

Módulo 4
Actividad

Introducción a la Ciencia de Datos

Actividad

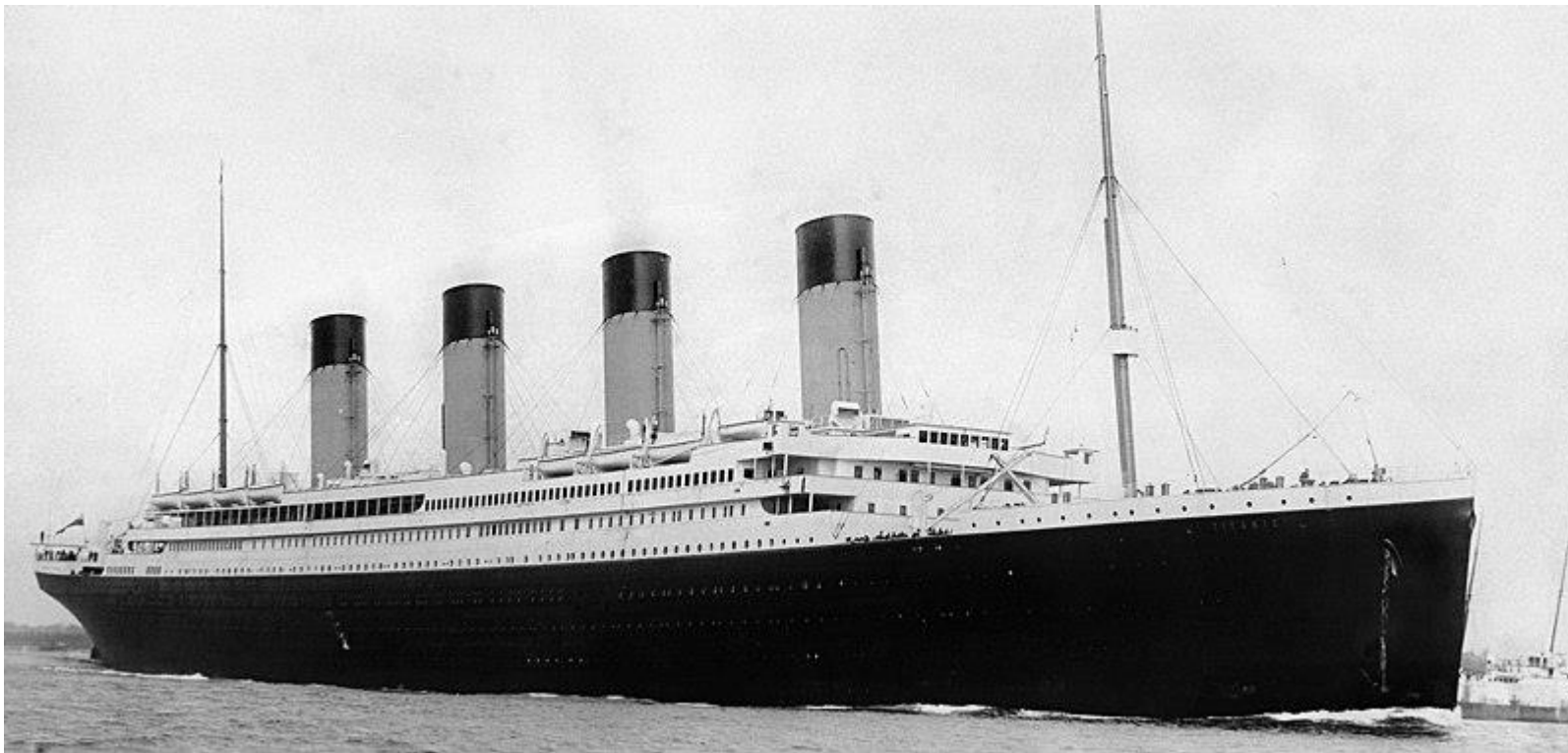
Análisis Univariado

Titanic



Caso Titanic

El 10 de Abril de 1912 partió desde el puerto de Southampton hacia New York el transatlántico Titanic, que sufrió un siniestro la noche del 14 de abril, en donde murieron 1.492 personas de un total de 2.208 convirtiendo esta tragedia en uno de los mayores naufragios de la historia.



Caso Titanic



Nómina de pasajeros

DESCRIPTIONS OF <u>BRITISH</u> PASSENGERS EMBARKED AT THE PORT OF LONDON.											
(2) NAMES OF PASSENGERS.	(3) CLASS. (Whether 1st, 2nd or 3rd).			(4) Port at which Passengers have contracted to Land.	(5) Profession, Occupation, or Calling of Passengers. In the case of First Class Passengers this column need not be filled up.	(6) AGES OF PASSENGERS. Except for First Class Passengers the age last birthday.					
	Adults.	Children.	Infants.			Adults of 12 years and upwards.		Children between 1 and 12.		Males.	Females.
						Accompanied by husband or wife.	Not accompanied by husband or wife.	Males.	Females.		
W. Key	1		3 rd	New York	Spinster					20	
Barry	1		1							27	
Roberts	1		1		Gen. Labr				22		
McLellan	1		1		Spinster					22	
...	1		1		...					19	

MERCHANT SHIPPING ACT, 1906, and ALIENS ACT, 1905.

GOING PASSENGERS.

22

Returns of Passengers leaving the United Kingdom in ships bound for places out of Europe, and not within the Mediterranean Sea.

All Passengers carried by each ship are to be included, whether proceeding to European or non-European Ports. 1st Class, 2nd Class, and 3rd Class Passengers are to be entered in separate groups. Children born of alien parents in the United Kingdom should be entered in the alien portion of the Return, and the fact that they were so born should be stated in the accompanying column.

Ship's Name.	Official Number.	Shipping Line.	Master's Name.	Registered Tonnage.	Age, Sex, and Date of Birth of each Passenger, and the name of the ship to which they are going.	Where Bound.
TITANIC.	13428	WHITE STAR LINE.	L. J. Smith	4582	26992	NEW YORK

I hereby certify that the Passengers actually taken on board this ship are sufficient, according to the requirements of the Merchant Shipping Acts, for 1150 Passengers, for a voyage of 7 days.

Date 10th April 1912 (Signature) [Signature] Master.

NAMES AND DESCRIPTIONS OF BRITISH PASSENGERS EMBARKED AT THE PORT OF Southampton

SEXES OF PASSENGERS.	CLASS.	PART-RECEIVED.	Profession, Occupation, or Calling of Passenger.	AGE OF PASSENGERS.										Country of last Permanent Residence.	Country of last Permanent Residence.
				Adults of 15 years and upwards.	Children under 15 years of age.	Infants under 2 years of age.	Children under 2 years of age.	Infants under 2 years of age.	Children under 2 years of age.	Infants under 2 years of age.	Children under 2 years of age.	Infants under 2 years of age.	Children under 2 years of age.		
1	✓	EDWARD WILLEY	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
2	✓	JOSEPH BUCHANAN	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
3	✓	EDWARD ROBERTS	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
4	✓	OWEN G. ALLISON	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
5	✓	ARTHUR JONES	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
6	✓	HENRY SADOWICZ	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
7	✓	EDWARD GOODWIN	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
8	✓	EDWARD	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
9	✓	EDWARD	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
10	✓	EDWARD	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
11	✓	EDWARD	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
12	✓	EDWARD	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
13	✓	EDWARD	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
14	✓	EDWARD	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
15	✓	EDWARD	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
16	✓	EDWARD	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
17	✓	EDWARD	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
18	✓	EDWARD	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
19	✓	EDWARD	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
20	✓	EDWARD	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
21	✓	EDWARD	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
22	✓	EDWARD	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
23	✓	EDWARD	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
24	✓	EDWARD	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
25	✓	EDWARD	NEW YORK	11	24	2	11	22	17	13	16	14	11	10	11
26	✓	EDWARD	NEW YORK	11	24	2	11	22	17</						

Set de datos

PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	Embarked	
0	1	0	3	Braund, Mr. Owen Harris	male	22.0	1	0	A/5 21171	7.2500	NaN	S
1	2	1	1	Cumings, Mrs. John Bradley (Florence Briggs Th...	female	38.0	1	0	PC 17599	71.2833	C85	C
2	3	1	3	Heikkinen, Miss. Laina	female	26.0	0	0	STON/O2. 3101282	7.9250	NaN	S
3	4	1	1	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35.0	1	0	113803	53.1000	C123	S
4	5	0	3	Allen, Mr. William Henry	male	35.0	0	0	373450	8.0500	NaN	S
5	6	0	3	Moran, Mr. James	male	NaN	0	0	330877	8.4583	NaN	Q
6	7	0	1	McCarthy, Mr. Timothy J	male	54.0	0	0	17463	51.8625	E46	S
7	8	0	3	Palsson, Master. Gosta Leonard	male	2.0	3	1	349909	21.0750	NaN	S
8	9	1	3	Johnson, Mrs. Oscar W (Elisabeth Vilhelmina Berg)	female	27.0	0	2	347742	11.1333	NaN	S
9	10	1	2	Nasser, Mrs. Nicholas (Adele Achem)	female	14.0	1	0	237736	30.0708	NaN	C

Set de datos

A continuación se describe cada columna:

- PassengerId: Muestra el id del Pasajero (correlativo)
- Survived: Se encuentra en 2 valores 0 si murió en la tragedia y 1 si sobrevivió
- Pclass: Determina la clase del pasajero, 1ra, 2da o 3era clase.
- Name: Nombre de los Pasajeros
- Sex: Sexo de los Pasajeros
- Age: Edad de los Pasajeros
- SibSp: Número de parientes como Hermano, Hermana, Hermanastra, Hermanastro, Esposo o Esposa.
- Parch: Número de parientes como Madre, Padre, Hijo, Hija, Hijastro, Hijastra
- Ticket: Número del ticket o boleto
- Fare: Tarifa del pasaje.
- Cabin: Número de cabina del pasajero.
- Embarked: Muestra los datos del puerto de embarcaquedero. (C = Cherbourg, Q = Queenston, S = Southapmtpon)

Instrucciones

Construya un notebook jupyter, ordenado, bien documentado y reproducible, que permita responder lo siguiente:

- Análisis univariado de la edad de los pasajeros
 - Análisis univariado del valor del pasaje
- Del análisis anterior, ¿Qué insights puede levantar?



Gracias