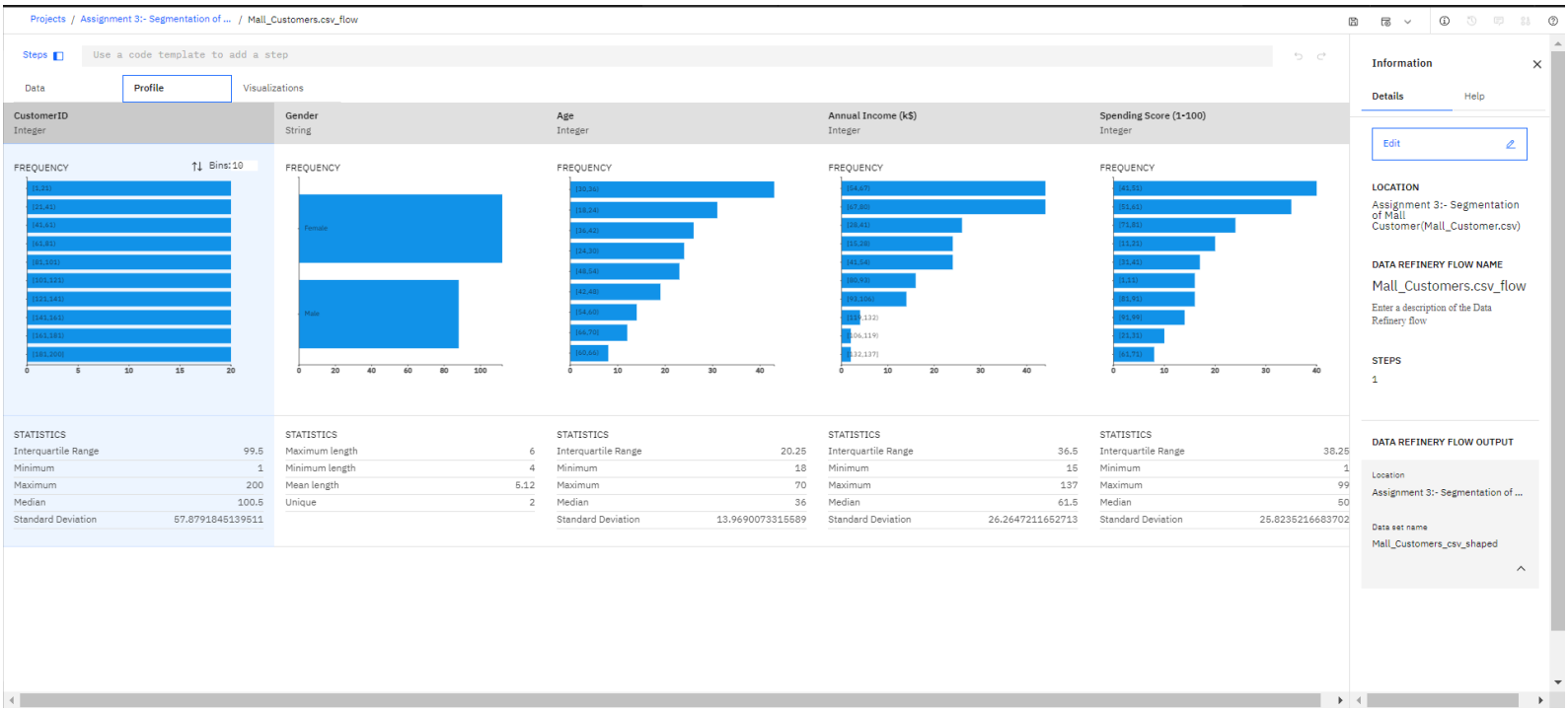
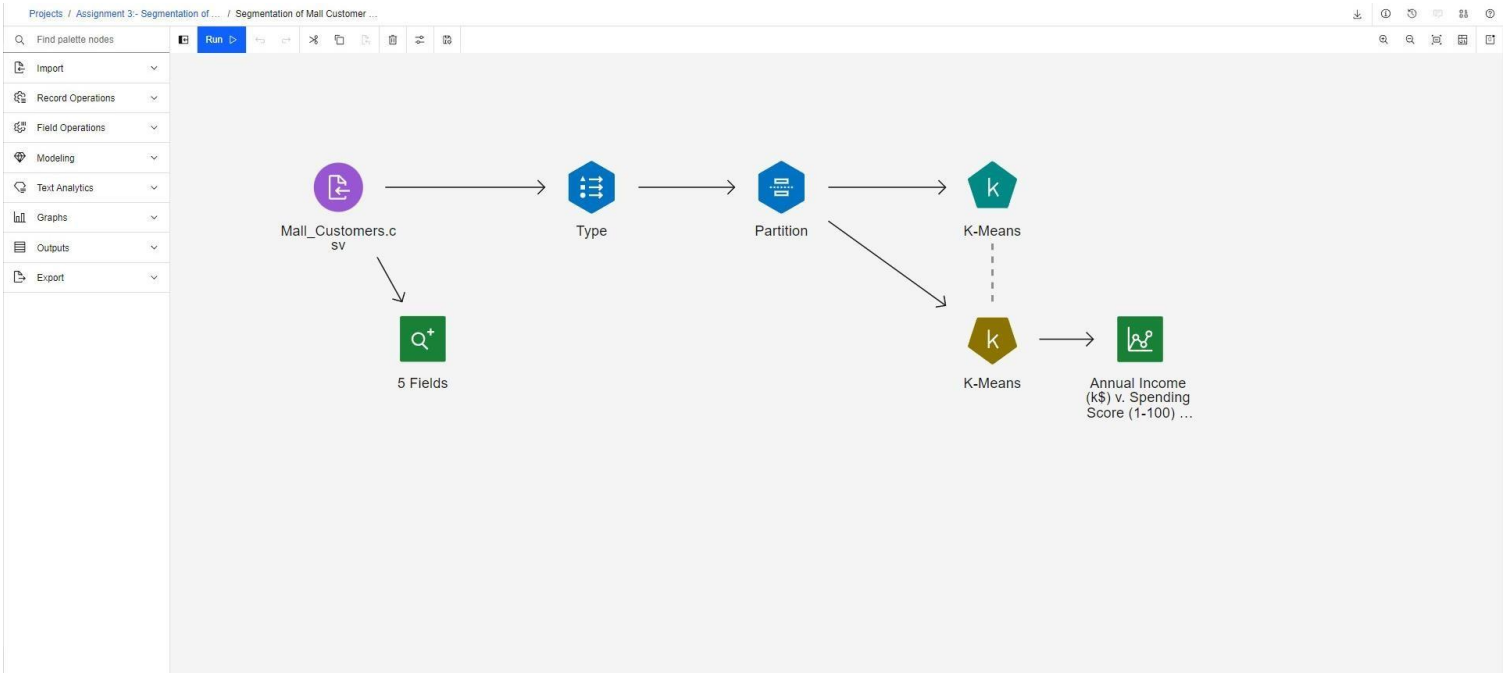
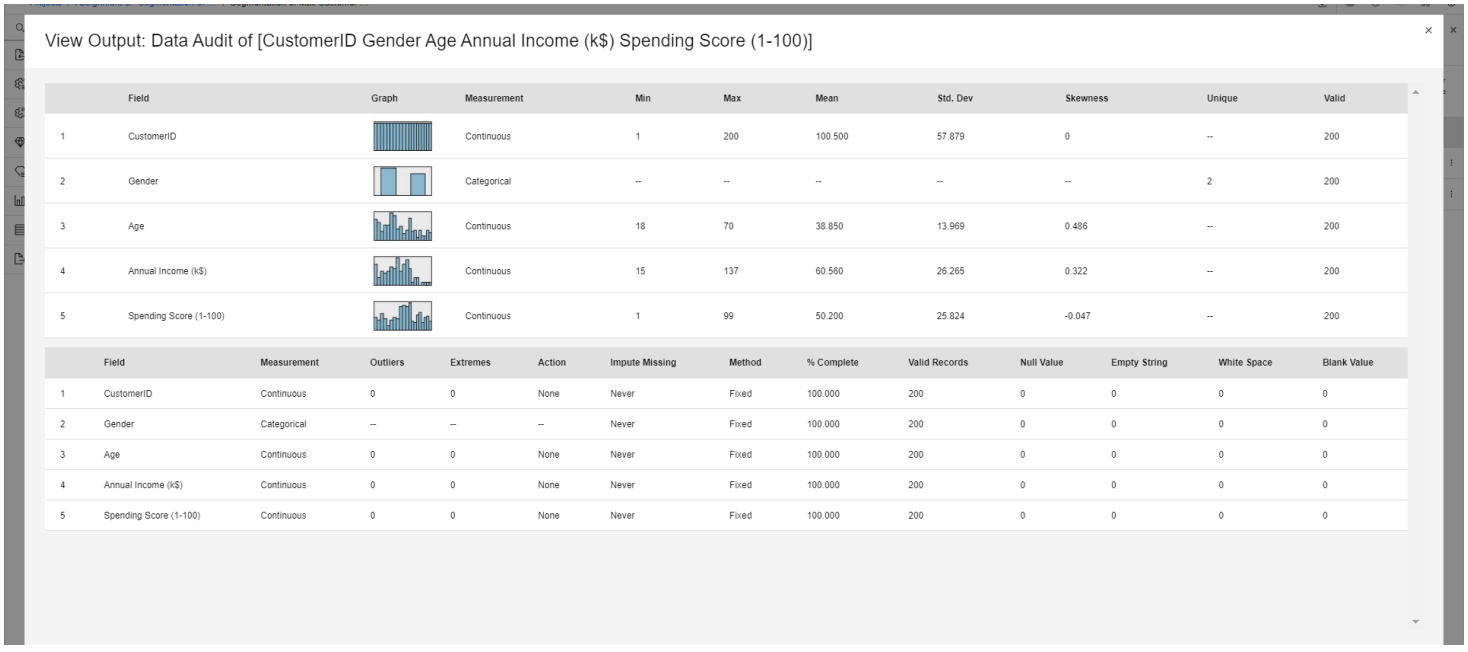
Data Refinery Flow



SPSS Modular Flow



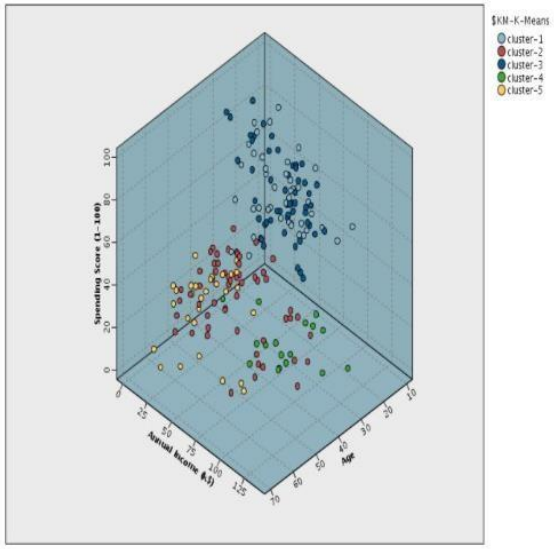


View Output: Data Audit of [CustomerID Gender Age Annual Income (k$) Spending Score (1-100)]

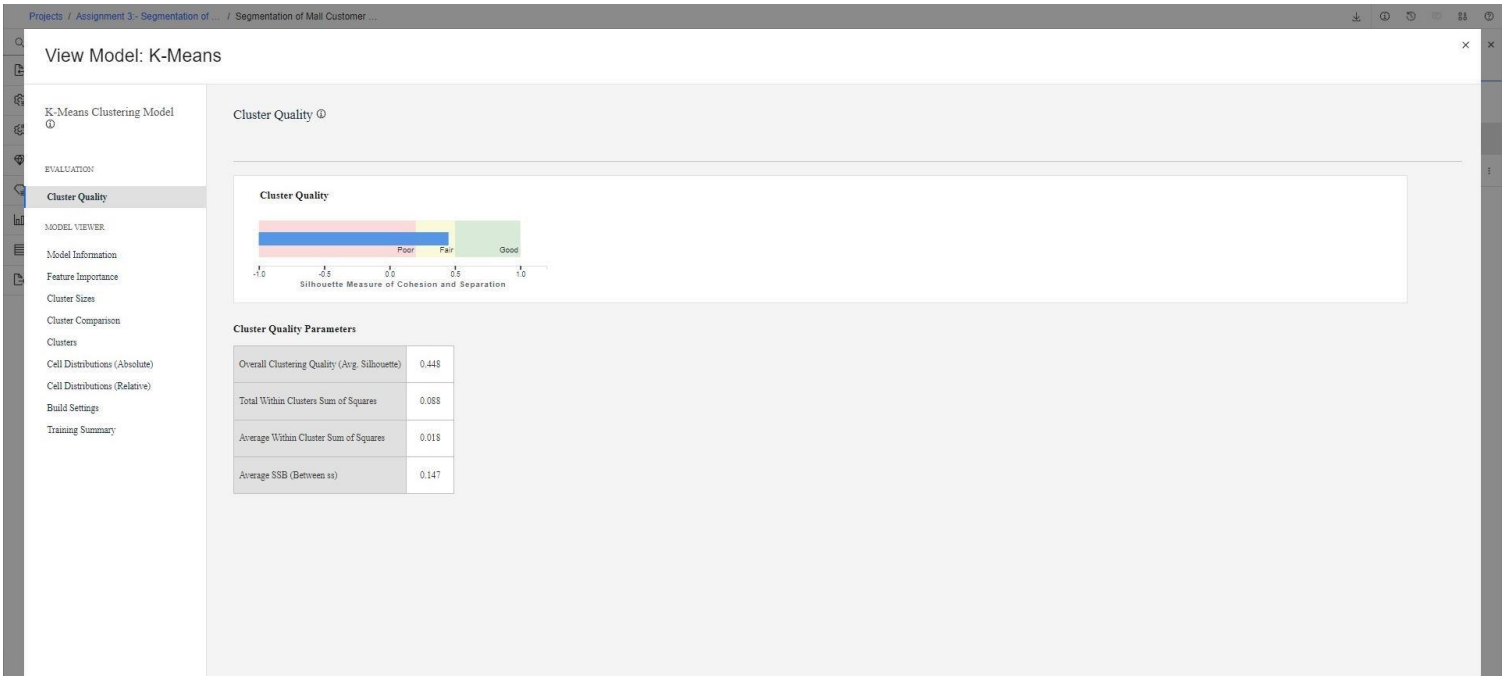
	Field	Graph	Measurement	Min	Max	Mean	Std. Dev	Skewness	Unique	Valid
1	CustomerID		Continuous	1	200	100.500	57.879	0	--	200
2	Gender		Categorical	--	--	--	--	--	2	200
3	Age		Continuous	18	70	38.850	13.969	0.486	--	200
4	Annual Income (k$)		Continuous	15	137	60.560	26.265	0.322	--	200
5	Spending Score (1-100)		Continuous	1	99	50.200	25.824	-0.047	--	200

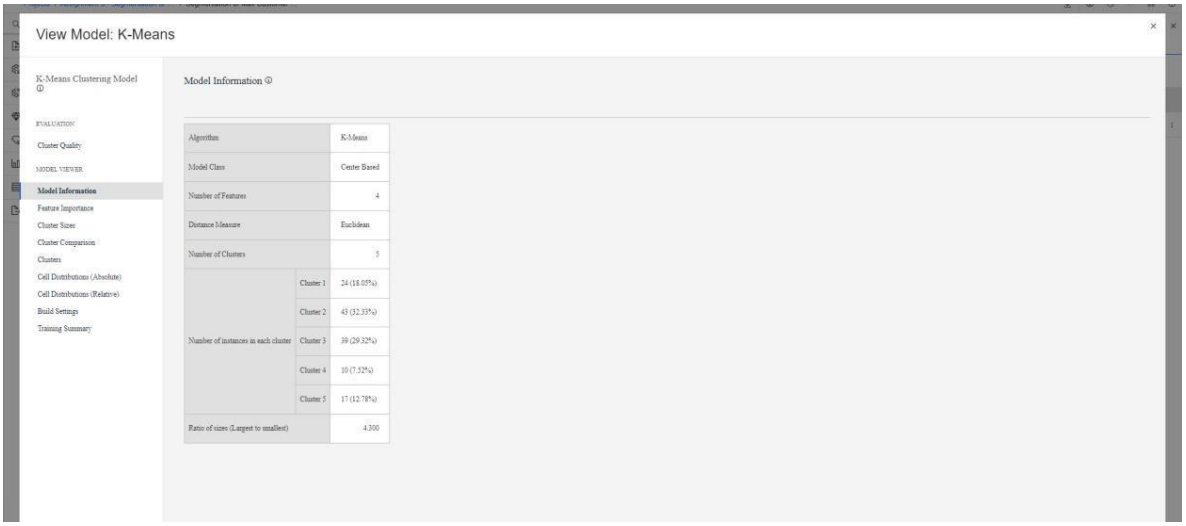
	Field	Measurement	Outliers	Extremes	Action	Impute Missing	Method	% Complete	Valid Records	Null Value	Empty String	White Space	Blank Value
1	CustomerID	Continuous	0	0	None	Never	Fixed	100.000	200	0	0	0	0
2	Gender	Categorical	--	--	--	Never	Fixed	100.000	200	0	0	0	0
3	Age	Continuous	0	0	None	Never	Fixed	100.000	200	0	0	0	0
4	Annual Income (k$)	Continuous	0	0	None	Never	Fixed	100.000	200	0	0	0	0
5	Spending Score (1-100)	Continuous	0	0	None	Never	Fixed	100.000	200	0	0	0	0

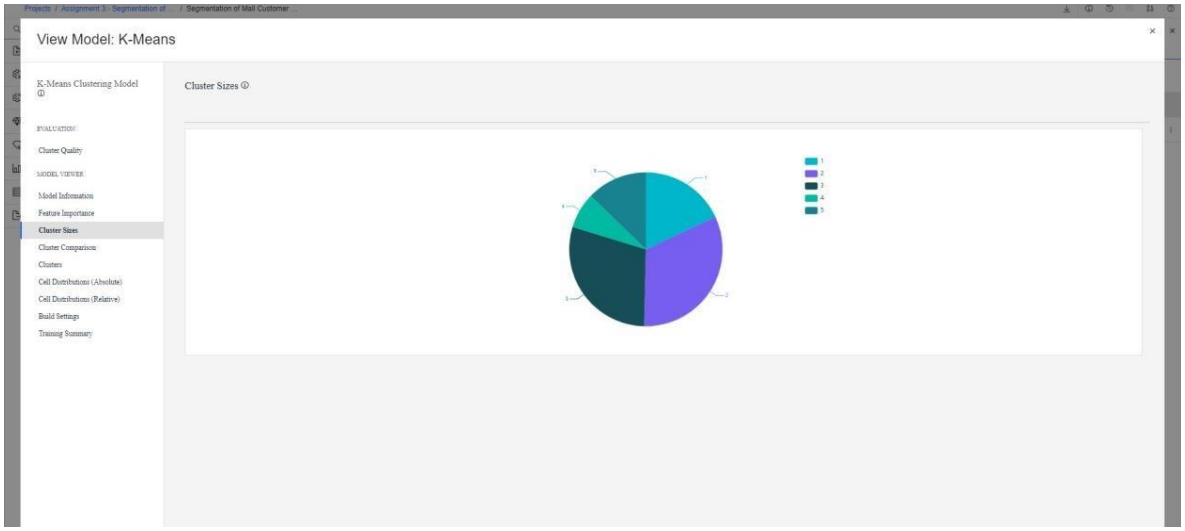
View Output: Annual Income (k$) v. Spending Score (1-100) v. Age

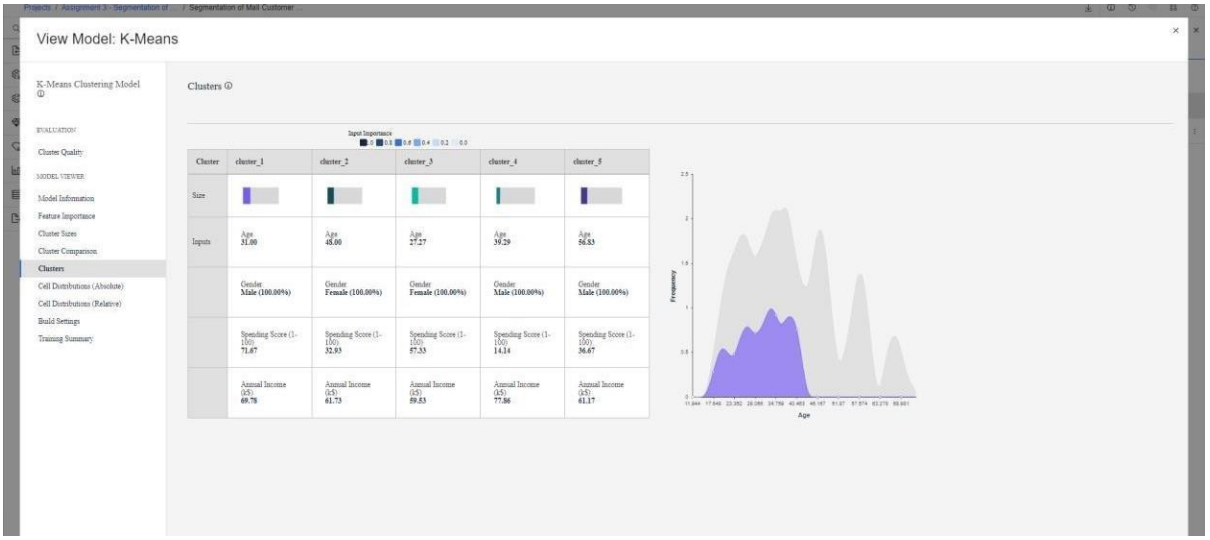


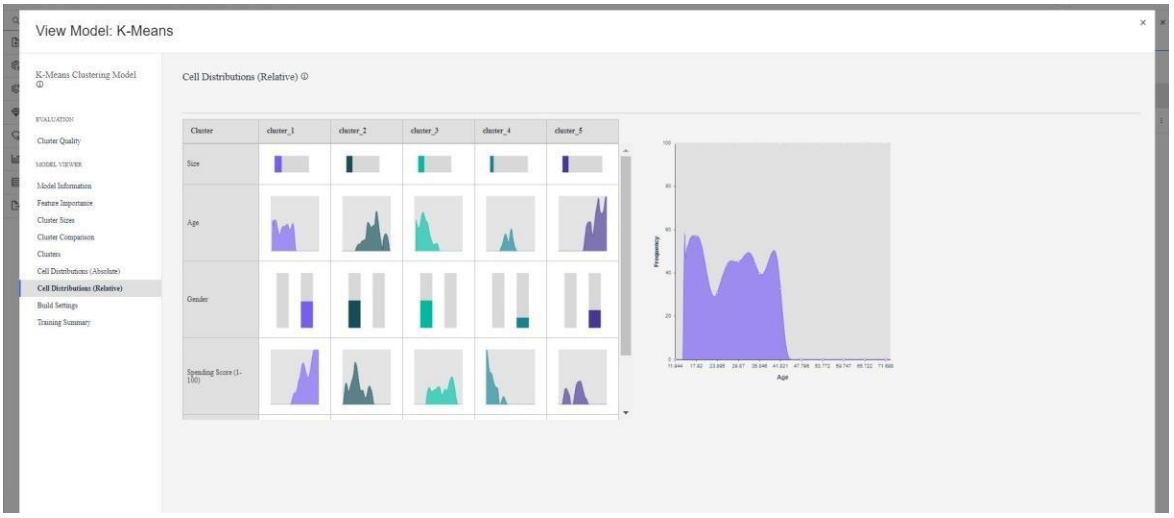
View-Model


Projects / Assignment 3:- Segmentation of ... / Segmentation of Mall Customer ...
View Model: K-Means
K-Means Clustering Model
EVALUATION
Cluster Quality
MODEL VIEWER
Model Information
Feature Importance
Cluster Sizes
Cluster Comparison
Clusters
Cell Distributions (Absolute)
Cell Distributions (Relative)
Build Settings
Training Summary
Cluster Quality
Cluster Quality
Poor
Fair
Good
-1.0
-0.5
0.0
0.5
1.0
Silhouette Measure of Cohesion and Separation
Cluster Quality Parameters
Overall Clustering Quality (Avg. Silhouette) 0.448
Total Within Clusters Sum of Squares 0.088
Average Within Cluster Sum of Squares 0.018
Average SSB (Between ss) 0.147


View Model: K-Means
K-Means Clustering Model
EVALUATION
Cluster Quality
MODEL VIEWER
Model Information
Feature Importance
Cluster Sizes
Cluster Comparison
Clusters
Cell Distributions (Absolute)
Cell Distributions (Relative)
Build Settings
Training Summary
Model Information
Algorithm K-Means
Model Class Center Based
Number of Features 4
Distance Measure Euclidean
Number of Clusters 5
Number of instances in each cluster
Cluster 1 24 (18.05%)
Cluster 2 43 (32.33%)
Cluster 3 39 (29.32%)
Cluster 4 10 (7.52%)
Cluster 5 17 (12.78%)
Ratio of sizes (Largest to smallest) 4.300


Projects / Assignment 3 - Segmentation of / Segmentation of Mall Customer
View Model: K-Means
K-Means Clustering Model
EVALUATION
Cluster Quality
MODEL VIEWER
Model Information
Feature Importance
Cluster Sizes
Cluster Comparison
Clusters
Cell Distributions (Absolute)
Cell Distributions (Relative)
Build Settings
Training Summary
Cluster Sizes
1
2
3
4
5


View Model: K-Means
K-Means Clustering Model
Clusters
Cluster Quality
Model Information
Feature Importance
Cluster Sizes
Cluster Comparison
Clusters
Cell Distributions (Absolute)
Cell Distributions (Relative)
Build Settings
Training Summary
Cluster
cluster_1
cluster_2
cluster_3
cluster_4
cluster_5
Size
Inputs
Age
31.00
48.00
27.27
39.29
56.83
Gender
Male (100.00%)
Female (100.00%)
Female (100.00%)
Male (100.00%)
Male (100.00%)
Spending Score (1-100)
71.67
32.93
57.33
14.14
36.67
Annual Income (k$)
69.78
61.73
59.53
77.86
61.17
Frequency
Age


View Model: K-Means
K-Means Clustering Model
Cell Distributions (Relative)
Cluster Quality
Model Information
Feature Importance
Cluster Sizes
Cluster Comparison
Clusters
Cell Distributions (Absolute)
Cell Distributions (Relative)
Build Settings
Training Summary
Cluster
cluster_1
cluster_2
cluster_3
cluster_4
cluster_5
Size
Age
Gender
Spending Score (1-100)
Frequency
Age