



INFO TO GET THE UNIVERSITY ADMISSIONS IN THE AMERICA

BUSINESS PROBLEM: Get the University Information to apply to universities in the United States of America based on test scores of the universities and decompose into 'CLUSTERS'.

NOTE: Use the MACHINE LEARNING MODELS to find out the best results.

CONTENT:

The dataset contains the information of the universities. Information about Student Acceptance Test Score, Top10 Ratio, Accept Ratio by the university, Expenses of the university, Student Faculty Ratio and Graduation Ratio.

DATASET: [Click here to get the dataset](#)

MACHINE LEARNING MODEL:

UNSUPERVISED ML: Unsupervised ML is a class of ML techniques to find the patterns in data. The data given to Unsupervised algorithms are not labeled, Which means only the input variables are given with no corresponding output variables.

No defined dependent and independent variables. Patterns in the data are used to identify group similar observations.

CLUSTERING: Clustering is primarily an exploratory technique to discover hidden structures of the data. A way to decompose a data into subsets with each subset representing a group with similar characteristics. Groups are known as 'CLUSTERS' and each cluster gets a distinct label called 'CLUSTER ID' / 'MEMBERSHIP ID'. (Used Centroid Based Clustering: K MEANS CLUSTERING).

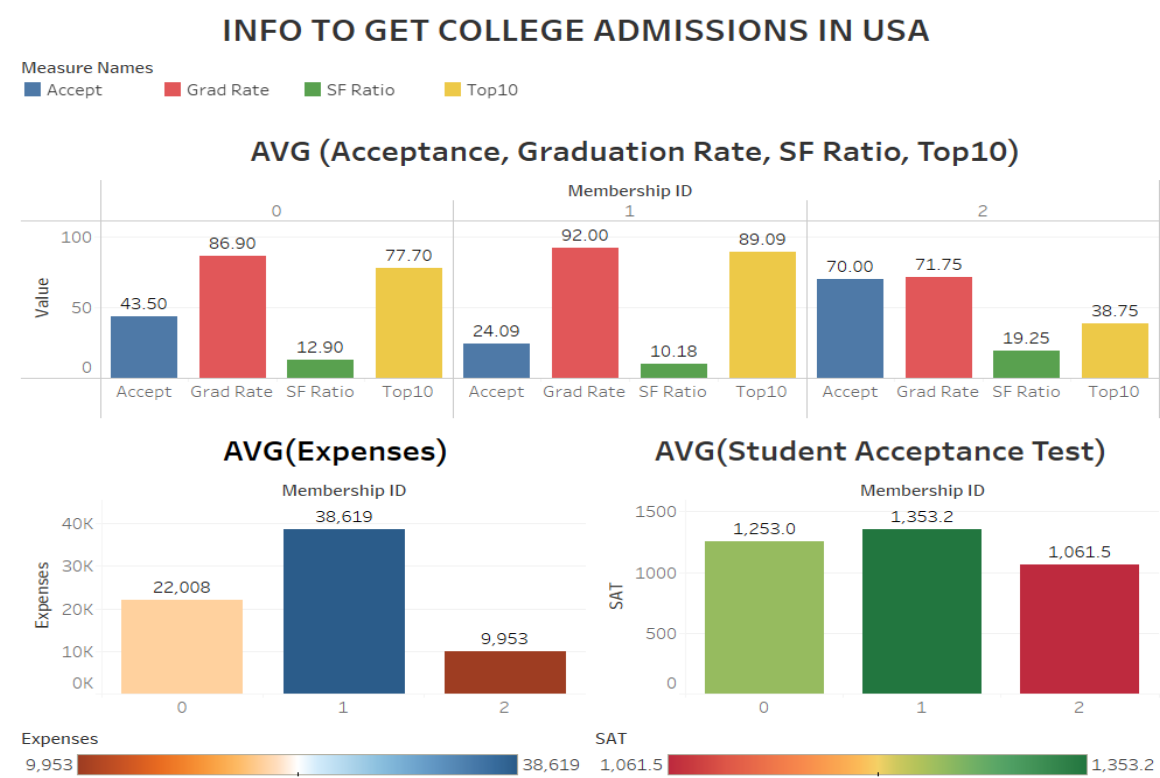
RESULTS: Below details and graphs are the output/ results of the 'K MEANS CLUSTERING MODEL'

INFORMATION TO GET THE ADMISSION IN THE UNIVERSITIES:

DETAILS:

MEMBERSHIP ID	AVG SAT	AVG TOP10	AVG ACCEPT RATIO	AVG SF RATIO	AVG EXPENSES	AVG GRAD RATIO
2	1061.5	38.75	70	19.25	9953	71.75
1	1353.18	89.09	24.09	10.18	38618.73	92
0	1253	77.7	43.5	12.9	22008.2	86.9

DETAILS IN GRAPH:



UNIVERSITIES WITH MEMBERSHIP IDS:

MEMBERSHIP_ID	UNIVERSITY	STATE	ABBREVIATION
2	PennState	Pennsylvania	PA
2	Purdue	Indiana	IN
2	TexasA&M	Texas	TX
2	UWisconsin	Wisconsin	WI
1	Brown	Rhode Island	RI
1	CalTech	California	CA
1	Columbia	New York	NY
1	Dartmouth	New Hampshire	NH
1	Duke	North Carolina	NC
1	Harvard	Massachusetts	MA
1	JohnsHopkins	Maryland	MD
1	MIT	Massachusetts	MA
1	Princeton	New Jersey	NJ
1	Stanford	California	CA
1	Yale	Connecticut	CT
0	CMU	Pennsylvania	PA
0	Cornell	New York	NY
0	Georgetown	Washington	WA
0	Northwestern	Illinois	IL
0	NotreDame	Indiana	IN
0	UCBerkeley	California	CA
0	UChicago	Illinois	IL
0	UMichigan	Michigan	MI
0	UPenn	Pennsylvania	PA
0	UVA	Virginia	VA