

Project Start and End Dates are		15-Oct	8-Dec				
Assumption (Data Segmentation)					Status: Not Started In Progress Delayed On Hold Canceled Completed		
Task	Days	Start Date	End Date	% Complete	Status	Person	Outcomes/Deliverables/Comments
Project Planning	3	15-Oct	18-Oct	100	Completed		
Selecting the dataset	1	15-Oct	16-Oct	100	Completed	All Team	Selected DataSet is Customer Personality Analysis
Define project objectives and scope.	2	16-Oct	19-Oct	100	Completed	All Team	
Data Preparation	4	19-Oct	24-Oct	100	Completed		
Clean the dataset (handle missing values, correct data types, NAs ...etc.).	0.5	19-Oct	19-Oct	100	Completed	Yibin, Bashar	
Perform exploratory data analysis (EDA) to understand data distributions and relationships.	3.5	19-Oct	23-Oct	100	Completed	All Team	
Feature Engineering	5	23-Oct	29-Oct	100	In Progress		
Create new features based on existing data (e.g., total spending, average purchase frequency, ...etc.).				100	Completed	All Team	Bashar: suggest finding Total No. of purchases Minsang: Total Amount of Purchases
Normalize or standardize data as needed for clustering.				100	Completed	Carlos, Minsang	
Segmentation Analysis	7	29-Oct	6-Nov		Completed		
Select appropriate clustering algorithms (example: K-Means.).				100	Completed	Bashar, Priyank	Bashar: initial analysis suggest K-Means
Implement clustering and determine optimal number of clusters (using certain methods like elbow method or ...etc.).				100	Completed	Bashar, Minsang	Bashar: initial analysis suggest Elbow method
Analyze cluster profiles and characteristics.					Completed	Bashar, Carlos, Priyank	
Model Validation	6	6-Nov	14-Nov	100	Completed		
Select a validation method				100	Completed	Bashar, Priyank	
Validate the robustness of clusters				100	Completed	Bashar, Yibin	
Refine clustering approach if necessary based on validation results.				100	Completed	Bashar, Priyank	
Interpretation of Results	7	14-Nov	22-Nov	100	Completed		
Summarize key insights from clusters.				100	Completed	Yibin, Minsang	
Create visualizations to illustrate cluster characteristics (e.g., demographics, spending patterns, ...etc.).				100	Completed	Bashar, Yibin	
Develop Marketing Recommendations	5	22-Nov	30-Nov	100	Completed		
Identify actionable marketing strategies for each segment.				100	Completed	All Team	
Draft a report outlining recommendations based on segmentation results.				100	Completed	All Team	
Presentation	3	30-Nov	3-Dec	100	Completed		
Prepare a presentation/Video summarizing findings and recommendations.				100	Completed	All Team	
Final Revisions and Documentation	3	3-Dec	7-Dec	100	Completed		
Finalize the report/Filee in GitHub Repo				100	Completed	All Team	
Document methodologies, findings, and recommendations.				100	Completed	All Team	
Project Closure	1	7-Dec	7-Dec	100	Completed		
Review project outcomes against objectives.				100	Completed	All Team	
Conduct a lessons learned session and close the project.				100	Completed	All Team	
Total Number of Days for the Project =	44						