



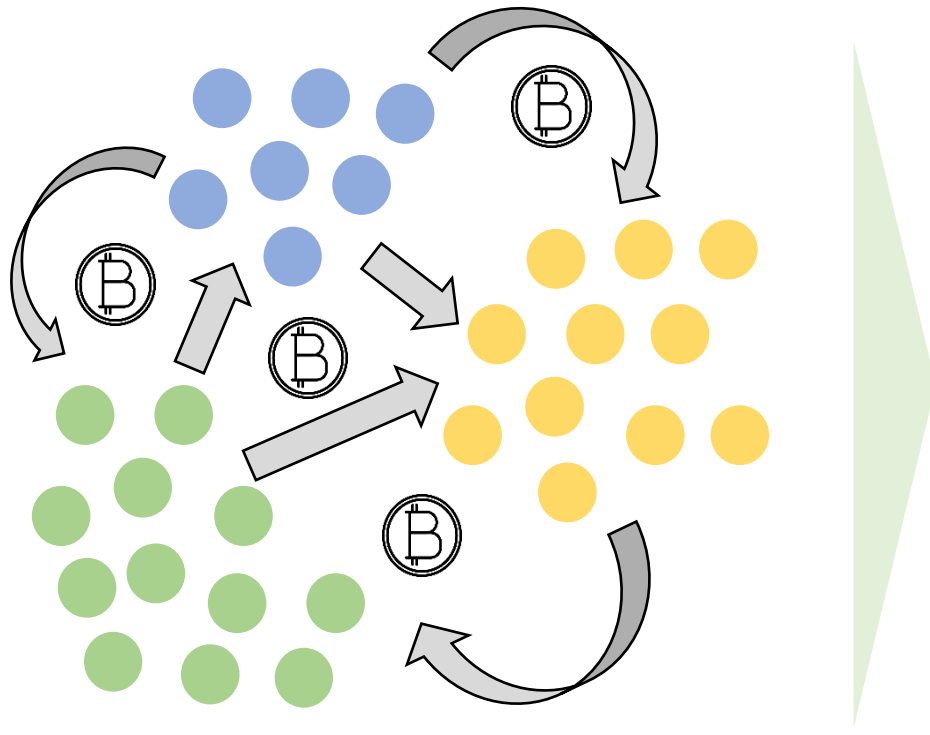
BTC PRICE GROWTH PREDICTION

SOFTWARE ARCHITECTURE COURSE PROJECT

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HYPOTHESIS

The hypothesis is that fact of moving bitcoins from one wallet to another can cause price changes.



PLAN

Transaction database

trx 1	1 BTC from Wallet 1 to Wallet 2
trx 2	4 BTC from Wallet 3 to Wallet 4
trx 3	42 BTC from Wallet 4 to Wallet 1

1) Taking raw transactional data from database

Wallet's features

	balance	frequency	trx size	...
Wallet 2
Wallet 3

2) Derive features of each wallet based on their transactional activity

Wallet clusters/labels

	cluster
Wallet 54	1
Wallet 33	2
Wallet 211	1
Wallet 42	2



Date	transaction
April 1	trx1
April 2	trx2
April 3	trx3
April 4	trx4

3) Cluster wallets based on their features. Then label each transaction regarding the cluster where the transaction has happened

Use movement between clusters to predict price

Datetime	1 -> 2	2 -> 3	3 -> 4	BTC price
April 1	1000	- 2000	200	60000
April 2	- 1000	300	3000	61000
April 3	- 5000	- 5000	- 1000	59000
April 4	3000	200	100	58000

4) Based on the amount of transaction between cluster predict price of the coin in upcoming periods (next day)

ARCHITECTURE OVERVIEW

