

Presentation Fundamentals

Presentation

Date: August 2nd (next Saturday)

Rehearsal and setup: August 1st (next Friday)

Location: Mondavi Center

Format: in-person with projector

We will go through three ideas to deliver the presentation

- Poster-like slide deck
- Storytelling website
- Dashboards/web apps.

Slide Deck


Perhaps the most common way to delivery any presentation

Examples

Source	Key Takeaways	Link
Juice Analytics – <i>20 Best Data Storytelling Examples</i>	Curated slide examples with a strong narrative arc; shows balance of visuals + key messages.	Juice Analytics
Medium – <i>Design + Storytelling Tips</i>	Use three-part story arc (Setup → Conflict → Resolution); slide titles should be informative.	Medium Article
DataKnowsAll – <i>Data Science Slide Tips</i>	Use 1-minute rule per slide, one message per chart, and highlight trends with color and annotation.	DataKnowsAll Blog
SlidesCarnival – <i>Elevate Slide Storytelling</i>	Focus on contrast, clarity, and chunking data into digestible blocks; strong visuals over text.	SlidesCarnival
Storydoc – <i>How to Build Engaging Decks</i>	Emphasizes designing for flow: hook → insight → impact; includes examples and templates.	Storydoc Guide

Resources

Tool	Purpose	Type	Why It's Useful	Difficulty	Notes
Google Slides	Layout & presentation	Design	Easy drag-and-drop editor, shareable, ideal for two-slide posters	● Beginner	Works well for in-class or online posters
Canva	Visual design & infographics	Design	Sleek templates for posters, charts, icons, text layouts	● Beginner	Free version has most features; great for visual polish
PowerPoint	Slides and diagrams	Design	Precise control, animations, and exporting as PDF	● Beginner	Common in school settings
Figma	Layout & UI design	Design	Collaborative interface design, supports interactivity mockups	● Intermediate	Great for polished, structured layouts
Jupyter Notebook	Data analysis & plotting	Code	Code, graphs, and markdown in one place	● Intermediate	Export graphs to images for slides
Python (Matplotlib, Seaborn)	Data visualization	Code	Custom charts and statistical plots	● Intermediate	Used during analysis, not presentation itself
Google Charts / Chart Studio (Plotly)	Interactive plots	Web-based	Create charts for embedding into slides or images	● Beginner	Plotly allows easy export as PNG or HTML
Lucidchart / Draw.io	Diagrams & infographics	Web-based	Create flowcharts, timelines, or explanatory visuals	● Beginner	Useful for methods or workflow sections
Screen Recorder / GIF Maker	Animations	Utility	Record short clips of dashboard/app usage to embed in slide	● Beginner	Use for "click-to-play" visuals
QR Code Generator	Linking to extras	Utility	Link to dashboards, full sites, or code notebooks	● Beginner	Add to slide corners for interactivity

Tool	Purpose	Type	Why It's Useful	Difficulty	Notes
Streamlit / Voila	Dashboard interactivity	Code/Web	Create and showcase dashboard interactions; capture screenshots or GIFs for slides	 Intermediate	Use for demos and visuals, not the slides themselves

Storytelling website

A storytelling website can let the users to control the pace of the story, as well as to explore the parts of their interest. It is still a prepared narrative from the presenters but grant more freedom to the users.

Examples

1. The Pudding – Data Journalism with Visual Essays <https://pudding.cool/> Ideas to adapt: Scroll-based transitions, animations triggered by explanation, sectioned layouts.
2. NYTimes “Upshot” & Data Visual Stories <https://www.nytimes.com/section/upshot> Ideas to adapt: Use of timelines, step-by-step logic, geographic storytelling, comparisons.
3. FlowingData by Nathan Yau <https://flowingdata.com/> Ideas to adapt: Use of time-based data, custom animations, visual metaphors.
4. Observable HQ Notebooks <https://observablehq.com/> Ideas to adapt: Show students how interactivity + storytelling can be embedded directly in the page.
5. Explorable Explanations (Bret Victor-inspired) <https://explorabl.es/>

Resources

Tool	Why Use It	Skill Level
Quarto (https://quarto.org)	Turn markdown + code + plots into beautiful websites; great for Python data viz	Medium
Jupyter Book (https://jupyterbook.org)	Convert notebooks into publishable websites with sections	Medium
GitHub Pages	Host any static website for free	Medium

Tool	Why Use It	Skill Level
Notion + Super.so	Build sleek pages with text, images, and embedded visuals	Easy
Google Sites	Simple drag-and-drop website builder	Easy

Dashboard

Dashboards or web apps offer a user-centric experience where the users can explore the datasets using the tools you prepare for them. Recalling that a user is unlikely an expert on this issue, it is even more important for you to design the interface for a smooth experience.

Examples

1. Streamlit Gallery <https://streamlit.io/gallery>
2. Our World in Data Dashboards <https://ourworldindata.org/coronavirus>

Resources

Tool	Pros	Cons	Skill Level
Streamlit	Easiest Python dashboard tool; runs locally or deploys online; markdown-friendly	Slight learning curve with widgets	Medium
Voila	Turns existing Jupyter notebook into interactive interface	Limited styling; less dynamic	Medium
Dash (Plotly)	Powerful and flexible	More code-heavy	High
Google Data Studio (Looker Studio)	No coding; drag and drop	Not Python-based	Easy
Gradio	Meant for ML demos but works for visualization	Less layout control	Medium