

STOCKS PRICE PREDICTION DATABASE								
Version:	3	Date:	April 7, 2025	Author:	Elaine da Silva	w0445885		
TABLE NAME	ATTRIBUTE NAME	CONTENTS	TYPE	FORMAT	RANGE	REQUIRED?	PK or FK?	FK REFERENCED TABLE
stock_sector	ss_id	PK automatic increment	int	5		Y	PK	
	ss_name	Sector name	varchar	Technology		Y		
stock	st_id	PK automatic increment	int	5		Y	PK	
	st_ticker	Stock ticker symbol	varchar	AAPL		Y		
	st_date	Date of the stock price	date	yyyy-mm-dd	2025-03-20	Y		
	st_open_price	Stock opening price	float	248.65		Y		
	st_high_price	Stock highest price of the day	float	248.82		Y		
	st_low_price	Stock lowest price of the day	float	241.55		Y		
	st_close_price	Stock closing price	float	243.58		Y		
	st_close_price_pred	Stock closing price predicted	float	242.5		N		
	st_adjusted	Stock closing price adjusted	float	243.58		Y		
	st_volume	Number of shares traded	bigint	55740700		Y		
	ss_id_fk	Stock sector ID	int	5		N	FK	stock_sector
stock_features	sf_id	PK automatic increment	int	5		Y	PK	
	sf_ticker	Stock ticker symbol	varchar	META		Y		
	sf_date	Date for which the features are calculated	date	yyyy-mm-dd	2025-03-20	Y		
	sf_moving_avg_7d	7-day moving average	float	248.65		N		
	sf_moving_avg_30d	30-day moving average	float	248.82		N		
	sf_moving_avg_90d	90-day moving average	float	241.55		N		
	sf_moving_avg_180d	180-day moving average	float	243.58		N		
	sf_volatility_avg_7d	7-day price volatility	float	248.65		N		
	sf_volatility_avg_30d	30-day price volatility	float	248.82		N		
	sf_volatility_avg_90d	90-day price volatility	float	241.55		N		
	sf_volatility_avg_180d	180-day price volatility	float	243.58		N		
model_metrics	mm_id	PK automatic increment	int	5		Y	PK	
	mm_name	Machine Learning model name	varchar	XGBoost		Y		
	mm_date	Date for which the prediction was made	date	yyyy-mm-dd	2025-03-20	Y		
	mm_rmse	RMSE provided by the trained model	float	13.331736		N		
	mm_r2	R Square provided by the trained model	float	0.999991812		N		
	mm_mae	MAE provided by the trained model	float	4.242471159		N		