

Project Overview:

This project involves the analysis of a dataset from ABC company consisting of 458 rows and 9 columns. This dataset provides information about employees across various teams, including their roles, personal attributes (age, height, weight), and salaries. The objective of this project is to preprocess the dataset, perform various analyses to extract meaningful insights, and visualize the findings graphically.

Preprocessing:

Corrected the data in the "height" column by replacing it with random numbers between 150 and 180. Currently, the "height" values in some rows are inconsistent (e.g., "7-0" instead of numeric values). These will be replaced with random values between 150 and 180 (inclusive), ensuring consistency and integrity of the dataset for further analysis.

Analysis Tasks:

1. Determined the distribution of employees across each team and calculated the percentage split relative to the total number of employees.
2. Segregated employees based on their positions within the company. This analysis will categorize employees by their position (e.g., PG, SG, SF, PF, C).
3. Predominant age group identification among employees for finding the most common age group among employees
4. Identified which team and position have the highest total salary expenditure.
5. Correlation between age and salary: This will involve calculating the correlation coefficient and visualizing the relationship between the two variables.

Graphical Representations:

1. Distribution of employees across each team. Bar chart is used for showing number of employees in each team
2. Segregated employees based on their positions within the company. Pie chart is used for showing percentage of employees in each position
3. Predominant age group identification among employees. Bar chart is used for showing distribution of employees by age group
4. Salary Expenditure. Bar chart is used for showing salary expenditure by team and position.
5. Correlation between age and salary. Scatter Plot is used for visualizing the relationship between employee age and salary.

Key Insights:

1. The team 'New Orleans Pelicans' has the highest number of employees
2. Most of the employees are in the position 'SG'.
3. Most of the employees within the age group 20-25
4. The team with highest salary expenditure is Cleveland Cavaliers

