



# Palestine Launchpad Program

**Data Analysis NanoDegree**



# Our agenda for today

- 1 Congratulation Students who passed
- 2 Recap about the last session
- 3 Project Two Statistics
- 4 Project (Three) Overview
- 5 Case Study
- 6 Knowledge sharing
- 7 Q\A

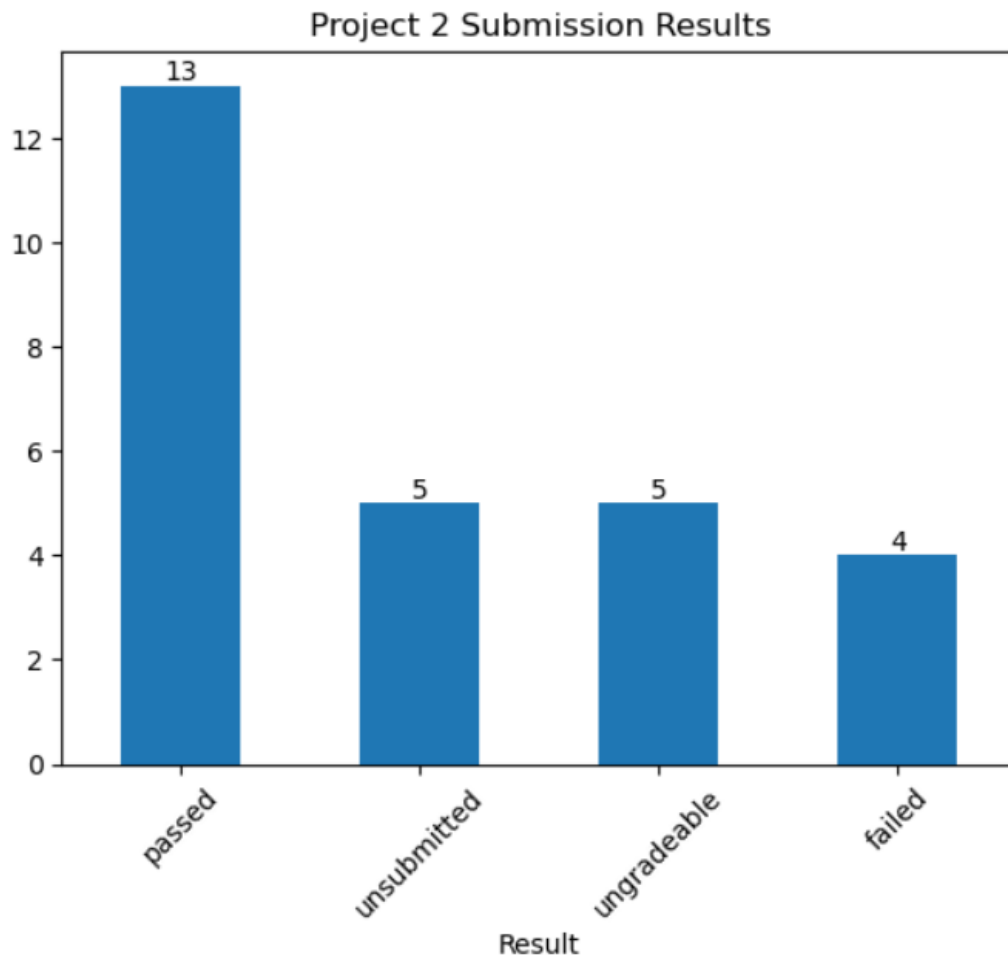
# Project Two Statistics

Project 2 overview

# Project 2 Status

## 5 July

Attempts mean = 1.5



# Recap

What did we talk about last session

## Last Session we covered the following:

Here's a breakdown of the key areas we covered:

- ✓ **Q&A:** We addressed and responded to various inquiries that were raised.
- ✓ **Knowledge Sharing:** During our last session, we had dived into some exciting topics, including how to extract data from PCBS by Saeeda

# Project Three : Communicate Data Findings

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What is needed to make a successful submit

# Project: Communicate Data Findings

## Project Overview

This project has two parts that demonstrate the importance and value of data visualization techniques in the data analysis process.

- ✓ In Part I, Exploratory data visualization, you will use Python visualization libraries to systematically explore a selected dataset, starting from plots of single variables and building up to plots of multiple variables.
- ✓ In Part II, Explanatory data visualization, you will produce a short presentation that illustrates interesting properties, trends, and relationships that you discovered in your selected dataset. The primary method of conveying your findings will be through transforming your exploratory visualizations from the first part into polished, explanatory visualizations.
- ✓ Project Due Date: Aug 27, 2024



### Exploratory vs. Explanatory Analyses

The five steps of the data analysis process:

1. **Extract** - Obtain the data from a spreadsheet, SQL, the web, etc.
2. **Clean** - Here, we could use exploratory visuals.
3. **Explore** - Here, we use exploratory visuals.
4. **Analyze** - Here, we might use either exploratory or explanatory visuals.
5. **Share** - Here is where explanatory visuals live.

## Project: Communicate Data Findings

### TYPES of ANALYSIS



vs.



# Characteristics of Exploratory vs Explanatory Analysis

## Exploratory

Analysis is done when you are searching for insights.

These visualizations don't need to be perfect

You are using plots to find insights, but they don't need to be aesthetically appealing.

You are the consumer of these plots, and you need to be able to find the answer to your questions from these plots.

## Explanatory

Analysis is done when you are providing your results for others

These visualizations need to provide you the emphasis necessary to convey your message.

They should be accurate, insightful, and visually appealing.

### Choose Your Dataset

Below is a compiled list of the datasets you can choose from. However, you can explore other datasets that interest you:

- ☐ [Ford GoBike System Data\(opens in a new tab\)](#) (38 MB, CSV File)
- ☐ [Flights](#)
- ☐ [Loan Data from Prosper\(opens in a new tab\)](#) (82.5 MB, CSV File)
- ☐ [PISA Data - 2018](#)

# New Concepts

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Udacity, Students and Session Leads

# Skimpy

[https://colab.research.google.com/gist/aeturrell/7bf183c559dc1d15ab7e7aaac39ea0ed/skimpy\\_demo.ipynb](https://colab.research.google.com/gist/aeturrell/7bf183c559dc1d15ab7e7aaac39ea0ed/skimpy_demo.ipynb)

## Dataset Sources

[!\[\]\(eafc244b53721dd1ec133f0772f70fc7\_img.jpg\) Exploring Data Sources for Data Analysis Projects | by Alaa' Omar | Jun, 2024 | Medium](#)

# Case Study

→  
Visualize a log database

# Firewall Log dataset

[https://colab.research.google.com/drive/1m\\_Q12L-CDGunKSsHI9Nrrh\\_m7Jx3igDR?usp=sharing](https://colab.research.google.com/drive/1m_Q12L-CDGunKSsHI9Nrrh_m7Jx3igDR?usp=sharing)



# Knowledge Sahring

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Udacity, Students and Session Leads

# Text processing pipeline by Sondos

# Next Steps

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Let's get things started...

# Second Project July 2, 2024

May

June

July

August

September

## Strat working on Project three

1. Choose the dataset
2. Start Exploring your dataset

Today  
July 6, 2024



Third Project Due  
Date

August 27, 2024

- Communicate Data  
findings



Program Period  
May 9, 2024 - September 14, 2024



# Thank You!

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And Good Luck!