Artificial Intelligence and Machine Learning

Project Report

Semester-IV (Batch-2022)

Case Study: - Amazon Purchases Dataset

Url:-https://drive.google.com/file/d/1xk9E7nhjz1gNO67zzs3V70IFUXbd-BK9/view?usp=drive_link

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Description about Case Study: -

- Read dataset Amazon Purchases
- Display Top 10 rows
- Display the Last 10 rows
- Check the datatype of Each column
- Check null values in the Dataset
- How many rows and columns are in our dataset
- Highest and lowest purchase price in the dataset
- Average purchase price
- How many people have French 'fr' as their Language
- The job title contains engineer

Library: -

- Pandas

Methods: -

1. **read_csv():**
   Description: Reads a CSV file and converts it into a data frame.
2. **tail():**
   Description: Displays the last few rows of the data frame.
3. **head():**
   Description: Displays the first few rows of the data frame.
4. **shape():**
   Description: Returns the shape (number of rows, number of columns) of the data frame.
5. **isnull():**
   Description: Returns True/False for each value in the data frame, indicating whether the value is missing (NaN) or not.
6. **contains():**
   Description: Checks if a specified substring or value is present in a column of the data frame.
7. **max():**
   Description: Returns the maximum value in a column of the data frame.
8. **min():**
   Description: Returns the minimum value in a column of the data frame.
9. **mean():**
   Description: Calculates the mean (average) value of a column in the data frame.
10. **len():**
    Description: Returns the number of rows in the data frame