# Pricing of derivatives
# Project proposal
# 2022 - 2023

As part of the course requirement, students are required to complete a class project. The class project accounts for 60% of your final grade. Each project can be done individually or in groups of 2 students.
The project should contains `at least` the following parts:

- Data collection and preprocessing: Two kind of data should be collected.
  - Data for forecasting
  - Derivatives data available on the same underlying
- Data Visualisation.
- Forecasting
  - Calculates log returns, variance and volatility
  - Predict ARIMA parameters then run it on your data.
  - Apply another forecast model like LSTM / SARIMA
- Derivatives
  - Return Sample Statistics and Graphical visualisation. You can use the (`GBM_returns.py`) file.
  - Apply Black-Scholes-Merton Implied Volatilities of selected Options (Call/Put).
- Project reports

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The deliverable for the project are due before midnight on 31 March 2023. Please upload your work ( Report All source code including data) on Moodle.