

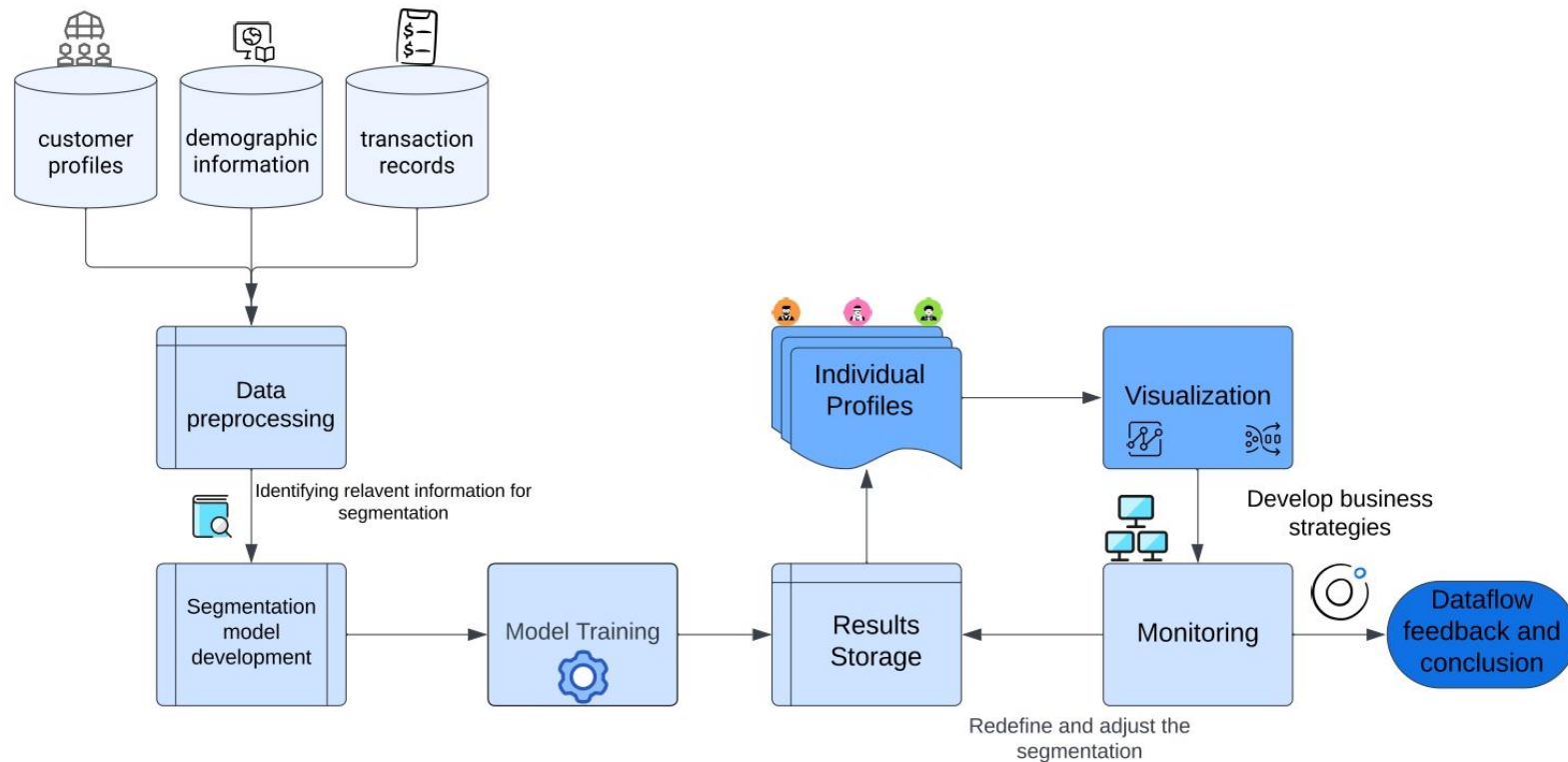
## Project Design Phase-II

### Data Flow Diagram & User Stories

Date	03 November 2023
Team ID	Team -592110
Project Name	Wholesale customer Segmentation
Maximum Marks	4 Marks

#### Data Flow Diagrams:

The data flow diagram for the Wholesale customer Segmentation:



## User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Government Agencies	Project setup & Infrastructure	USN-1	By defining the objectives and using relevant customer data we setup the infrastructure for wholesale customer segmentation	Initialized the all the necessary aspects that required	High	Sprint-1
Consultants	Developing environment	USN-2	The main focus is on data collection, we will be able to classify the groups. It will be able to customize the current marketing strategies.	Understood the need for development of new marketing strategies	High	Sprint-1
customers	Data Collection	USN-3	Gather data on customer purchases, such as the types and quantities of products they buy over a period of time	Collected the dataset of customers in a particular region.	High	Sprint-1
E-commerce Retailers	Data Preprocessing:	USN-4	Clean and preprocess the data by handling missing values, scaling features if necessary, and removing outliers	Preprocessed the data for reducing overfitting problems.	Medium	Sprint-2
Management and decision makers	Feature Selection:	USN-5	Identify the relevant features for segmentation. In this case, it could be the product categories, purchase frequency, or total spending.	Created a meaningful segment to specific business goals.	Medium	Sprint-2
Healthcare Providers	Model Building or selection	USN-6	By selecting the number of clusters (K) through methods like the elbow method or silhouette score. Then, initialize K centroids, assign each customer to the nearest centroid based on their features, and recalculate centroids by taking the mean	Selected and performed the required algorithm that required	High	Sprint -3
Retailers	Model evaluation	USN-7	Analyze these clusters to understand the purchasing patterns and characteristics of each segment.	We could test the scalability.	Medium	Sprint -3
	Marketing strategies	USN-8	Develop specific marketing strategies for each customer segment based on their preferences and behavior	We could implement many more business and marketing strategies based on the group.	Low	Sprint -4