MS AMLIN - Marine Risk Prediction case study

The objective of this case study is to build a risk score model. The analysis and modelling must be carried out using python and your analysis and model results returned to Rosita.nikpour@msamlin.com at least 1 day before your interview date. The interview will include a detailed review of your analysis and results. To facilitate this process please capture your analysis, model & validation code in a Jupyter notebook. Be prepared to present and discuss your work in detail at the interview.

Datasets description

Data for 3 types of ships: Dry Cargo/Passenger, Tankers and Bulk Carriers have been provided in the attached:

- Ships Data: vessels' physical attributes
- Status History: provides status change and dates for each ship

Risk score model

A risk-based model provides a risk score at a vessel level to assist in risk selection stage of the underwriting.

Your target variable should be a binary variable where 1 is 'Ships suffered an accident'

For the case study, carry out the analysis, design and validate your model based on the datasets using python.

Appendix

Status Category	Status
	In Service/Commission
	US Reserve Fleet
	Converting/Repairing
	Laid Up
Live Fleet	To be Broken
	Projected
	On Order/Not commenced
	Under Construction
	Keel Laid
New Buildings	Launched
	Hulked
	Scuttled
Dead/deletions	Total Loss
	Cancelled before construction
	Scrapped before completion
	No longer meets ihsf criteria
Other	Continued Existence in Doubt