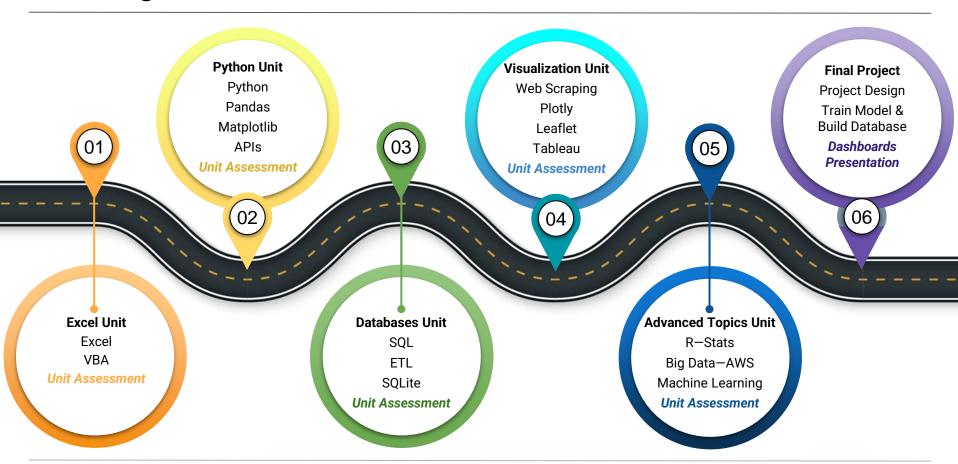


# Data Visualization Best Practices and Project Work

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



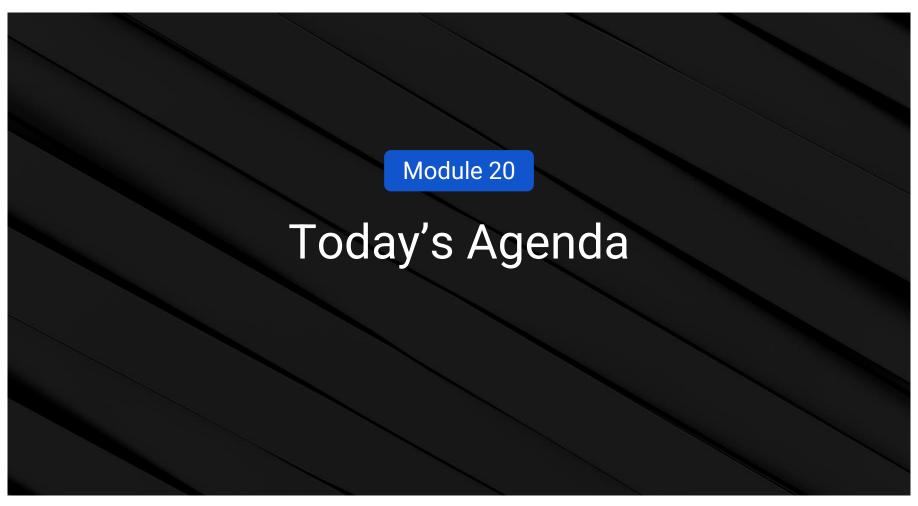
Explain the process of Heroku deployment



Create a professional presentation



Host a working model of your application on a website

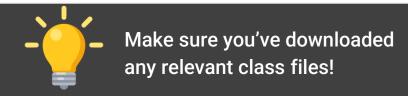


## Today's Agenda

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.
  - 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