

Data Visualization Best Practices and Project Work

Data Boot Camp Lesson 20-3.1



The Big Picture





Quick Tip for Success:

If you're getting stuck, think through the issues out loud, lean on your teammates, and ask questions!

Project Segments

This Week: "Plug It In"



Sketch It Out

Decide on your overall project, select your question, and build a simple model. You'll connect the model to a fabricated database using comma-separated values (CSV) or JavaScript Object Notation (JSON) files to prototype your idea.



Build the Pieces

Train your model, and build out the database you'll use for your final presentation.



Plug It In

Connect your final database to your model, continue to train your model, and create your dashboard and presentation.



Put It All Together

Put the final touches on your model, database, and dashboard. Lastly, create and deliver your final presentation to the class.

This Segment: Capstone Project

By the end of this segment, you will be able to:



Demonstrate data visualization best practices



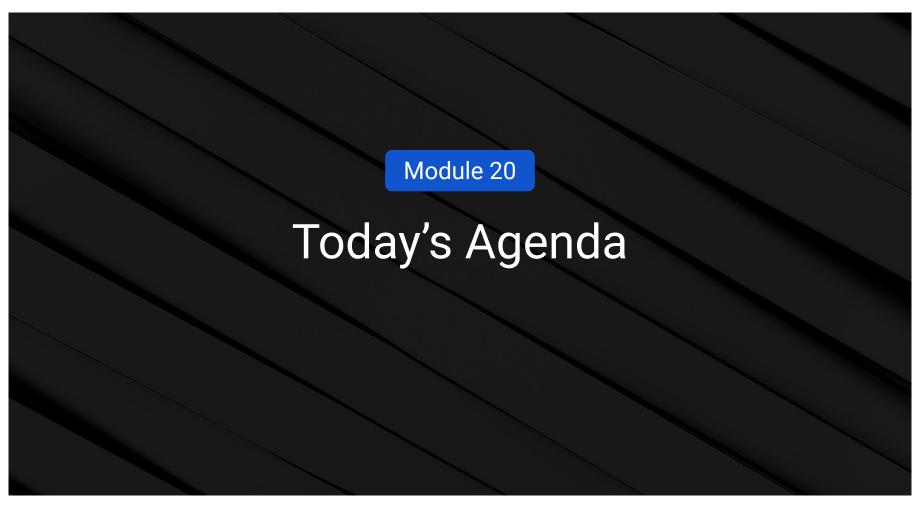
Explain the process of Heroku deployment



Create a professional presentation



Host a working model of your application on a website

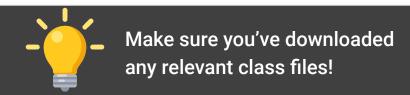


Today's Agenda

By completing today's activities, you'll...



Understand the best practices to follow when creating visualizations







Does your team know how your data will tell a story visually?

Data Visualization Best Practices

Make It Honest

Maintain visual integrity in your visualizations

- Don't cherry-pick your data.
- Don't distort scales.
 - Don't zoom in to exaggerate differences.
 - o Don't use inconsistent scales.
- Don't imply relationships that don't exist.
- Make sure relative visual proportions reflect the proportions in the data.



Make It Clear and Accessible

Let everyone see your data story

- Label your axes!
- Use readable fonts.
- Use accessible color palettes.
 - 1 in 20 people have difficulty distinguishing certain color combinations.
 - 10 out of 10 people in one survey reported having trouble reading yellow text on a white background.



Make It Effective

Bring attention to the most important parts of your visualization

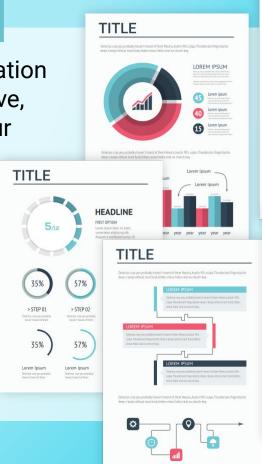
- Remove distracting elements.
- Aim for a high data-ink ratio.
 - If you were to print out a visualization, what proportion of the ink would be used to display the data, versus features that could be erased? That is your data-ink ratio.
- Highlight important elements of your visualization.
- But still keep it honest, clear, and accessible!



Make It Pretty

Once you've ensured that your visualization is honest, clear, accessible, and effective, aesthetic considerations can make your visualization more pleasing.

- Use colors that complement and contrast each other.
- Consider white space in your layout.
- Align elements.
- Add easing transitions to animations.









Project Development Consultation

Suggested Time:

1 hour and 30 minutes