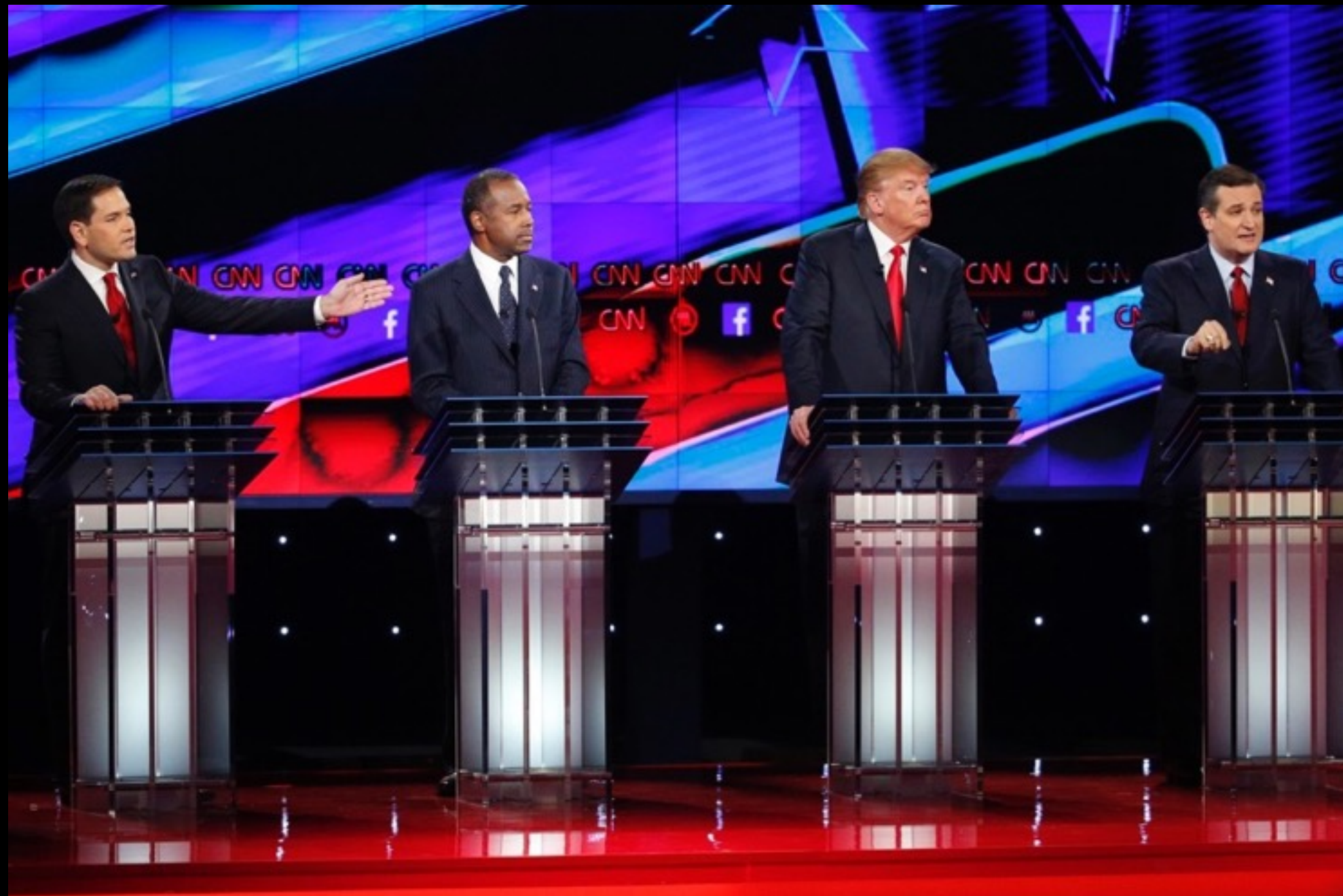
TIMELINES

Before we do this, a few notes about timeline construction.

1. Timelines move from left to right and up to down.
2. Timeline entries are written in present tense.
3. Keep headlines short and pithy.

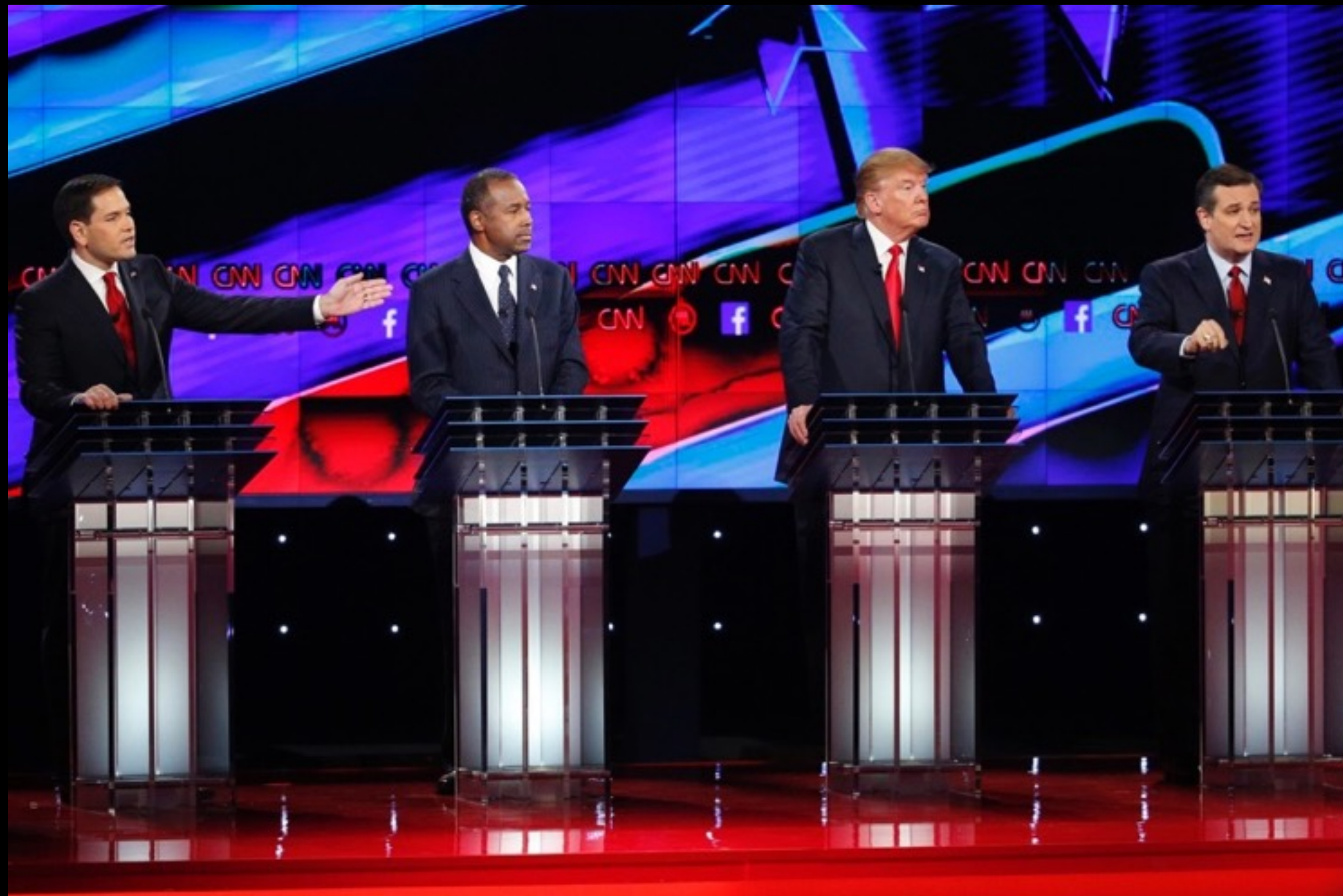
TIMELINES

Begin, in your two-person team, by researching your timeline. You can begin your timeline whenever you think meaningful, but please focus on events related to the 2016 election. Key events can include announcements for president among the candidates and results of primaries, for example, or key moments in debates.



TIMELINES

For the purposes of our timeline, we will need a short headline with each entry, the date it happened, and an image for each. (You can use Google image searches for the images you will be using for this exercise; download each image to a folder called election inside your website's images folder.)



TIMELINES

In an effort to get you thinking, Stephen Colbert will remind you of the state of the race, via his “Hungry for Power Games” bit, this time right after the Iowa Caucuses.



Feb. 4

SPREADSHEET

It is easiest to use the template spreadsheet to add your text.

Go the URL here, scroll down, and click on the “Get the Template Spreadsheet” button.

Make a Timeline

TimelineJS works on any site or blog. Make your own in four easy steps.

Having trouble? Watch our [video](#), or see the [help section below](#).

1

Build a new Google Spreadsheet using our [template](#). You'll need to copy the template to your own Google Drive account by clicking the "Use this template" button.

Drop dates, text and links to media into the appropriate columns. For more about working with our template, [see our help docs](#).

Create your spreadsheet


Get the Spreadsheet Template ↗

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

<https://timeline.knightlab.com/index.html>

SPREADSHEET

When the Spreadsheet template displays, click the button that says, "Use this template." The spreadsheet will now open in your own Google Drive.

 **Official TimelineJS3 Template** By [Knight Lab](#) ★★★★★ 7 ratings [Rate It](#) [Report abuse](#)
Start here to create a Timeline using Northwestern University Knight Lab's TimelineJS software. This spreadsheet is for the new (2015) version of TimelineJS.
[Use this template](#) [Browse template gallery](#)

Official TimelineJS3 Template : od1

| Year | Month | Day | Time | End Year | End Month | End Day | End Time | Display Date | Headline | Text |
|------|-------|-----|----------|----------|-----------|---------|----------|--------------------------|----------------------------|---|
| 1905 | 7 | 3 | | | | | | | Google Spreadsheet Example | This is a test of using google spreadsheets as a source for the timeline tool |
| 2012 | | | | 2012 | | | | January — February | A Flickr Example | TimelineJS is an open-source tool that enables you to build visually-rich interactive timelines and is available in 40 languages. |
| 2011 | 11 | 1 | | 2011 | 12 | 15 | | | Another Flickr Example | It's Easy to Make Your Own Timeline |
| 2011 | 11 | 16 | 05:58:44 | 2011 | 11 | 16 | 07:30:00 | | Vimeo Example | Illustrate your Timeline with photos, videos, tweets and more. |
| 2011 | 12 | 1 | | 2011 | 12 | 2 | | | SoundCloud Example | |
| 2011 | 12 | 7 | | 2011 | 12 | 8 | | | YouTube Example | |

PUBLISH

Before you can start changing the data in the spreadsheet, you will have to publish it. Pull down File > Publish to the Web ... to do this.

The screenshot shows a Google Spreadsheet titled "Campaign 2016" with the "File" menu open. The spreadsheet contains a table with columns: End Month, End Day, End Time, Display Date, Headline, Text, Media, Media Credit, and Media Caption. The "File" menu is open, and the "Publish to the web..." option is highlighted. The spreadsheet data is as follows:

| End Month | End Day | End Time | Display Date | Headline | Text | Media | Media Credit | Media Caption |
|-----------|---------|----------|---------------------|----------------------------|---|---|--|--|
| | | | | Google Spreadsheet Example | This is a test of using google spreadsheets as a source for the timeline tool | http://www.flickr.com | Zach Wise/verite.co | Chicago by zach.wise |
| | | | January February | A Flickr Example | TimelineJS is an open-source tool that enables you to build visually-rich interactive timelines and is available in 40 languages. | http://www.flickr.com | Zach Wise/verite.co | Enjoying the snow while sheltered at the train station |
| 2 | 15 | | | Another Flickr Example | It's Easy to Make Your Own Timeline | http://www.flickr.com | Zach Wise/verite.co | Chicago to NYC |
| 1 | 16 | 07:30:00 | | Vimeo Example | Illustrate your Timeline with photos, videos, tweets and more. | https://vimeo.com/11 | Greg Solenström recorded by Joe Germuska | Jay Z - "Hello Brooklyn" A recording of the radiators at Knight Lab |
| 2 | 2 | | | SoundCloud Example | | https://soundcloud.com | | Edwin Land on BBC |
| 2 | 8 | | | YouTube Example | | http://www.youtube.com | | |
| | 7 | | | Tweet Example | | https://twitter.com/ | | |
| | 4 | | | Google Map Example | Just put a link to the map. Nothing fancy, just a link. | https://www.google.com | | |

PUBLISH

Click the blue publish button, then dismiss the “Are you sure?” alert.

Publish to the web ✕


This document is not 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 ⇅

Publish

▶ Published content & s

 **docs.google.com says:**
Are you sure you want to publish this selection?

Cancel **OK**

PUBLISH

Copy the URL for your timeline (even of the content isn't "real" yet) and paste it in the small window in Step 3 on the TimelineJS home page.

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

Press ⌘+C to copy.

`https://docs.google.com/spreadsheets/d/1-pOs03p-AvfsFJz7ole0AYN8ld0Zes2472nQLD6ZRB4/pubhtml`

Or share this link using:    

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

Published

3 Copy/paste spreadsheet URL into the box below to generate your timeline. (Make sure you've published the spreadsheet.)

Generate your timeline

| | | | | | |
|------------------------|---|-------|------|--------|-----|
| Google Spreadsheet URL | <code>https://docs.google.com/spreadsheets/d/1</code> | Width | 100% | Height | 650 |
|------------------------|---|-------|------|--------|-----|

Optional settings (show)

Set language, fonts, starting slide and more.

<https://timeline.knightlab.com/>

PUBLISH

The iframe tag in step 4 contains the code that you can add to your HTML page. To complete this exercise, you will add your timeline to the bottom of your primary.html page (the one that includes your charts from Wednesday).

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

Press ⌘+C to copy.

`om/spreadsheets/d/1-pOs03p-AvfsFJz7ole0AYN8ld0Zes2472nQLD6ZRB4/pubhtml`

Or share this link using:    

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

Published

4

Embed the code into your website

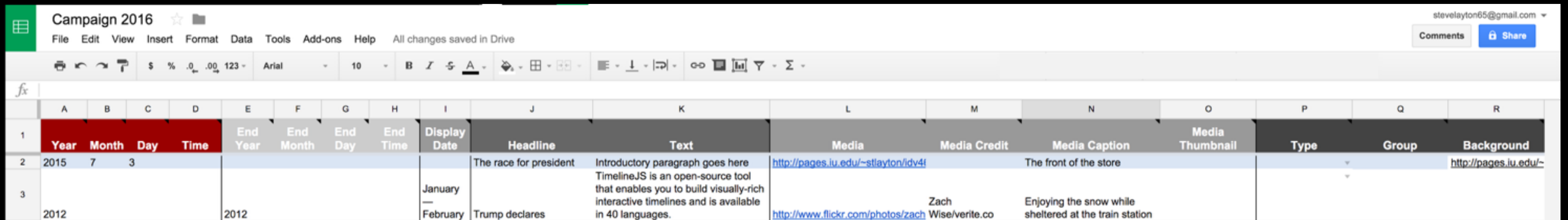
Grab the embed code and paste it on your site where you want your TimelineJS to appear (just like a YouTube video).

```
<iframe src='//cdn.knightlab.com/libs/timeline3/latest/embed/index.html?source=1-p0s03p-AvfsFJz7oIe0AYN8ld0Zes2472nQLD6ZRB4&font=Default&lang=en&initial_zoom=2&height=650' width='100%' height='650' frameborder='0'>
</iframe>
```

<https://timeline.knightlab.com/>

THE DATA

You can change the title of the spreadsheet but DO NOT change the column names or delete columns on the spreadsheet! You can have blank spaces in your data, but not entire blank rows.



The screenshot shows a Google Spreadsheet interface with the title 'Campaign 2016'. The spreadsheet contains a table with the following data:

| 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 |
|------|-------|-----|------|----------|-----------|---------|----------|--------------|------------------------|---|---|----------------|--|-----------------|------|-------|---|
| 2015 | 7 | 3 | | | | | | | The race for president | Introductory paragraph goes here | http://pages.lu.edu/~stlayton/idv4/ | | The front of the store | | | | http://pages.lu.edu/~stlayton/idv4/ |
| | | | | | | | | January | | TimelineJS is an open-source tool that enables you to build visually-rich interactive timelines and is available in 40 languages. | | Zach | Enjoying the snow while sheltered at the train station | | | | |
| 2012 | | | | 2012 | | | | February | Trump declares | | http://www.flickr.com/photos/zach | Wise/verite.co | | | | | |

THE DATA

The second four columns (E through H) are optional, if you are representing a span of time instead of a particular instance.

The screenshot shows the Google Sheets interface for a spreadsheet titled "Campaign 2016". The menu bar includes File, Edit, View, Insert, Format, Data, Tools, Add-ons, and Help. The status bar indicates "All changes saved in Drive". The toolbar contains various icons for printing, undo, redo, copy, paste, and formatting. The spreadsheet has columns labeled A through J. Column A is "Year", B is "Month", C is "Day", and D is "Time". Columns E, F, G, and H are "End Year", "End Month", "End Day", and "End Time" respectively, and are highlighted with an orange box. Column I is "Display Date" and column J is "Headline".

| | A | B | C | D | E | F | G | H | I | J |
|---|------|-------|-----|------|----------|-----------|---------|----------|--------------------------|------------------------|
| 1 | Year | Month | Day | Time | End Year | End Month | End Day | End Time | Display Date | Headline |
| 2 | 2015 | 7 | 3 | | | | | | | The race for president |
| 3 | 2012 | | | | 2012 | | | | January — February | Trump declares |

THE DATA

You can override the first eight columns with an entry in Column I (Display Date). This is helpful if the actual date isn't known (like Spring 2015).

016 ☆ 📁

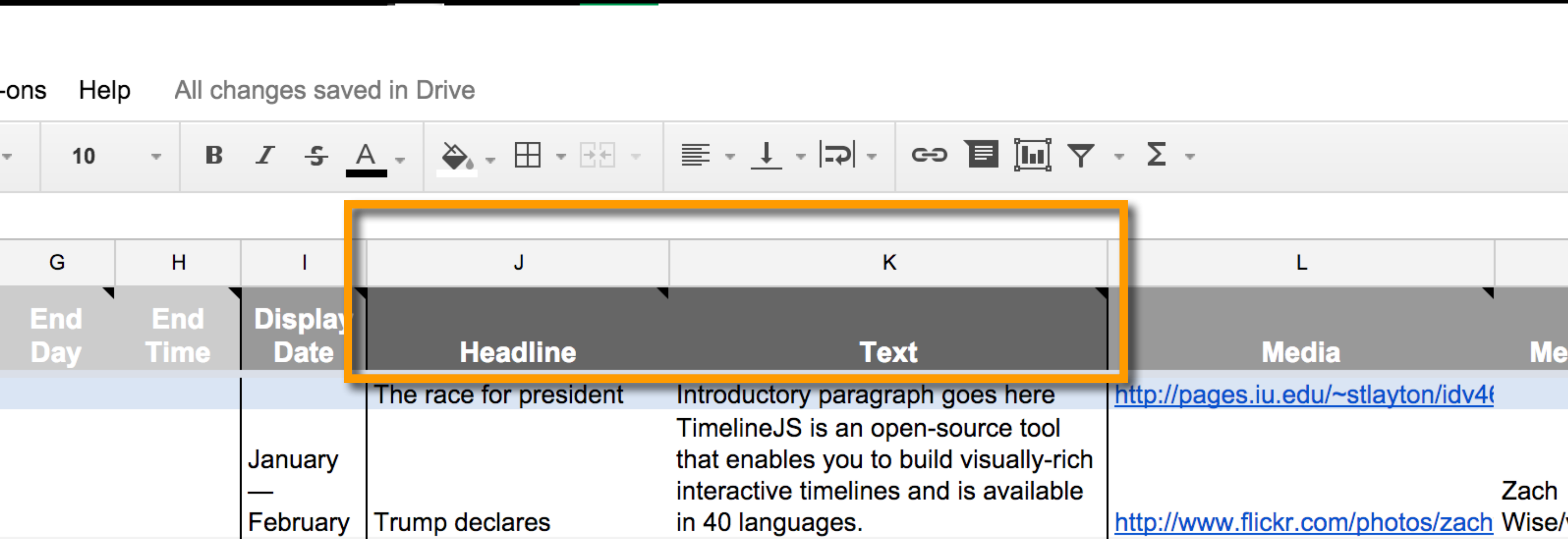
Insert Format Data Tools Add-ons Help All changes saved in Drive

\$ % .0 .00 123 Arial 10 B I S A [fill] [table] [grid] [list] [download] [refresh] [link] [comment] [chart] [filter]

| C | D | E | F | G | H | I | J | K |
|-----|------|----------|-----------|---------|----------|--------------|------------------------|---|
| Day | Time | End Year | End Month | End Day | End Time | Display Date | Headline | Text |
| | | | | | | | The race for president | Introductory paragraph goes here |
| | | 2012 | | | | January | | TimelineJS is an open-source tool that enables you to build visually-rich interactive timelines and is available in 40 languages. |
| | | | | | | February | Trump declares | |

THE DATA

Columns J and K are where you place the text for the timeline. Be sure every entry has a headline (for our purposes), and write these and your text in present tense.



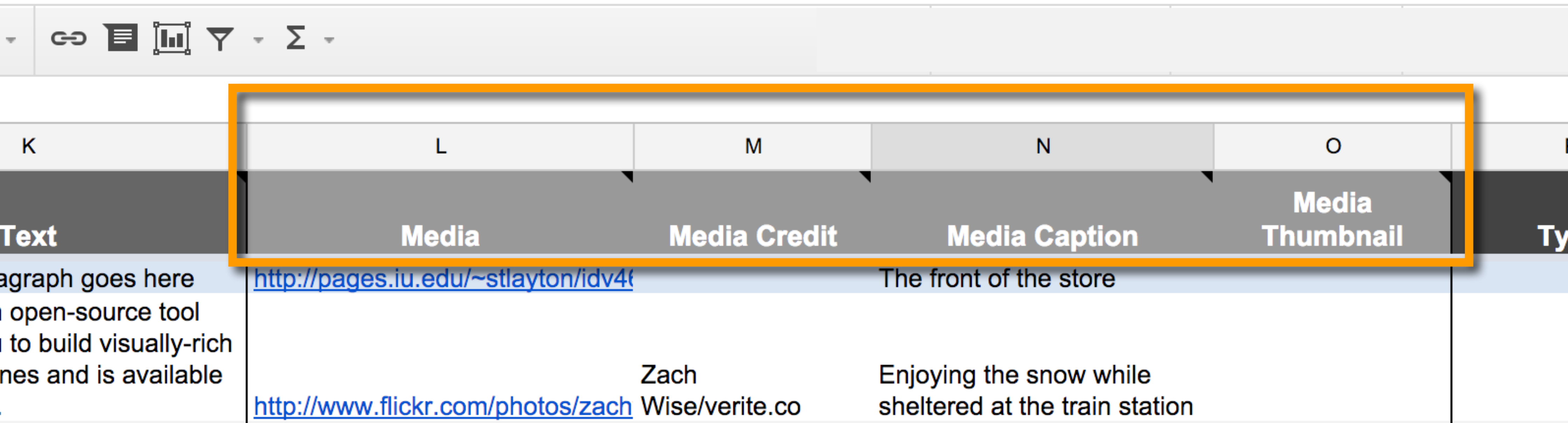
ons Help All changes saved in Drive

10 B I S A [Icons]

| G | H | I | J | K | L | M |
|---------|----------|--------------|------------------------|---|---|-------|
| End Day | End Time | Display Date | Headline | Text | Media | Me |
| | | | The race for president | Introductory paragraph goes here | http://pages.iu.edu/~stlayton/idv46 | |
| | | January | | TimelineJS is an open-source tool that enables you to build visually-rich interactive timelines and is available in 40 languages. | | Zach |
| | | February | Trump declares | | http://www.flickr.com/photos/zach | Wise/ |

THE DATA

Media columns (L through O) allow you to place images. Today, you will use a link to your class website (or your partner's) to specify the image location in Column L as an absolute path. I advise including credits, and be sure to write a caption if one is needed. Add the same URL for the image to Column O if you want the timeline to display a thumbnail.



| K | L | M | N | O | P |
|--|---|------------------------|---|-----------------|------|
| Text | Media | Media Credit | Media Caption | Media Thumbnail | Type |
| Paragraph goes here an open-source tool to build visually-rich pages and is available | http://pages.iu.edu/~stlayton/idv46 | | The front of the store | | |
| | http://www.flickr.com/photos/zach | Zach Wise/verite.co | Enjoying the snow while sheltered at the train station | | |

THE DATA

The Type column can be used to create your title slide, which is always first in the timeline but will not be “part” of it – in other words, you don’t need the date, etc. The other type, “era,” would be used to color a span of time in the chronology of the timeline. Each era gets a color, though you have little control over it.

stvelayton65@gmail.com ▼

Comments [Share](#)

| M | N | O | P | Q | R |
|--------------|--|-----------------|------|-------|---|
| Media Credit | Media Caption | Media Thumbnail | Type | Group | Background |
| | The front of the store | | | | http://pages.iu.edu/~ |
| rite.co | Enjoying the snow while sheltered at the train station | | | | |

THE DATA

Group (Column Q) is for organizing different types of entries. For example, you might consider using “Democrats” and “Republicans” for our exercise today.

stevelayton65@gmail.com ▼

Comments [Share](#)

| M | N | O | P | Q | R |
|--------------|--|-----------------|------|-------|---|
| Media Credit | Media Caption | Media Thumbnail | Type | Group | Background |
| | The front of the store | | | | http://pages.iu.edu/~ |
| rite.co | Enjoying the snow while sheltered at the train station | | | | |

THE DATA

You can leave Column R – Background – blank if you like, or give it a color, using a hex value, or you can apply an image as a background by using its (absolute) URL. Both color and image will fill the entire visible area of that particular slide in the final piece.

stevelayton65@gmail.com ▼

Comments [Share](#)

| M | N | O | P | Q | R |
|--------------|--|-----------------|------|-------|---|
| Media Credit | Media Caption | Media Thumbnail | Type | Group | Background |
| | The front of the store | | ▼ | | http://pages.iu.edu/~ |
| rite.co | Enjoying the snow while sheltered at the train station | | ▼ | | |

CUSTOMIZING

TimelineJS *is* customizable, though it isn't easy. If you want to have some presentation control, you can, but you will not be able to use the simple `<iframe>` tag. You will have to instantiate the timeline via Javascript, similar to the way you did the Google chart last week. This means a few more lines of code in your HTML document.

1. You need a link tag to load timeline.js's CSS:

```
<link title="timeline-styles" rel="stylesheet" href="https://cdn.knightlab.com/libs/timeline3/latest/css/timeline.css">
```

2. Secondly, you need a script tag to load the timeline.js Javascript:

```
<script src="https://cdn.knightlab.com/libs/timeline3/latest/js/timeline.js"></script>
```

3. You will need a div tag within the body of the page to establish an ID for the timeline:

```
<div id='timeline-embed' style="width: 100%; height: 600px"></div>
```

CUSTOMIZING

TimelineJS *is* customizable, though it isn't easy. If you want to have some presentation control, you can, but you will not be able to use the simple `<iframe>` tag. You will have to instantiate the timeline via Javascript, similar to the way you did the Google chart last week. This means a few more lines of code in your HTML document.

4. Finally, you need a script tag to actually create the timeline (referencing your div):

```
<script>
```

```
    timeline = new TL.Timeline('timeline-embed', 'https://docs.google.com/spreadsheets/d/  
    1cWqQBZCkX9GpzFtxCWHoqFXCHg-yITVUWInrdYMzKUI/pubhtml');
```

```
</script>
```

(Note that this is the link to your Google spreadsheet.)

CUSTOMIZING

If you build your timeline this way, you can have greater control over various ways in which timeline.js is presented. To learn more, visit Knight Lab's Documentation section.

<https://timeline.knightlab.com/docs/index.html>

We will explore some ways to customize TimelineJS on Wednesday, as well as begin working with another online tool – Highcharts.