

# Crypto-DM

Helar Oolberg / Romet Vinnal

## Identifying business goals

Since we both have a common interest in cryptocurrency it wasn't difficult to get to an agreement about what we shall be working on for this project.

Cryptocurrency is popular and an always changing environment. The whole concept is easy to get into but difficult to completely understand. For that reason we are both committed to learning more about building various machine learning models and using them on cryptocurrencies.

The goal of our project is to train a working prediction model that can be used to predict whether the value of a crypto asset is going to increase or decrease.

Ultimately we would like to use our model to be ready to buy or sell crypto currencies when our model reports a rise or fall and maybe even automate the process.

The success criteria for us is if our trained model could be used to assist in investment decision making.

## Assessing the situation

Our team has two Data Science students - Helar and Romet.

We will be using JetBrains' Datalore environment.

We'll be using Binances' Trade Streams data collected using Binance API during the years 2015 - 2017.

For this project to be successful we will need a proper dataset to train our model. Since we have already found a suitable dataset to start off with then we should be able to train our first model without much of an issue.

While considering the fact how unpredictable crypto can be then our current knowledge and the provided dataset might not be enough for our model to make you want to invest in crypto right away but instead give you an assumption of whether you should or when is the right time to invest.

Cryptocurrency schema can be rather difficult or even close to impossible to predict. Since there can be a huge number of impactful events that might occur to influence the price of a crypto then it can never be perfect. With that in mind we will not waste our time trying to perfect the model but instead try to be reasonable while working on the project.

Our project will be using raw trade information where each trade has a unique buyer and seller. Each trade will influence the current price of given crypto.

Since our original investment is only our own time and if the success rate is good enough, monetary benefits are possible.

## Defining your data-mining goals

We would like to make use of all the data we have access to. If necessary then we will modify the dataset to help our model understand the data for a more appealing result.

The success criteria we have for our project is the prediction accuracy rate.  
We believe an accuracy rate of at least 0.5 would be successful.

Data understanding -

Plan -