NBA 3-point and Salary Analysis Case Study Rubric
Due Date: TBD

Submission Format: Upload PDF and link to GitHub repo to Canvas

General Description
The following rubric will outline how to submit your report in the analysis of 3-point shooting over time in the NBA. This case study serves as a practical application of your data science skills to real-world sports data, highlighting the evolving strategic importance of long-range shooting in professional basketball. Through this exercise, you will explore the correlation between player positions, specifically point guards and shooting guards, their salary progression, and the increase in 3-point shot attempts across the league.

Why Am I Doing This?
This case study offers a chance to showcase both your technical and conceptual skills through a hands-on project that mimics scenarios you might encounter in academic or professional settings. It allows you to apply data science methodologies to real-world sports analytics.

What Am I Going to Do?
You will use your data science skills to analyze NBA salary trends and the rise of 3-point shooting, creating models and visualizations to support your findings. The deliverable will comprehensively cover all requirements, showcasing significant results and informed conclusions.

How Will I Know I Have Succeeded?
You will meet the expectations of this case study by adhering to the criteria outlined in this rubric.

Category	**Details**
Formatting	Written Portion: - Submit the written analysis as a PDF file. Data & Code: - Submit all code on GitHub. - Include any additional data used. - Your repository should be titled "CS-[insert your first & last name]". References:

	- Include references on a separate page at the end of your written document. - Use IEEE citation style.
Written Portion	Summary: - Briefly describe the problem and its significance in the context of NBA analytics. Analysis Plan: - Outline your approach to creating regression models and analyzing the data. - Include a simple graphic in your PDF that visualizes your planned analysis workflow. Results Discussion: - Detail the findings from your regression analysis and visualizations. - Discuss the implications of these findings in the broader context of sports management and economics. Reflection: - Challenges and Learning: - Discuss any challenges faced during the case study and how you addressed them. - Reflect on what could have been done differently and how you plan to apply these learnings in future projects.
Code	Exploratory Data Analysis: - Begin with a thorough exploratory analysis of player salaries and 3-point shooting trends. Regression Analysis: - Construct regression models to analyze salary trends for point guards and shooting guards versus other positions.

	- Separate positions into buckets and compare both salaries and 3-point shooting statistics. - Ensure your code is well-commented to be easily understood by others. Visualization: - Create visualizations such as graphs depicting 3-point shooting trends over time. - Visuals should clearly illustrate the relationship between player positions, 3-point shooting, and salary changes.
References	- List all additional references used in the analysis that were not included in the provided materials, following IEEE citation style.