



Introduction to Project 3

Data Boot Camp

Lesson 16.1



Class Objectives

In this lesson, you will:



Understand the requirements of Project 3.



Be assigned a group for the project.



Begin group work on the project.

Project 3 Group Work

You have two weeks to work on this project.



The goal of this project is to tell a story using data visualizations.



Interactivity should be built-in, allowing users to explore data on their own.



Teams will also create a 10-minute presentation that lays out your theme, coding approach, data wrangling techniques, and final visualization.

Project 3 Group Work

The project requirements consist of five categories:

01

Data and data delivery

02

Back end (ETL)

03

Visualizations

04

Group presentations

05

Slide deck

Specific Requirements

01

Your visualization must include a Python Flask-powered API, HTML/CSS, JavaScript, and at least one database (SQL, MongoDB, SQLite, etc.).

02

Your project should fall into one of these tracks:

- A combination of web scraping and Leaflet or Plotly
- A dashboard page with multiple charts that update from the same data

03

Your project should include at least one JS library that we did not cover.

04

Your project must be powered by a dataset with at least 100 records.

05

Your project must include some level of user-driven interaction (e.g., menus, dropdowns, textboxes).

06

Your final visualization should ideally include at least three views.

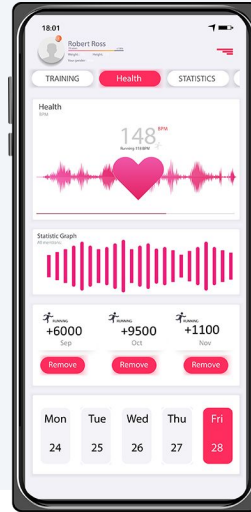
Project 3 Group Work

You can focus on:

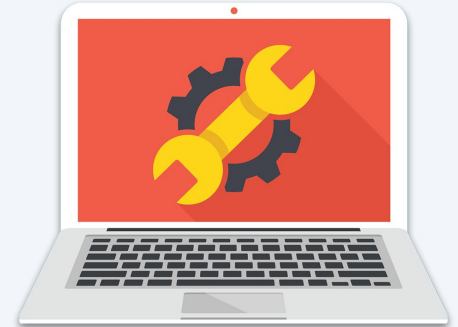
Finance



Healthcare



Custom



Dashboard Example: Finance

Tracking market data is crucial for equity traders. Not all traders code and are able to create custom-tailored visualizations. What's the best way for them to get what they need for success?



One option is offered by the [Wall Street Journal](#).



Their website offers a dashboarding tool providing a high-level view of market performance.



This highly interactive tool allows users to easily explore stocks, bonds, currencies, and commodities.



Users of all skill levels can utilize these data.



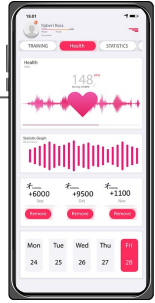
Visualizations help make the data easier to understand.



Multiple views are available for customized content.

Dashboard Example: Healthcare

Imagine: Vacation time is coming up—and so is flu season. Trying to plan a road trip across the United States while keeping everyone's health in mind can be tricky. Using the [FluView](#) dashboard provided by the CDC, users can easily confirm which areas to avoid. Different interactive features include:



An overall view of the United States, or customizable view (state by state)



Historic and current cases

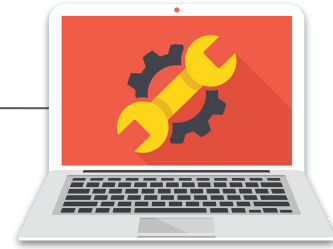


A chart showing the count of cases, broken down by strain



With this, data is delivered quickly and navigated through with ease.

Dashboard Example: **Weather Tracking**



While on the way to work one morning, you notice dark clouds on the horizon. You don't remember hearing about a storm front coming in, but this looks ominous.



A quick visit to [Weather Underground's Dashboard](#) helps illuminate the situation.



Updated with live data, you can view a live map as well as specific conditions such as temperature, pressure, and even feed from a live webcam.



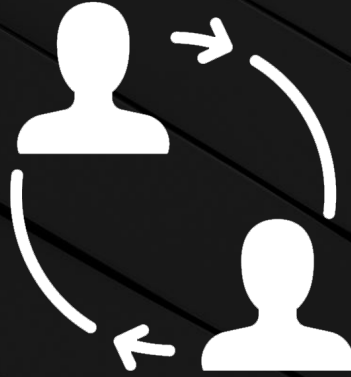
The data delivery is up-to-date and seamless, making it easy to understand current conditions without digging too deeply.

Questions?



Time to divide into teams!





Project 3 Group Work

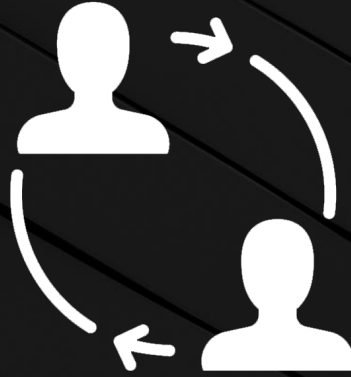
Suggested Time:

55 Minutes



A close-up photograph of a computer keyboard. The central focus is a large, white, rectangular key with rounded corners. On this key, there is a dark blue icon of a coffee cup with three wavy lines above it representing steam. Below the icon, the word "Break" is printed in a dark blue, serif font. The key is slightly raised from the keyboard's base. Surrounding this key are other keys: to the left is a key with double quotation marks, above it is a key with a right square bracket, and to the right is a key with a left square bracket. The keyboard has a light-colored, possibly wood-grain, textured surface.

Break



Project 3 Group Work

Suggested Time:

55 Minutes

Questions?



*The
End*