BIG GAME

Imagine you are a data analyst working for a consulting firm that specializes in the gaming industry. Your firm has been hired by a consortium of online casinos to provide an in-depth analysis of their performance metrics. Your task is to create a comprehensive EDA report that highlights key findings, trends, and potential areas of improvement.

EXPLORATORY DATA ANALYSIS (EDA)

ONLINE CASINO GAMING REVENUE

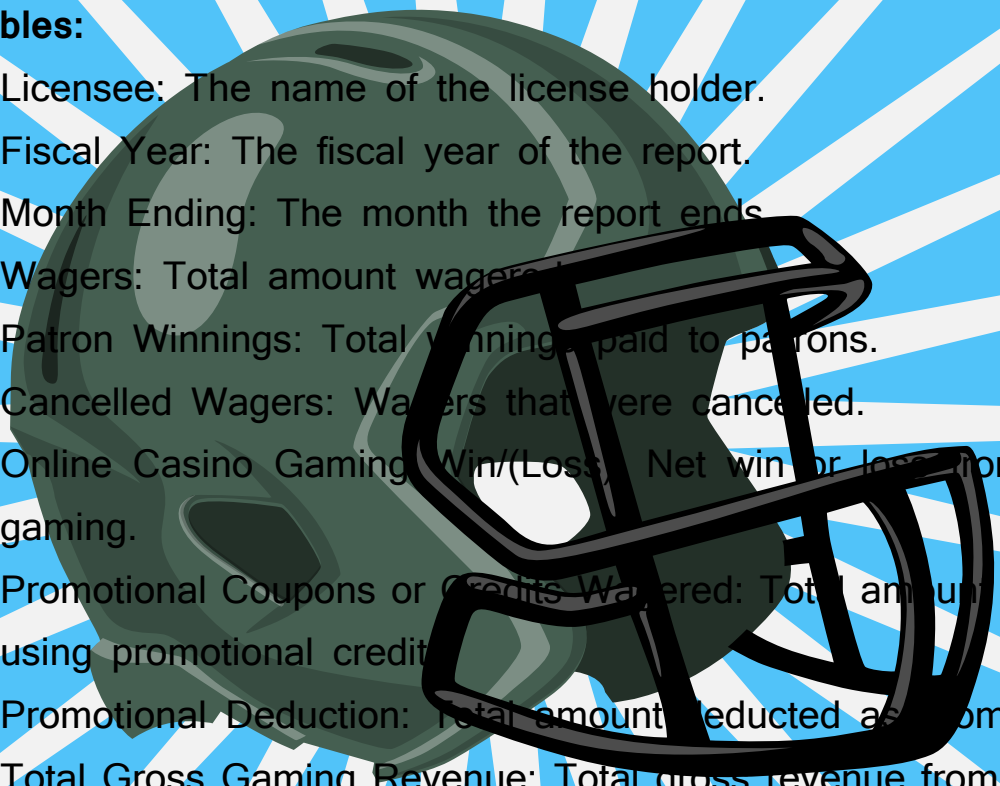
GAMING EDA BY MANISHA

Background

In this project, you'll analyze a dataset that contains detailed monthly reports from different casino gaming licenses, including information on wagers, winnings, promotional deductions, and total gross gaming revenue. The objective is to gain insights into the performance of online casino gaming over different periods and licenses, and to identify trends and patterns that can inform business and regulatory decisions.

Dataset Download Details

- **Dataset Link:** Download Casino Gaming Dataset
- **Format:** CSV
- **Variables:**
  - Licensee: The name of the license holder.
  - Fiscal Year: The fiscal year of the report.
  - Month Ending: The month the report ends.
  - Wagers: Total amount wagered.
  - Patron Winnings: Total winnings paid to patrons.
  - Cancelled Wagers: Wagers that were cancelled.
  - Online Casino Gaming Win/(Loss): Net win or loss from online gaming.
  - Promotional Coupons or Credits Wagered: Total amount wagered using promotional credits.
  - Promotional Deduction: Total amount deducted as promotions.
  - Total Gross Gaming Revenue: Total gross revenue from gaming.
  - Payment: Total payment to the license holder.



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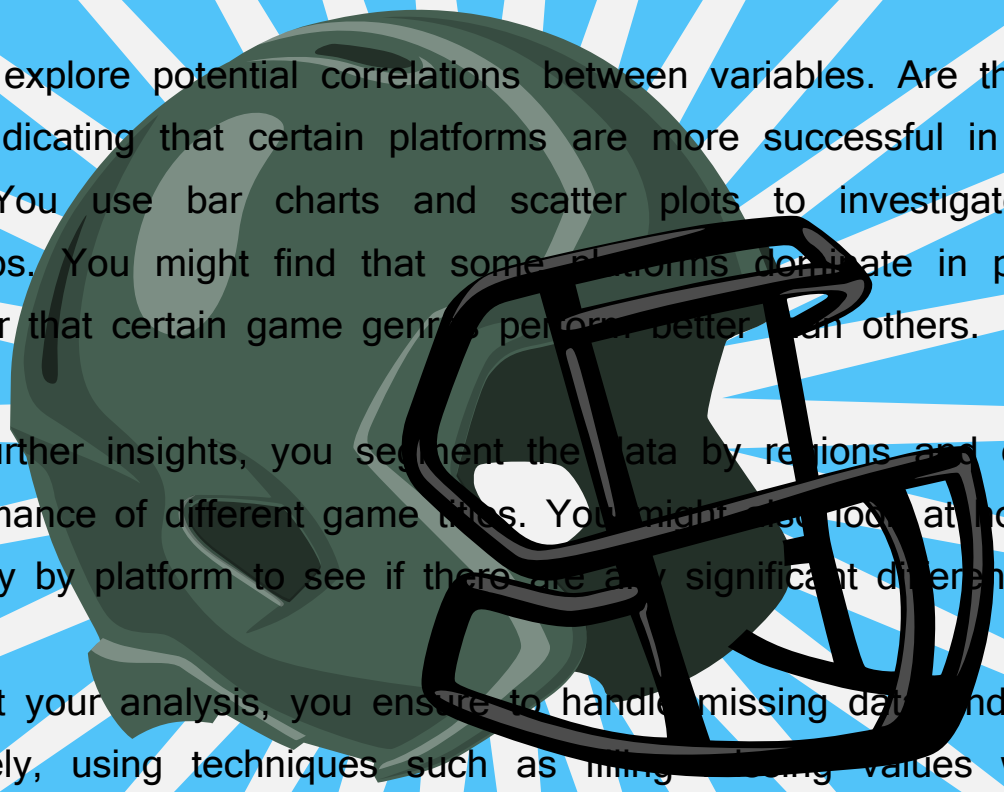
You've just received a new project focusing on understanding gaming revenue data. Your first task is to load and examine the dataset to get a sense of its structure and contents. You notice columns such as game titles, platforms, regions (North America, Europe, Asia, etc.), sales figures, and release dates. Each row represents the sales data for a particular game.

As you begin your analysis, you start by plotting histograms and distributions to visualize how gaming revenues are distributed across different regions. You also calculate summary statistics to understand the average sales, the range of sales, and the variation in sales figures.



Next, you explore potential correlations between variables. Are there any patterns indicating that certain platforms are more successful in specific regions? You use bar charts and scatter plots to investigate these relationships. You might find that some platforms dominate in particular markets, or that certain game genres perform better than others.

To gain further insights, you segment the data by regions and compare the performance of different game titles. You might also look at how sales figures vary by platform to see if there are any significant differences.

Throughout your analysis, you ensure to handle missing data and outliers appropriately, using techniques such as filling missing values with the median or using robust statistical methods.

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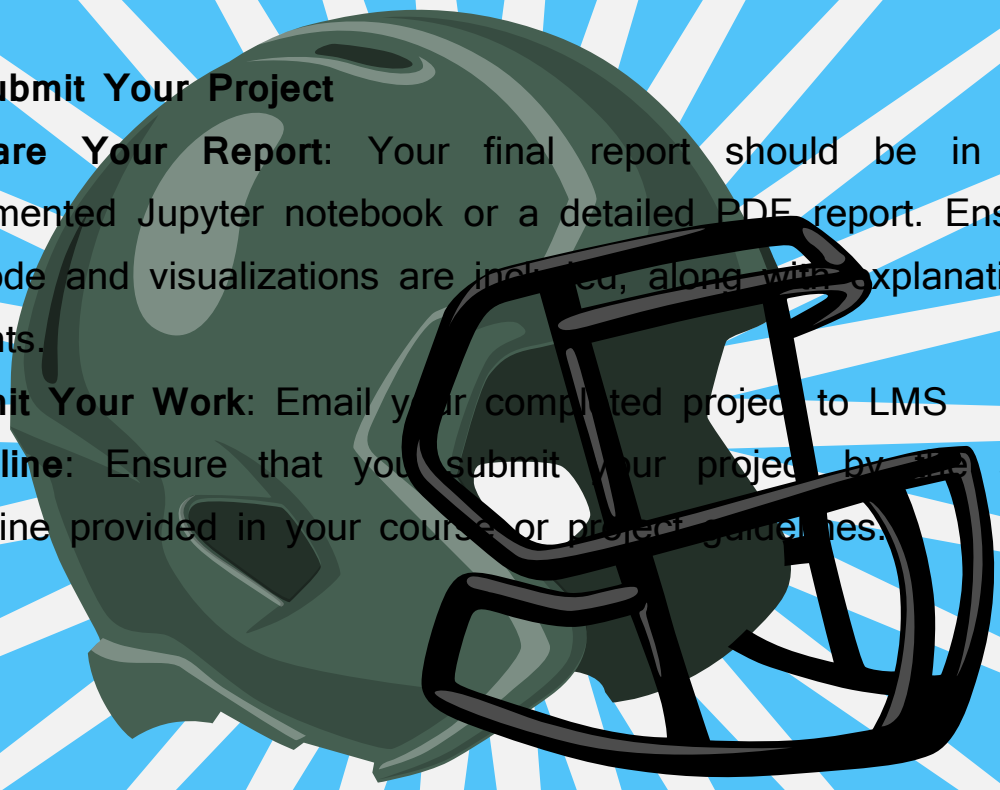
Finally, you summarize your findings in a comprehensive report, highlighting key insights and recommendations for game developers or marketers. For example, you might suggest focusing on specific platforms for certain regions or developing games in genres that are particularly popular.

Conclusion:

By the end of your project, you've not only gained valuable insights into gaming revenue patterns but also provided actionable recommendations. Your findings could potentially influence future game development and marketing strategies, making them more effective in targeting specific markets.

How to Submit Your Project

1. **Prepare Your Report**: Your final report should be in a well-documented Jupyter notebook or a detailed PDF report. Ensure that all code and visualizations are included, along with explanations and insights.
2. **Submit Your Work**: Email your completed project to LMS
3. **Deadline**: Ensure that you submit your project by the specified deadline provided in your course or project guidelines.



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