**Professional Certificate in Machine Learning and Artificial Intelligence**

Module 25: Datasheet for Portfolio Project

**Motivation**

* The dataset was created to observe the day-to-day fluctuations in price of APPLE INC. stock (AAPL).
* Apple Inc. is listed on the NASDAQ stock exchange. The data has been sourced from Yahoo Finance.

**Composition**

* The instances in the dataset represent the daily open, high, low, close, adj. close price and volume for Apple Inc. stock on the NASDAQ. The data is in USD.
* There are 10409 instances found in the dataset, starting from 12/12/1980 to 24/03/2022.
* There are no missing data values within the dataset. There is no stock price data available for Saturday and Sunday.
* The dataset does not contain data that might be considered confidential. Apple Inc. is a publicly listed company and information on price and volume can be found on NASDAQ Real Time Price.

**Collection process**

* The data was acquired from Yahoo Finance.
* The data was collected from 12/12/1980 to 24/03/2022.

**Preprocessing/cleaning/labelling**

* The close price was adjusted to reflect the value after accounting for any corporate actions.
* The raw data, the close price, was saved in addition the pre-processed adjusted close price. Both metrics were kept to support comparison within future uses of the dataset.

**Uses**

* The dataset can be used in real-time to make decisions about buying or selling Apple Inc. stock, project pricing trends in comparable companies and calculate market risk on portfolio of investments that may be held by an individual or an institutional investor.
* In terms of the composition of the dataset, the user is not privy to the exact calculation behind the adjusted close price. If there is a lack of data available in the future around corporate actions for Apple Inc., this may impact the viability of future uses of the dataset.
* The dataset should not be used to extrapolate predicted prices for companies in an unrelated field to Apple Inc as this is likely to result in high misclassification error.

**Distribution**

* The Apple Inc. stock data is freely available to download from the Yahoo Finance website. This dataset has been taken from another user on Kaggle.
* The raw price and volume data from Yahoo Finance is not subject to copyright IP or ToU. However, any graphs or images produced by Yahoo Finance using the stock data is subject to copyright.

**Maintenance**

* Yahoo Finance maintains the collection of stock data for listed company and shares this information to other outlets such as Bloomberg, Capital IQ and Morningstar.
* This particular dataset needs to be maintained by individuals in order to update the stock data to the most recent date from Yahoo Finance.