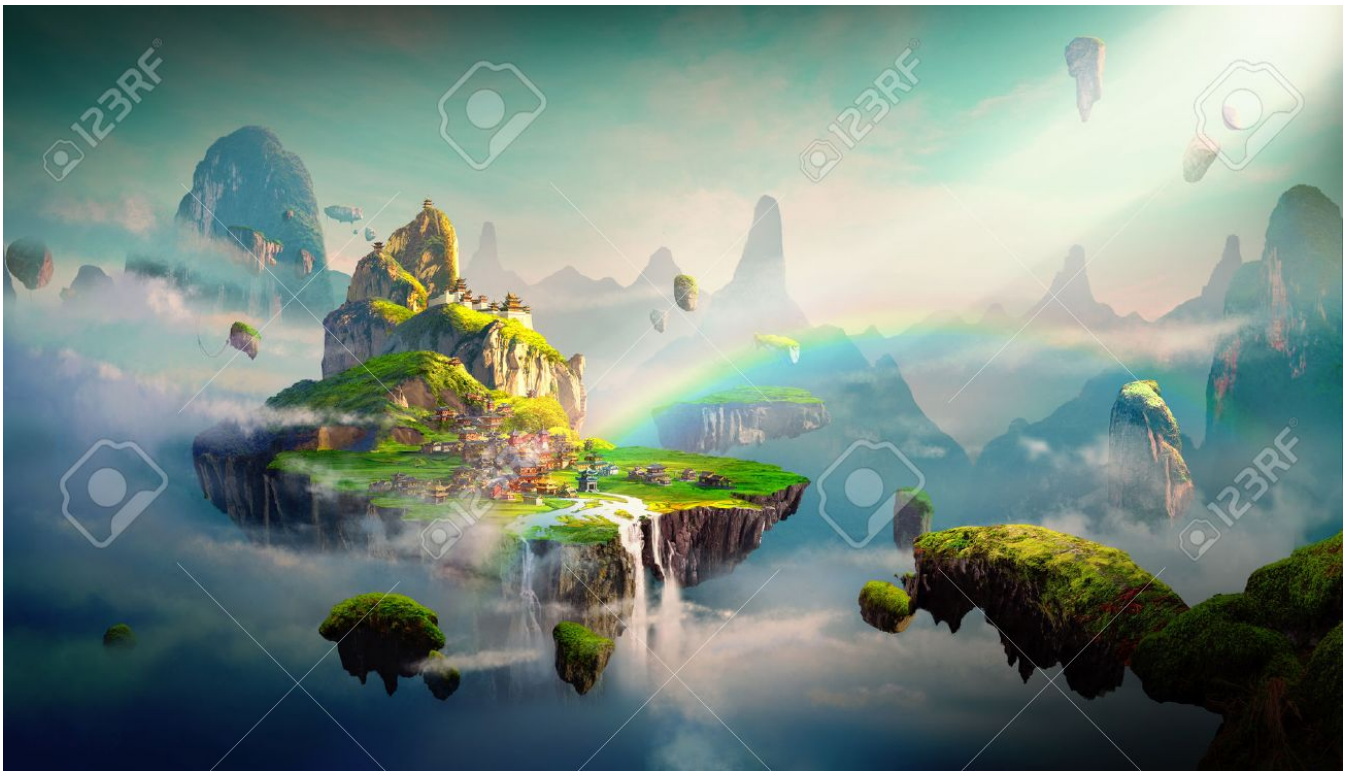
Pandas, Pandas, Pandas

Background

The data dive continues!

This is an exploration of Python Pandas to apply it to new situations.

Heroes of Pymoli



Imagine that I have landed a Lead Analyst gig for an independent gaming company. I've been assigned the exiting task of analyzing the data for their most recent fantasy game Heroes of Pymoli.

The game is free-to-play, but players are encouraged to purchase optional items that enhance their playing experience. As a first task, the company would like me to generate a report that breaks down the game's purchasing data into meaningful insights.

It includes the following:

Player Count

- Total Number of Players

Purchasing Analysis (Total)

- Number of Unique Items
- Average Purchase Price
- Total Number of Purchases
- Total Revenue

Gender Demographics

- Percentage and Count of Male Players
- Percentage and Count of Female Players
- Percentage and Count of Other / Non-Disclosed

Purchasing Analysis (Gender)

- The below each broken by gender
  - Purchase Count
  - Average Purchase Price
  - Total Purchase Value
  - Normalized Totals

Age Demographics

- The below each broken into bins of 4 years (i.e. <10, 10-14, 15-19, etc.)
  - Purchase Count
  - Average Purchase Price
  - Total Purchase Value
  - Normalized Totals

Top Spenders

- Identifies the the top 5 spenders in the game by total purchase value, then list (in a table):
    - SN
    - Purchase Count
    - Average Purchase Price
    - Total Purchase Value

Most Popular Items

- Identifies the 5 most popular items by purchase count, then list (in a table):
    - Item ID
    - Item Name
    - Purchase Count
    - Item Price
    - Total Purchase Value

Most Profitable Items

- Identifies the 5 most profitable items by total purchase value, then list (in a table):
    - Item ID
    - Item Name
    - Purchase Count
    - Item Price
    - Total Purchase Value

As final considerations:

- Uses the Pandas Library and the Jupyter Notebook.