Business Intelligence Project Description 2024

IS Department

(Kiva loans Dataset)

Submission:-

Pleases submit your code and report (including screenshot of code and the relevant figures) **note that** this project report should be in a presentation format (i.e., around 20 slides/PPT/PPTX) and code should be in a python file format (.py or .ipynb)

- o Presentation should include Agenda, Introduction, Conclusion, etc.
- o Each group member should spend equal time and effort.
- o Project delivery date & discussion will be on the practical exam date.

Dataset Description:-

We aim to analyze a dataset containing information about loans provided by a Kiva organization. The dataset consists of various attributes related to each loan.

Download Dataset: Kiva Loans

The dataset contains the following columns

1. id: Unique identifier for each loan.
2. Funded_amount: The amount of money funded for the loan. approved
3. Loan_amount: The total amount of money requested for the loan requested
4. Sector: The sector for which the loan is intended (e.g., Food, Transportation).
5. Country: The country where the loan is being provided.
6. Partner_id: Identifier for the partner organization facilitating the loan.
7. Term_in_months: The term of the loan in months.
8. Lender_count: The number of lenders contributing to the loan. bankers
9. Borrower_genders: Genders of the borrowers (e.g., female, male).
10. Repayment_interval: The interval at which repayments are made (e.g., irregular, bullet).
11. Date: The date when the loan was initiated.

Project Description:-

Use the methods and techniques studied in lectures and labs in order to help the

Kiva Organization to get insights from dataset and answer these questions

- Which sectors receive the highest amount of funding, and how does this change over time?
- Is there a correlation between the number of lenders and the funded loan amount?
- Can we predict future loan amounts based on historical data?

Project implementation will include the following:-

1. Understand the topic of the dataset and define your project objective.
2. Apply data exploration methods (i.e., summary statistics and visualization methods)
3. Apply data cleaning or transformation method (i.e., Handle missing values, remove duplicates, handle outliers, etc.)
4. Visualize your dataset using **PowerBI**.
5. Develop and evaluate a machine learning model to predict funded amount of the kiva.
6. Making a time series for the funded amount of kiva. It is between column funded amount and Date.