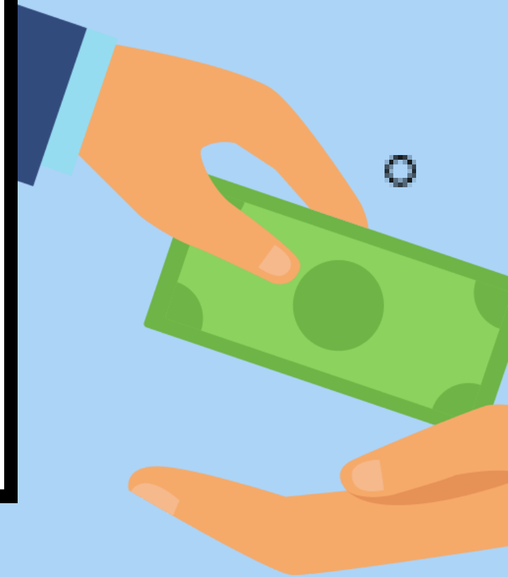
THE CUSTOMER COMPASS

CRM ANALYSIS

How its differ from other projects

Product management does not includes coding stuff

Companies offers high salary to IT product managers



OVERVIEW

The goal of this project is to use CRM (Customer Relationship Management) analysis to improve marketing strategies by leveraging customer data for targeted campaigns. The objective is to increase revenue by enhancing customer understanding and engagement, promoting action and loyalty.

Timeline till Mid Evaluation

WEEK 0

INTRODUCTORY SESSION

WEEK 1

INTRODUCTION TO CRM

WEEK 2

PYHTON AND ITS LIBRARIES

WEEK 3

APPLLICATION OF CRM AND RFM

WEEK 1

INTRODUCTION TO CRM

Customer Relationship Management (CRM) is a strategy to manage relationships with customers to improve business relationships, streamline processes, and increase profitability.

Key Components of CRM:

1. Manages day-to-day customer interactions (sales, marketing, service automation).
2. Analyzes customer data for better decision-making (data mining, customer analytics).
3. Enhances communication and collaboration with customers (customer portals, social CRM).

USE CASES OF CRM

Using AI tools, CRM software can be transformed to offer more advanced features and streamline various processes. Here are some practical examples of AI-powered enhancements for CRM software:

- SALES MANAGEMENT
- LEAD SCORING AND PRIORITIZATION
- MARKETING AUTOMATION
- ANALYTICS AND REPORTING
- E-COMMERCE MANAGEMENT
- CUSTOMER SERVICE
- CUSTOMER RETENTION

The goal is simple: improve relationships to grow your business.

Example:

Carol owns multiple scooter dealership. She has various customers. Shey was one of them.

1.Shey had configured her scooter 44 times in Carol's website

2. Marketing team sends automated customised message to Shey. This made Shey visit the showroom.

3.Shey finds things customised according to her. Takes test ride, enjoys and then buys it.

4. Services team sent her tips and information about services provided even before reaching home.

5. Marketing team has AI which helps to send her notification about various other assesories according to her need.

6. E-commerce team creates a customised store using AI according to her.

7. Tech team customises an app suitable for Shey through which she can connect to other riders.

CRM in all domains

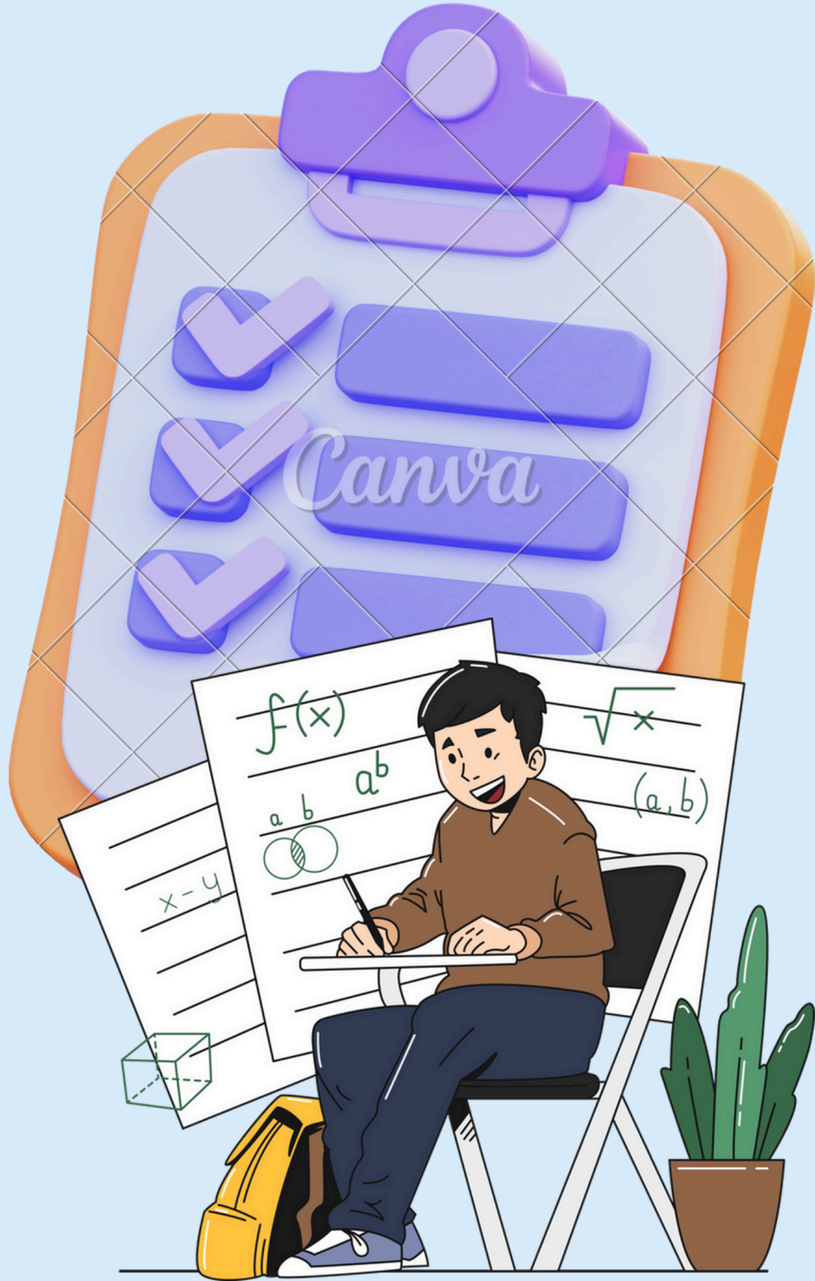
ASSIGNMENT 1

01 Familier with the google collab

02

Python Libraries:-

1. **Python Lists**
2. **Python Tuples**
3. **Python Sets**
4. **Python Dictonaries**
5. **Python If...Else**
6. **Python While**
7. **Python For Loops**
8. **Python Functions**
9. **Python Lambda**
10. **Python Arrays**



WEEK 2

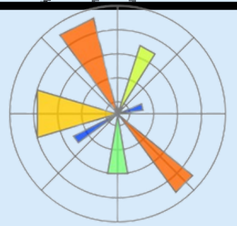
PYTHON LIBRARIES

NumPy

In the NumPy library we learn the other libraries so that the work became simple. We learnt the creation of arrays, slicing, their shape, how to reshape, copy, sorting, search, copy vs view and the way of putting the random no.

pandas

In the Pandas Library we have learnt that how the analysis in excel is not sufficient we have to use this in python using pandas. We learnt the csv and excel import and export. Dataframes and series. add and drop columns, sorting, find 0 and nan values, reindexing



matplotlib

In the Matplotlib and seaborn we learnt that the pandas is not sufficient to manage and predict data, the best is to plot so matplotlib came in context. How to plot line, bar, pie chart, histogram, subplots, scatter

ASSIGNMENT- 2

```
[ ]  import numpy as np
```

1.Let x = np.arange(4, dtype=np.int64). Create an array of ones with the same shape and type as X.

```
[ ]  Start coding or generate with AI.
```

2.Let X = np.array([[1, 2], [3, 4]]). Convert it into a matrix.

```
[ ]  Start coding or generate with AI.
```

3.Create a 1-D array of 50 evenly spaced elements between 3. and 10., inclusive.

```
[ ]  Start coding or generate with AI.
```

4.Let x be array [[1, 2, 3], [4, 5, 6]]. Convert it to [1 4 2 5 3 6].

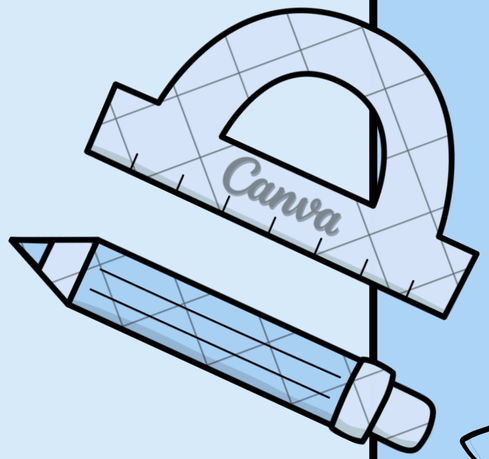
```
[ ]  Start coding or generate with AI.
```

5.Compute the inverse and primary diagnol sum of x=[[1,2],[3,4]]

ASSIGNEMNT BASED ON NUMPY LIBRARY. IT CONSIST OF 10 QUESTIONS THAT COVER UP ALL THE FUNCTION USED IN NUMPY

WEEK 3

RFM



RFM analysis is a method of scoring and ranking your customers based on three key metrics: recency, frequency, and monetary value.

Recency: How recently did the customer purchase?

Frequency: How often did this customer make a purchase in a given period? Count of transactions within the period.

Monetary Value: How much money did the customer spend in a given period?

RFM Metrics

1.Recency:

The number of days since the customer's last purchase.
Calculation: Recency=Today’s date−Last purchase

3.Monetary Value:

The total amount of money spent by the customer.
Calculation: Sum of all transaction values made by the customer.

2.Frequency:

The total number of purchases made by the customer within a specific period.
Calculation: Count of transactions within the period.

Based on the RFM, customers are scored from 1 to 5 for each metrices

How RFM is Used?

Customer Segmentation:

- High-Value Customers: Customers with high scores in all three dimensions are considered valuable.
- Loyal Customers: Customers with high frequency but not necessarily high monetary value.
- At-Risk Customers: Customers with high monetary value but low recency.

Targeted Marketing:

- Tailoring marketing strategies based on RFM scores to improve customer retention and increase sales.
- Sending re-engagement campaigns to customers with low recency scores.

Customer Lifetime Value (CLV) Estimation:

- RFM analysis helps in predicting the future value of customers by understanding their purchasing behavior.

RFM analysis is a powerful tool for CRM customer segmentation. It offers several benefits such as improving customer retention and loyalty, increasing revenue and profitability, optimizing customer acquisition and conversion, and enhancing customer satisfaction and feedback.

ASSIGNMENT- 3

```
import numpy as np # linear algebra
import pandas as pd # data processing, CSV file I/O (e.g. pd.read_csv)
import matplotlib.pyplot as plt
import seaborn as sns
import warnings
warnings.filterwarnings('ignore')
```

Data Manipulation

Importing dataset

```
[ ] df = pd.read_csv('netflix_titles.csv',encoding = 'latin1')
```

Display first 10 rows in the dataset

```
[ ] Start coding or generate with AI.
```

ASSIGNEMNT BASED ON MATPLOT AND SEABORN LIBRARY. IT COVERS DATA MANIPULATION AND DATA VISUALISATION

Resources Page

WEEK-1

- Intro to CRM
- Google collab
- Python Syntax

WEEK-2

- Numpy (part-A)
- Numpy(part-B)
- Numpy(part-C)
- Pandas(part-A)
- Pandas(part-B)
- Matplotlib
- Seaborn

WEEK-3

- CRM and RFM
- RFM Analysis Linkedin
- Tech Targer

Meet The Mentors

Bhakti Sangvikar

Harshika Agrawal

Prakhar Tripathi

Thank You!

OUR TEAM

- Abhishek L
- Ankit Agarwal
- Ayush
- Harshit
- Mayank
- Mukund
- Pratyush
- Rajat
- Saubhagya
- Sushmita
- Utkarsh
- Aditya
- Arul
- Itesh
- Jay
- Rishabh
- Sunny
- Vedant
- Yeva
- Chirag