Capstone Project
HYUNJUNG KIM

BrainStation

APARTMENT BUILDING EVALUATION



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ABOUT PROJECT

RentSafeTO

ANALYTICAL DATA

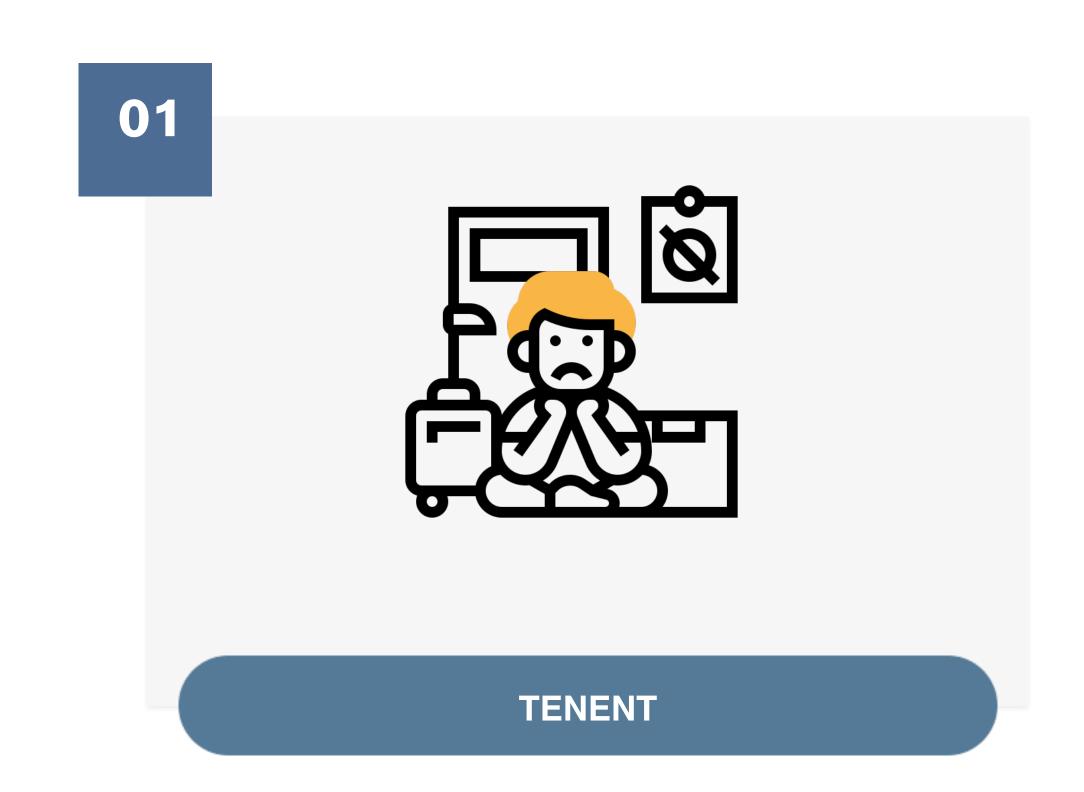
MODELS

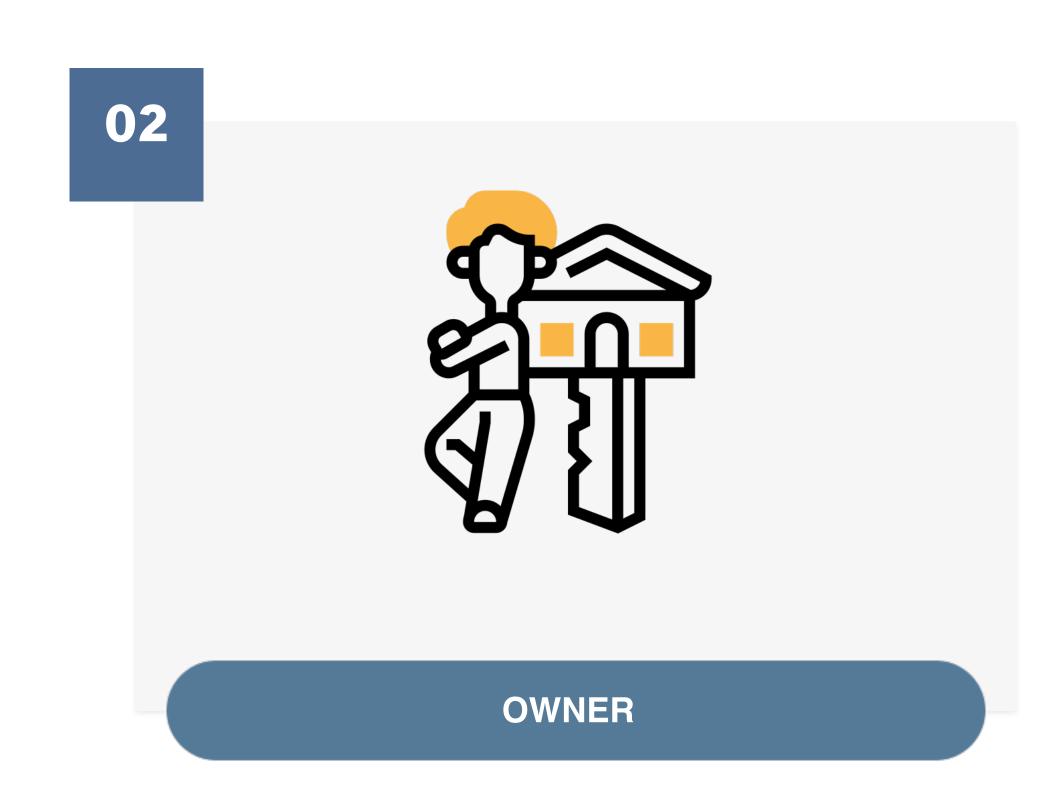
CONCLUSIONS

CAPSTONE PROJECT IDEA

PROJECT IDEA

THE PROBLEM AREA





About RentSafeTO

The City of Toronto works to ensure that tenants live in safe, well-maintained buildings through the RentSafeTO : Apartment Building Standards Program.

CAPSTONE PROJECT **ANALYTICAL DATA**

ANALYTICAL DATA

DATA FRAME

https://open.toronto.ca/dataset/apartment-building-evaluation/



ROWS: 11760

Columns: 40

Updata: daily

_id YEAR_REGISTERED YEAR_EVALUATED YEAR_BUILT PROPERTY_TYPE WARD WARDNAME

SITE_ADDRESS CONFIRMED_STOREYS

CONFIRMED_UNITS EVALUATION_COMPLETED_ON

SCORE

RESULTS_OF_SCORE

NO_OF_AREAS_EVALUATED

ENTRANCE_LOBBY

ENTRANCE_DOORS_WINDOWS

SECURITY STAIRWELLS LAUNDRY_ROOMS

INTERNAL_GUARDS_HANDRAILS

GARBAGE_CHUTE_ROOMS

GARBAGE_BIN_STORAGE_AREA

ELEVATORS

STORAGE_AREAS_LOCKERS

INTERIOR_WALL_CEILING_FLOOR

INTERIOR_LIGHTING_LEVELS

GRAFFITI

EXTERIOR_CLADDING

EXTERIOR_GROUNDS

EXTERIOR_WALKWAYS

BALCONY_GUARDS

WATER_PEN_EXT_BLDG_ELEMENTS

PARKING_AREA

OTHER_FACILITIES

GRID

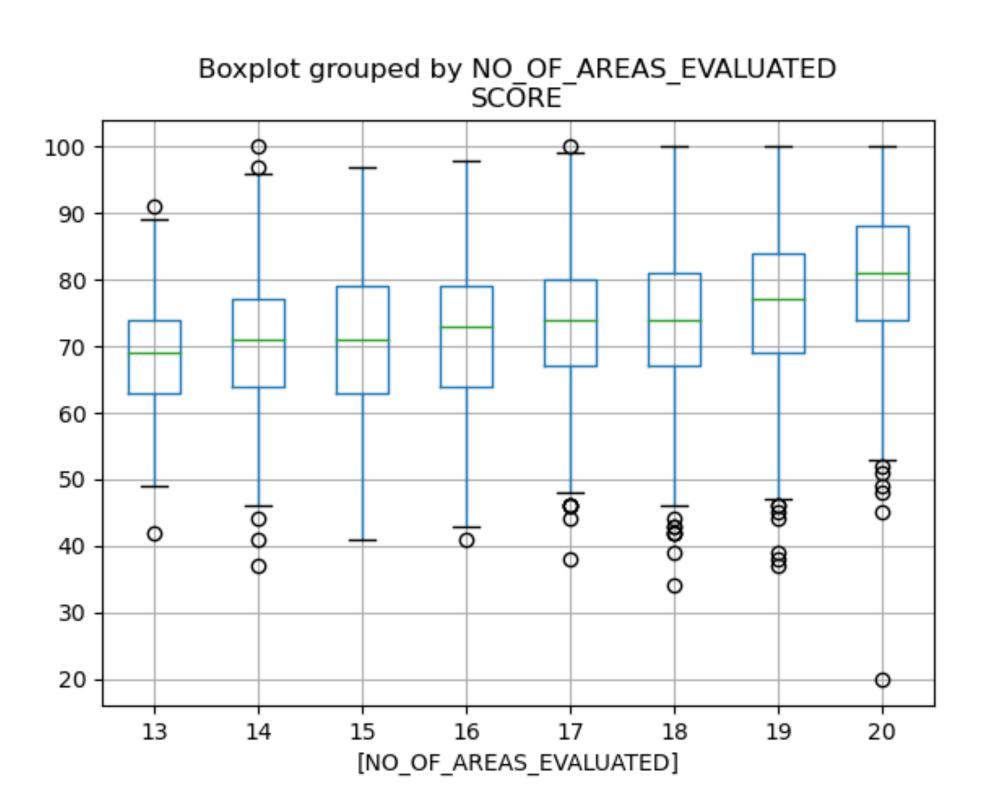
LATITUDE

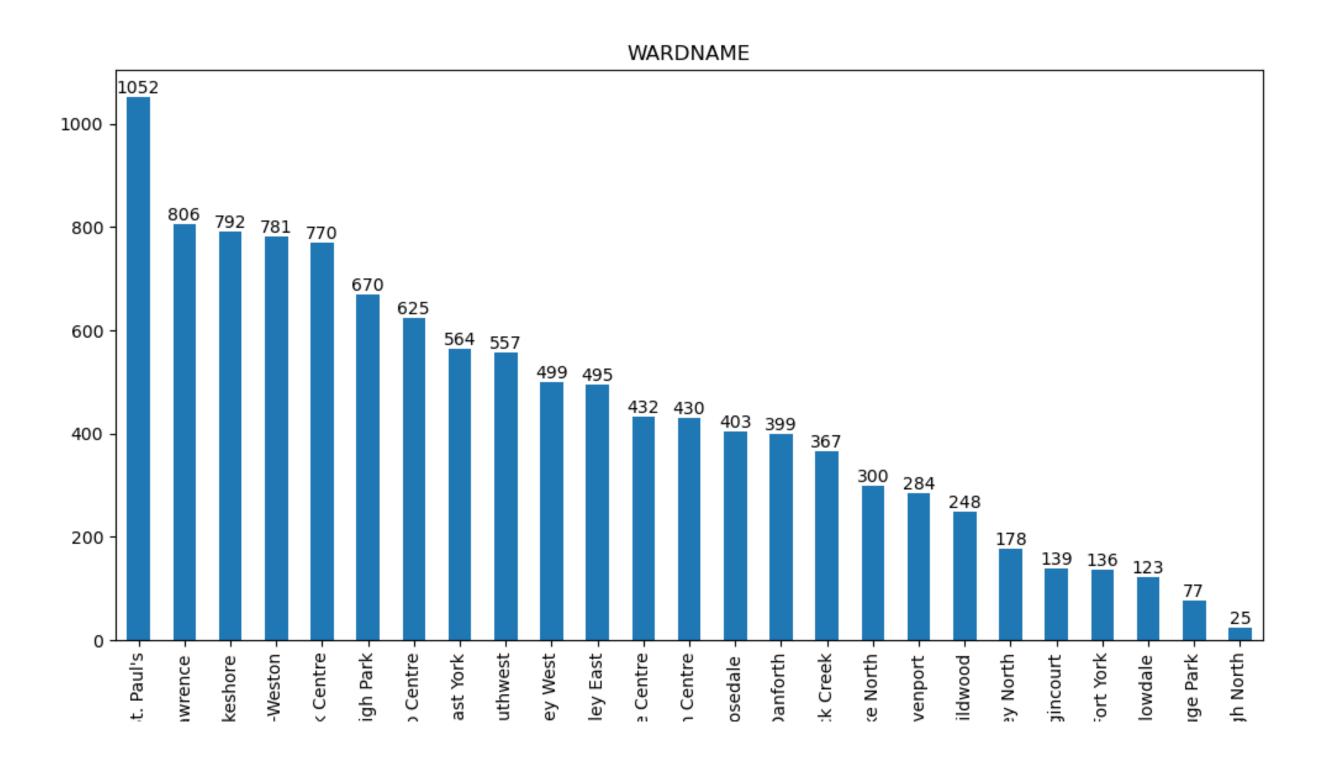
LONGITUDE

CAPSTONE PROJECT

ANALYTICAL DATA

ANALYTICAL DATA





CAPSTONE PROJECT ANALYTICAL DATA

ANALYTICAL DATA

OLS Regression Results

Dep. Variable:	SCORE	R-squared:	0.989
Model:	OLS	Adj. R-squared:	0.989
Method:	Least Squares	F-statistic:	5.457e+04
Date:	Thu, 17 Aug 2023	Prob (F-statistic):	0.00
Time:	22:02:53	Log-Likelihood:	-16588.
No. Observations:	11152	AIC:	3.322e+04
Df Residuals:	11132	BIC:	3.336e+04
Df Model:	19		
Covariance Type:	nonrobust		

	coef	std err	t	P> t	[0.025	0.975]
const	-4.4001	1.236	-3.560	0.000	-6.823	-1.977
YEAR_BUILT	0.0027	0.001	4.177	0.000	0.001	0.004
CONFIRMED_STOREYS	0.0100	0.002	4.691	0.000	0.006	0.014
NO_OF_AREAS_EVALUATED	-0.1235	0.009	-14.311	0.000	-0.140	-0.107
ENTRANCE_LOBBY	1.4657	0.020	72.435	0.000	1.426	1.505
ENTRANCE_DOORS_WINDOWS	1.2556	0.019	67.198	0.000	1.219	1.292
SECURITY	1.2847	0.015	85.402	0.000	1.255	1.314
STAIRWELLS	1.3694	0.019	73.241	0.000	1.333	1.406
LAUNDRY_ROOMS	1.3344	0.017	76.349	0.000	1.300	1.369
INTERNAL_GUARDS_HANDRAILS	1.3060	0.015	86.960	0.000	1.277	1.335
GARBAGE_BIN_STORAGE_AREA	1.3557	0.016	83.119	0.000	1.324	1.388
INTERIOR_WALL_CEILING_FLOOR	1.3236	0.019	71.359	0.000	1.287	1.360
INTERIOR_LIGHTING_LEVELS	1.3153	0.016	84.117	0.000	1.285	1.346
GRAFFITI	1.1984	0.015	80.981	0.000	1.169	1.227
EXTERIOR_CLADDING	1.2486	0.020	63.166	0.000	1.210	1.287
EXTERIOR_GROUNDS	1.3542	0.019	70.511	0.000	1.317	1.392
EXTERIOR_WALKWAYS	1.2177	0.019	65.312	0.000	1.181	1.254
BALCONY_GUARDS	0.9273	0.017	54.640	0.000	0.894	0.961
WATER_PEN_EXT_BLDG_ELEMENTS	1.2169	0.018	66.432	0.000	1.181	1.253
PARKING_AREA	1.0909	0.016	66.971	0.000	1.059	1.123
Omnibus: 254.512 Durbin-V	Vatson:	1.863				
Prob(Omnibus): 0.000 Jarque-Be		582.448				
		3.34e-127				
	nd. No.	2.39e+05				

Thank You:)

