BIG MARKET PROJECT REPORT AND ANALYSIS

FOML MINI PROJECT REPORT

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COLLEGE, ANNA

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BONAFIDE CERTIFICATE

Certified that this report title **"BIG MARKET PROJECT REPORT AND ANALYSIS"** is the Bonafide work of the students who carried out the mini project work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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Submitted for the FOML Mini project review held on_____

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About Dataset:

Item_Identifier: A unique identifier for each item sold.

Item_Weight: The weight of each item.

Item_Fat_Content: Indicates whether the item is labeled as "Low Fat" or "Regular".

Item_Visibility: The percentage of total display area of all products in a store devoted to a specific item.

Item_Type: The category to which the item belongs, such as "Dairy", "Meat", "Fruits and Vegetables", "Household", etc.

Item_MRP: The Maximum Retail Price (MRP) of the item.

Outlet_Identifier: A unique identifier for each outlet where the item is sold.

Outlet_Establishment_Year: The year in which the outlet was established.

Outlet_Size: The size of the outlet, such as "Small", "Medium", or "High" based on the size of the outlet.

Outlet_Location_Type: The location of the outlet, such as "Tier 1", "Tier 2", or "Tier 3" based on the population density of the area where the outlet is located.

Outlet_Type: The type of outlet, such as "Supermarket Type1", "Supermarket Type2", "Grocery Store", or "Supermarket Type3".

Item_Outlet_Sales: The sales of the item in the particular outlet in Indian Rupees.

Based on this data, one could potentially develop a machine learning model to predict the sales of an item in a specific outlet based on various features such as the weight of the item, its visibility in the outlet, the category to which it belongs, the outlet size, location, and type, and the maximum retail price of the item.

A potential project report for this could include the following sections:

Introduction: In this section, you could briefly introduce the problem statement and provide some background information on the dataset.

Data Exploration: In this section, you could explore the dataset and provide some descriptive statistics on each column. You could also visualize the data to identify any trends or patterns.

Data Preprocessing: In this section, you could clean the data, handle missing values, and perform feature engineering if needed.

Model Building: In this section, you could build and train a machine learning model to predict the sales of an item in a specific outlet. You could use various techniques such as linear regression, decision trees, or random forests.

Model Evaluation: In this section, you could evaluate the performance of the model using various metrics such as mean squared error, mean absolute error, or R-squared.

Conclusion: In this section, you could summarize the findings of the project and provide some insights on how the model could be used in real-world scenarios.

Report:

Introduction

Background and problem statement

Objectives of the project

Scope and limitations

Data Exploration

Overview of the dataset

Descriptive statistics

Data visualization

Data Preprocessing

Data cleaning

Handling missing values

Feature engineering

Model Building

Selection of the model

Training the model

Cross-validation

Model Evaluation

Metrics used for evaluation

Comparison of different models

Interpretation of results

Conclusion

Summary of the findings

Implications and potential applications

Limitations and future work

References

List of sources used in the project

Appendices

Additional tables or figures

Code snippets or algorithms used in the project