1

Set the Goals

Define the output you want to create in a a couple of sentences

To apply K-means clustering on online retail customer data and identify meaningful customer segments based on purchasing behavior. The output will help businesses understand their customers better and design targeted marketing strategies.

Add the skills that you want to learn by the end of the menternship

Data cleaning and preprocessing fo	Exploratory Data Analysis (EDA) and visualization tech
Application of K-means clustering a	Evaluation of clustering results using metrics (Elbow Me

Add the key learnings you want

Understanding of unsupervised learning and customer segmentation.

How to preprocess raw retail data for clustering (handling missing values, scaling, etc.).

Gaining hands-on experience with K-means clustering in Python.

2

Major Constraints

Add the constraints you face in working on the tasks mentioned in the menternship (for example: data cleaning, creating a content calendar)

Data Quality Issues – The retail dataset may have missing values, duplicates, or inconsisten

Choosing the Right Number of Clusters – Selecting the correct k value in K-means can be ch

Interpreting Results in a Business Context – Translating raw cluster outputs into meaningful

Find resources on your own that can help you and add below

UCI Machine Learning Repository –	Kaggle – Customer Segmentation Tutorials
Scikit-learn Documentation – KMea	YouTube – Krish Naik's Tutorial on Customer Segmentation
Towards Data Science – Customer S	GeeksforGeeks – K-means Clustering Algorithm

3

Add the schedule

Add the Schedule Below

Stage	Add the deadline by when you want to complete the corresponding steps	Tick when completed
Start of the Menternship	September 27, 2025	☑
Complete the Workplan and Submitted	9/29/2025	☑
Component 2	9/30/2025	☐
Component 3	10/1/2025	☐
Component 4	10/2/2025	☐
Component 5	10/3/2025	☐
Completed the Mentership	10/4/2025	☐
Recieved the Feedback over email		☐
Submitted the Final Draft		☐

Add the Schedule for Mentor Sessions you want to attend

Stage	Date (Double click on the cell below and add a date)	Tick when completed
Mentor Session 1	September 28, 2025	☑
One on One Call (Book one when you have specific queries)		☐
Mentor Session 2		☐
Mentor Session 3		☐
One on One Call (Book one when you have specific queries)		☐
Mentor Session 4		☐

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