



Animal Crossing Villager Recommender

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MSiA423 Analytics Value Chain | Project Presentation

“ Find your next
favorite villager ”

Motivation



1

Once upon a time...



2

Your favorite villager want
to explore the world and
left your island...



3

You found a cutie on a
deserted island...

Q/ Invite or not?

A/ Villager Recommender!



Demo



Data Used & RDS usage

Name	Species	Gender	Personality	Hobby	Birthday	Catch-phrase	Favorite_Song	Style_1	Style_2	Color_1	Color_2	Wallpaper	Flooring	Furniture_List	Filename	Unique_Entry_ID
Admiral	Bird	Male	Cranky	Nature	27-Jan	aye aye	Steep Hill	Cool	Cool	Black	Blue	dirt-clod wall	tatami	717...	brd06	xxx...
Agent S	Squirrel	Female	Peppy	Fitness	2-Jul	sidekick	Go K.K. Rider	Active	Simple	Blue	Black	concrete wall	colorful tile flooring	7854...	squ05	...

Features altered

Features used



Kmodes + create recommendations + store in RDS

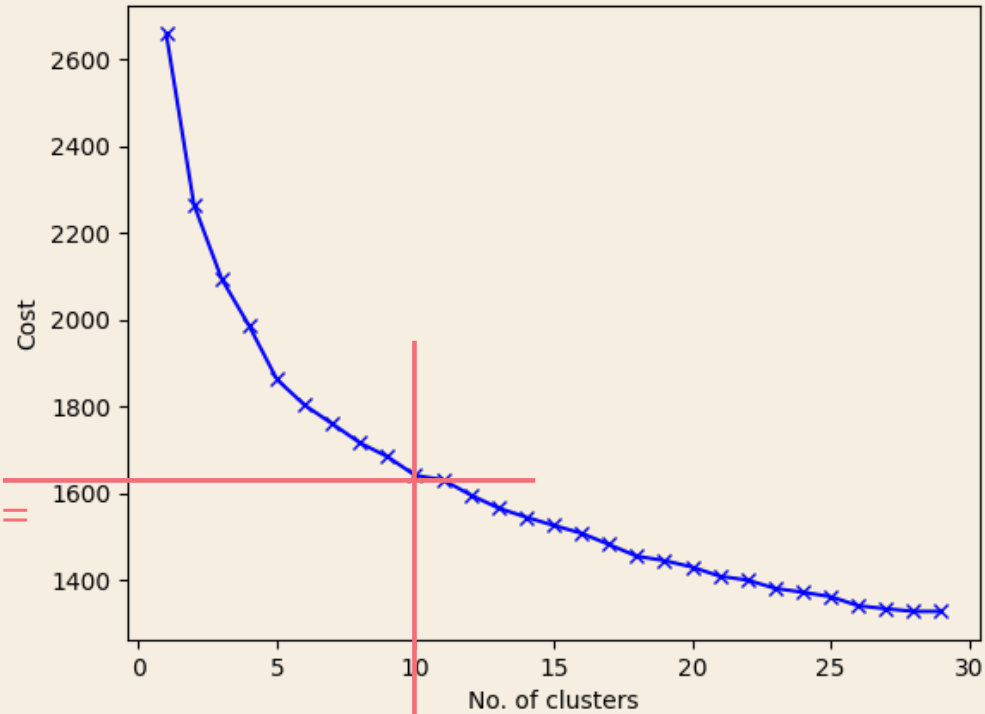
Input_name	Rec_name	Species	Gender	Personality	Hobby	Birthday	#1 style	#2 style	#1 color	#2 Color
Admiral	Agent	Squirrel	Female	Peppy	Fitness	2-Jul	Active	Simple	Blue	Black

App Input

App output

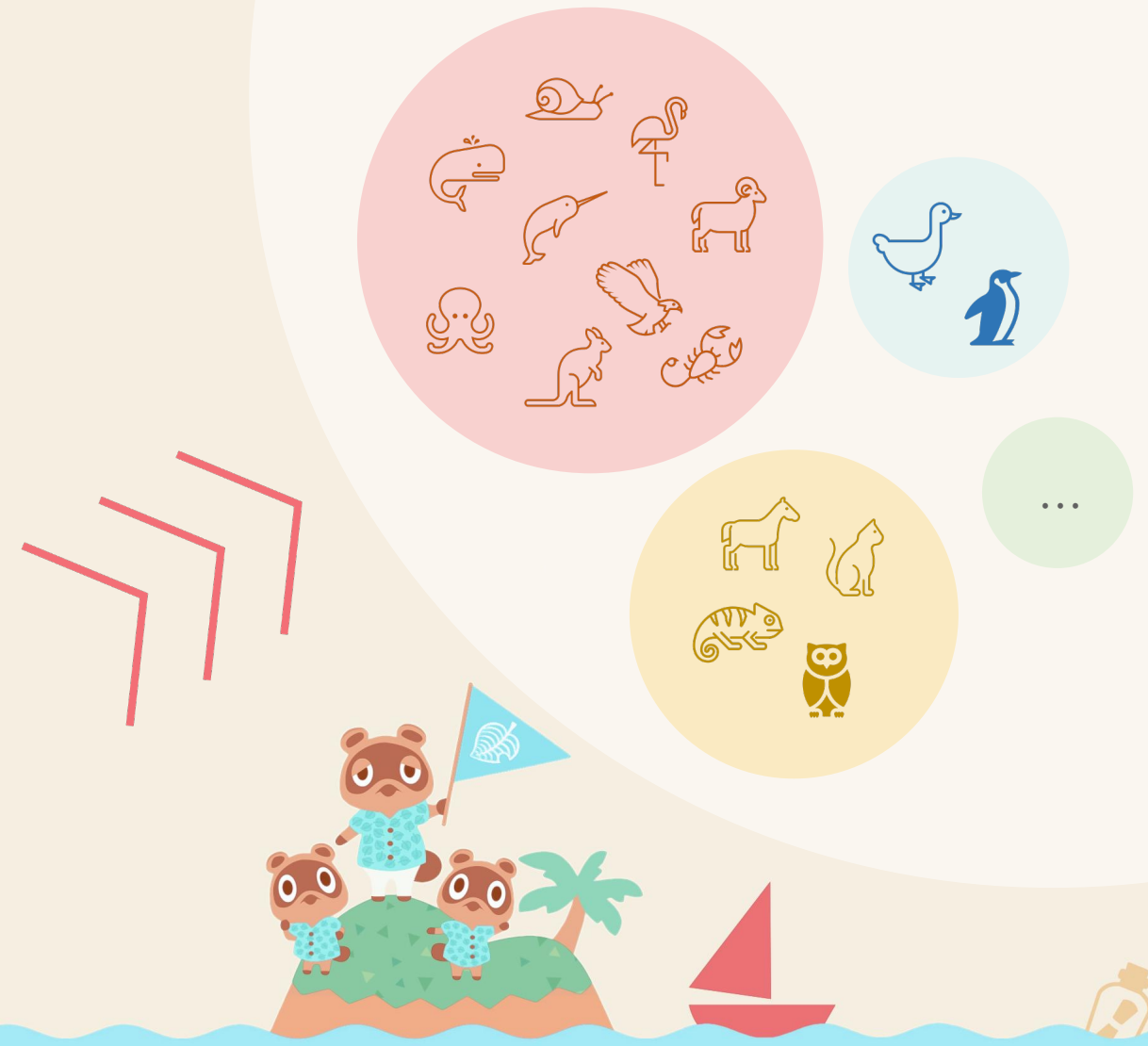
Kmodes Model

Elbow Method For Optimal k



Cost =
1642

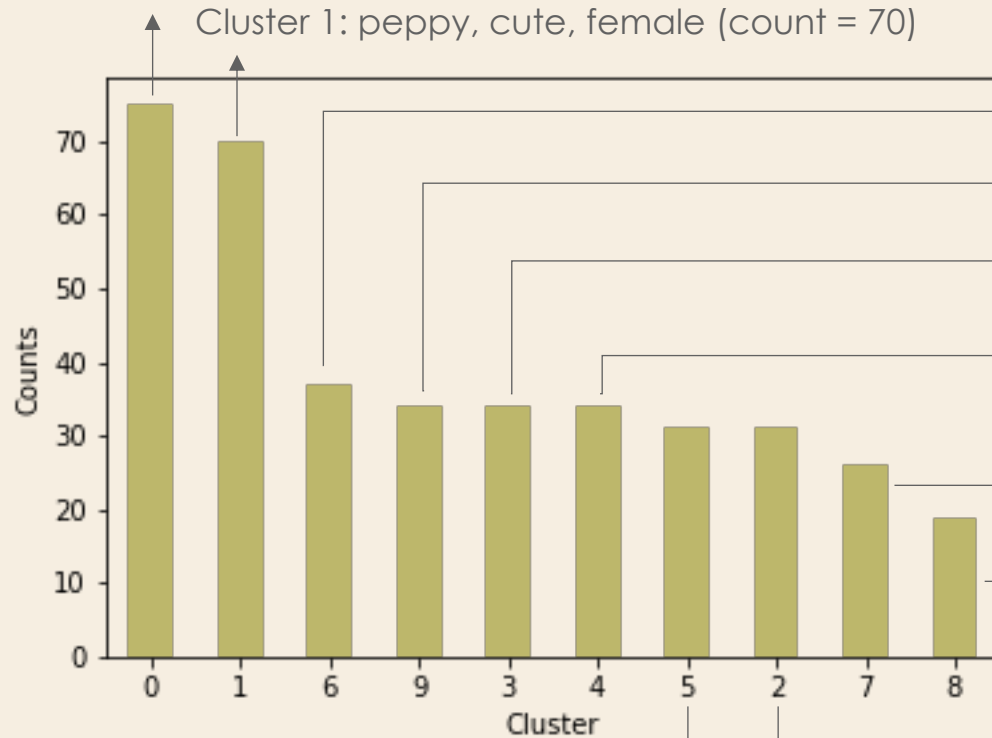
Pick # of clusters = 10



Kmodes Model Insight

Cluster 0: Lazy, simple, loves playing (count = 75)

Cluster 1: peppy, cute, female (count = 70)



Cluster 6: fitness, jock, male (count = 37)

Cluster 9: cranky, male, likes to be cool (count = 34)

Cluster 3: Snooty, small, female, likes to be gorgeous and elegant (count = 34)

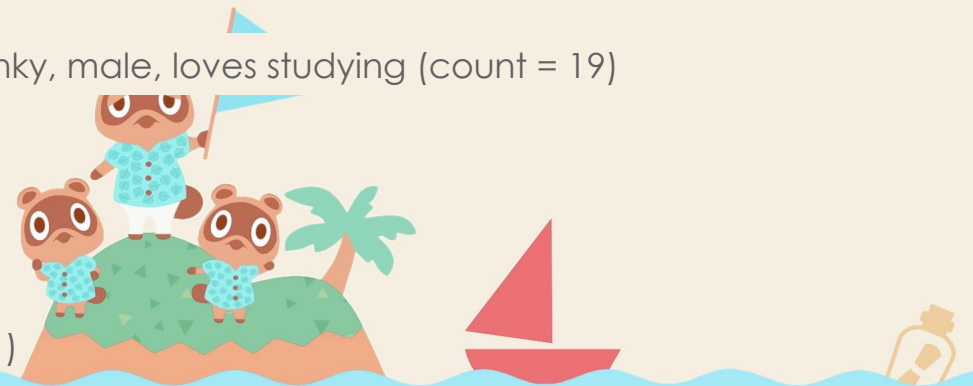
Cluster 4: Snooty, large, female, likes to be gorgeous and elegant (count = 34)

Cluster 7: jock, simple, male (count = 26)

Cluster 8: cranky, male, loves studying (count = 19)

Cluster 2: smug, male (count = 31)

Cluster 5: simple, normal, female (count = 31)



A top-down view of a tropical beach. In the center, there are three white lounge chairs arranged in a semi-circle. To the left of the chairs is a small wooden table with a bowl of fruit on it. Between the chairs are a checkered beach towel and a pair of flip-flops. To the right of the chairs is a stack of books. Two palm trees are on the beach, one in the center and one on the right. The beach is surrounded by blue water with white waves. The scene is brightly lit, suggesting a sunny day.

Thank you!

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