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الهيئة السعودية للبيانات والذكاء الاصطناعي
Saudi Data & AI Authority

# Forecasting, and Analyze digital currency

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# Introduction

| | |
|---|---|
| Why? | Organizing for the financial analysis process. |
| Goal: | price of the digital currency will predict whether it will fall or rise in the future. |
| Who? | trader in the cryptocurrency market. |
| How? | Building a model that uses the previous database |

# Steps before Model

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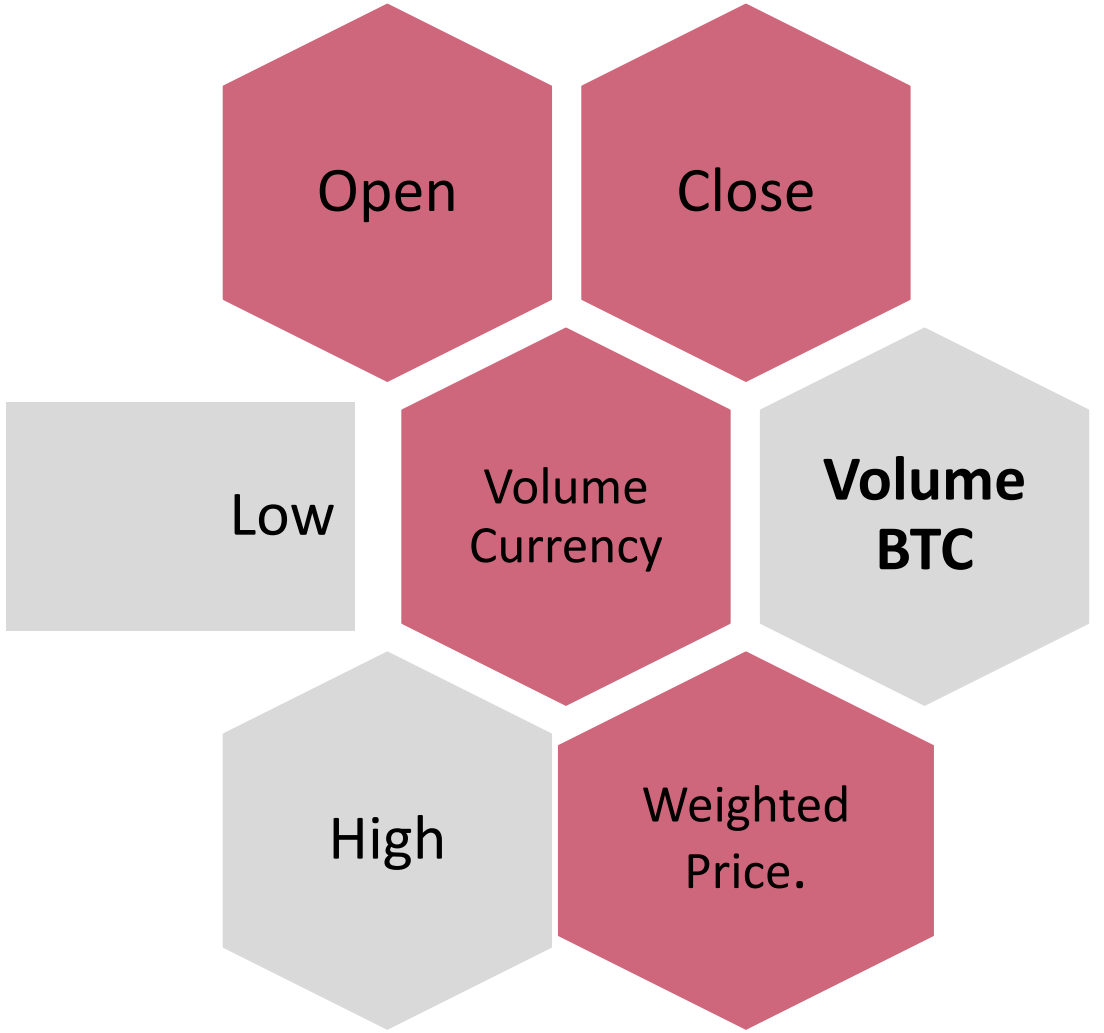
# characteristics/features for data

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# Data

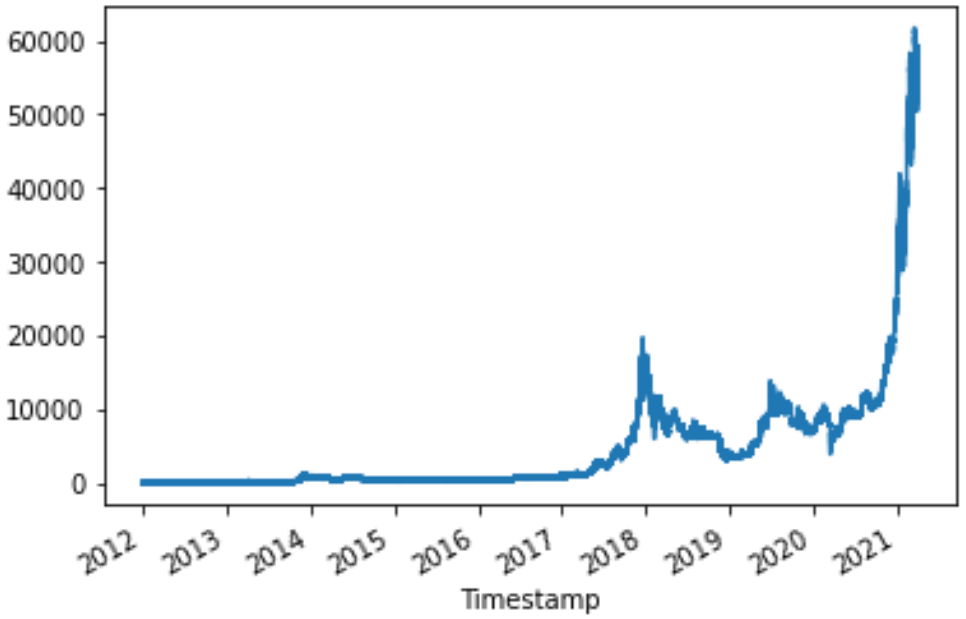
| | Timestamp | Open | High | Low | Close | Volume_(BTC) | Volume_(Currency) | Weighted_Price |
|---|---|---|---|---|---|---|---|---|
| 0 | 1325317920 | 4.39 | 4.39 | 4.39 | 4.39 | 0.455581 | 2.0 | 4.39 |
| 1 | 1325317980 | NaN | NaN | NaN | NaN | NaN | NaN | NaN |
| 2 | 1325318040 | NaN | NaN | NaN | NaN | NaN | NaN | NaN |
| 3 | 1325318100 | NaN | NaN | NaN | NaN | NaN | NaN | NaN |
| 4 | 1325318160 | NaN | NaN | NaN | NaN | NaN | NaN | NaN |

4,857,377 rows

3,613,769 rows

| Timestamp | Open | High | Low | Close | Volume_(BTC) | Volume_(Currency) | Weighted_Price |
|---|---|---|---|---|---|---|---|
| 2011-12-31 07:52:00 | 4.39 | 4.39 | 4.39 | 4.39 | 0.455581 | 2.000000 | 4.390000 |
| 2011-12-31 15:50:00 | 4.39 | 4.39 | 4.39 | 4.39 | 48.000000 | 210.720000 | 4.390000 |
| 2011-12-31 16:59:00 | 4.50 | 4.57 | 4.50 | 4.57 | 37.862297 | 171.380338 | 4.526411 |
| 2011-12-31 17:00:00 | 4.58 | 4.58 | 4.58 | 4.58 | 9.000000 | 41.220000 | 4.580000 |
| 2012-01-01 04:16:00 | 4.58 | 4.58 | 4.58 | 4.58 | 1.502000 | 6.879160 | 4.580000 |

# Data



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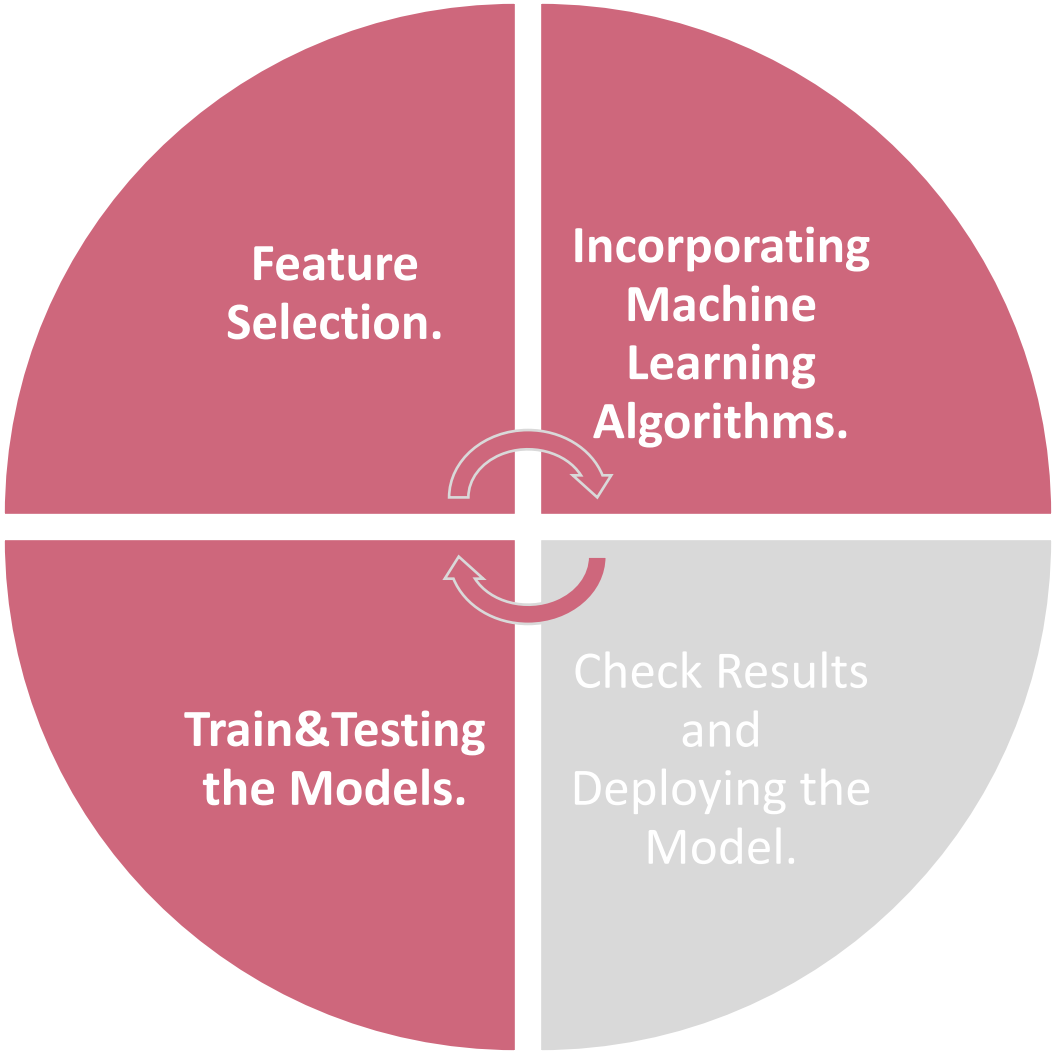
# Steps on Model

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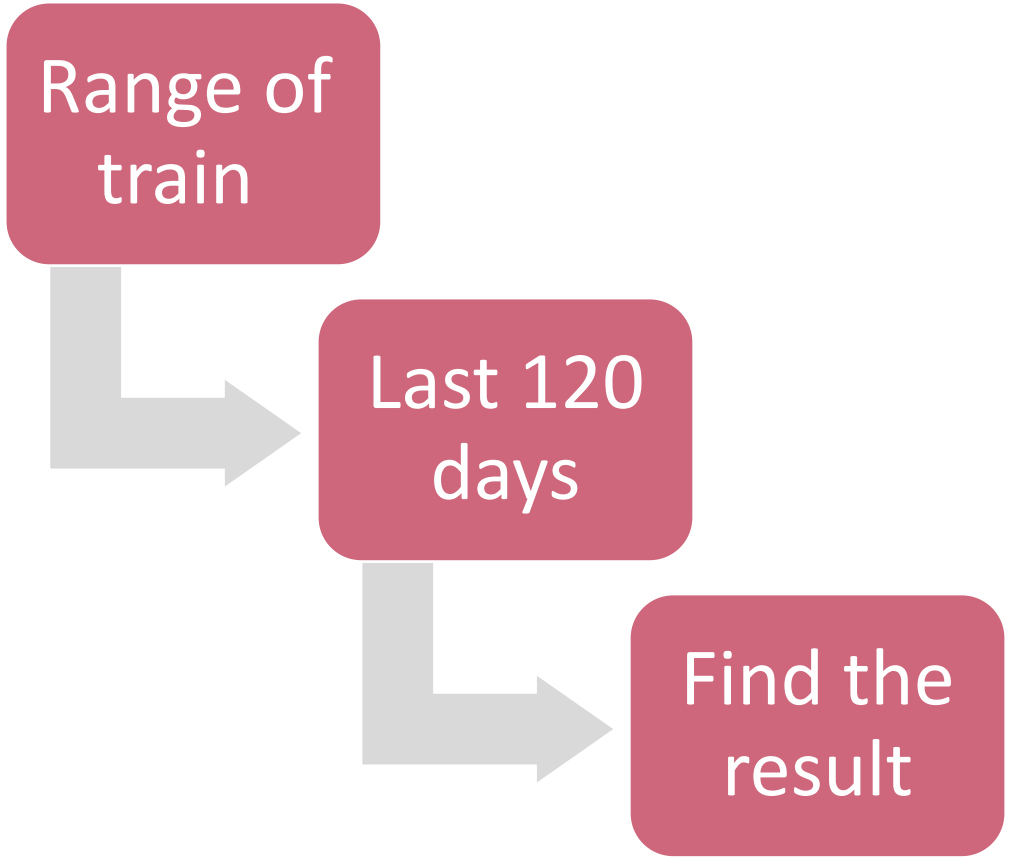
# Data after Training

| Timestamp | Close | Predictions |
|---|---|---|
| 2014-01-12 09:05:00 | 878.01 | 952.829529 |
| 2014-01-12 09:06:00 | 878.01 | 952.761353 |
| 2014-01-12 09:07:00 | 878.01 | 952.719849 |
| 2014-01-12 09:09:00 | 878.01 | 952.699463 |
| 2014-01-12 09:10:00 | 878.01 | 952.692810 |

| Timestamp | Close | Predictions |
|---|---|---|
| 2021-03-30 23:56:00 | 58686.00 | 19096.496094 |
| 2021-03-30 23:57:00 | 58685.81 | 19096.652344 |
| 2021-03-30 23:58:00 | 58723.84 | 19096.679688 |
| 2021-03-30 23:59:00 | 58760.59 | 19096.775391 |
| 2021-03-31 00:00:00 | 58778.18 | 19097.062500 |

# prediction equation

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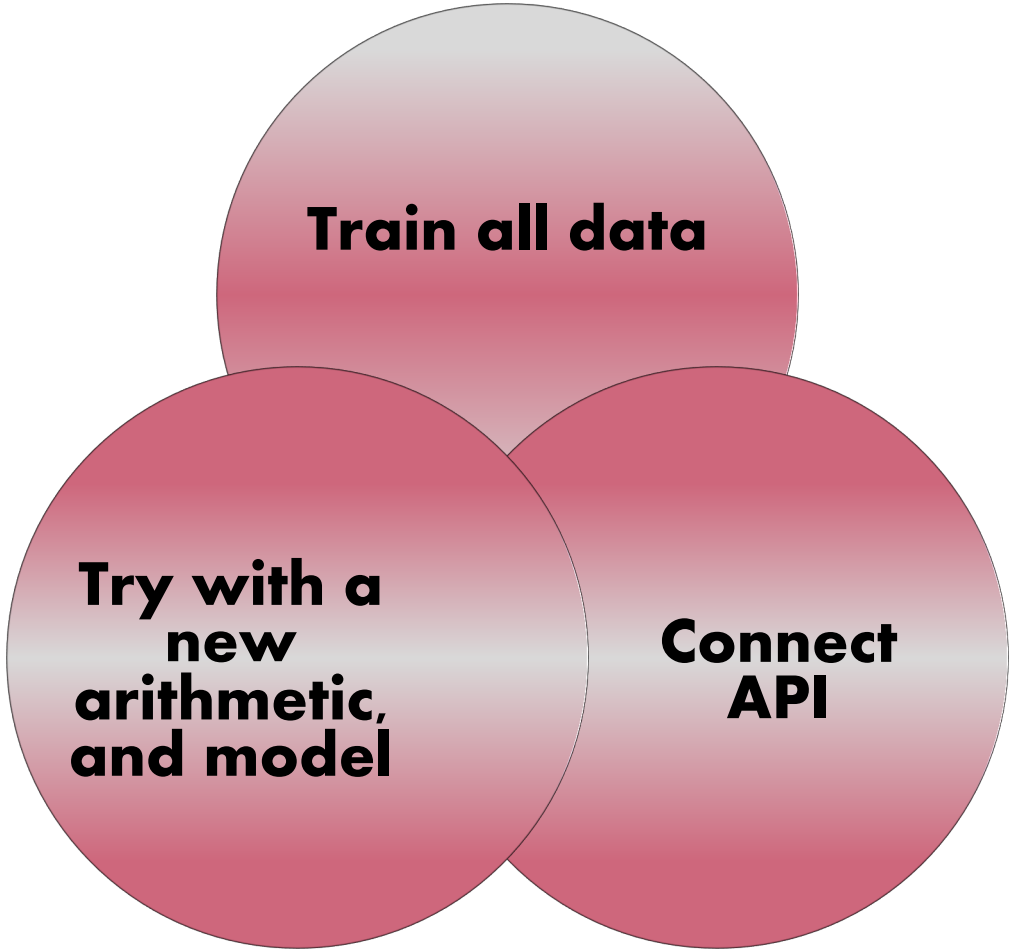
# Project Development in Future

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# Thank You!