

Bitcoin and Smileycoin basics

crypto251.0 Cryptocurrency and the Smileycoin

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Operating a wallet

A **wallet** is a computer program (or app) which handles the user's funds. From the user's side, the basics of operating a wallet are made extremely simple.

With a click of a button the user can

- Request funds
- Send funds

Transmissions of funds are sent out as **transactions**.

If Alice wants to send a transaction to Bob, her wallet needs information on where to send the transaction.

If Alice requests funds from Bob then Alice's wallet will typically show a QR-code which Bob's wallet can scan to set up the required transaction.

A quick video: <https://www.youtube.com/watch?v=a7EhHyWCrU4&index=>

The block and block explorers

A simple block (SMLY block 361698)

Details for Block #361698

Hash	6f00a05c0246cebb10f13bf6706b5da5a1739875adab88efca023d727d6f5190
Date/Time	2018-06-25 07:36:35 extracted by NOMP
Transactions	2 0.6 kB
Value Out	510,059.11714749 SMLY
Difficulty	18.35306627 script
Outstanding	27,606,889,322.9213 SMLY
Created	10,000.0 SMLY

Transactions		Raw Block	
Hash	Value Out	From (amount)	To (amount)
58fb719dd0...	10,001.0 SMLY	Generation + Fees	BA5RUkf6IEP54ke1aADYn7bkoXP6HWiS 1,001.0 SMLY B77dwKg3AFwY3ZokH8JgKbUNkjrXqnjDP 4,500.0 SMLY BQaNeMcSyrzGkeKknjw6fnCSSLUYAsXCVd 4,500.0 SMLY
e8c9...	500,058.11714749 SMLY	BEgxeqTKwTavuuDApys13u2nMzorb1emay BHWzcgBFhgLJM2qG98NruMTC6qsl6H4ks4	58.11714749 SMLY BLLHrNU6nDapnUEbQD8x5mtttKyPLvCpF 58.11714749 SMLY 500,000.0 SMLY BFTW8Tk3dLCaekGphwyhapFgzQgb8HXWw 500,000.0 SMLY

Contains two transactions.

See <https://chainz.cryptoid.info/smly/>
 and <https://blocks.smileyco.in/>

Video demonstration: <https://www.youtube.com/watch?v=a7EhHyWCrU4&>

The transaction

Færslurnar

Transactions		Raw Block		Bitcoin: Miner gets coinbase, 25 BTC + fees Smileycoin: Miner gets 10% + fees	
Hash	Value Out	From (amount)	Miner gets 1000+1 SMLY Reward: 1000 Fees: 1	To (amount)	
58fb719dd0... Coinbase transaction	10,001.0 SMLY	Generation + Fees		BA5RUkff6tEP54ke1aADtYn7bkoXP6HWiS B77dwKg3AFwY3ZokH8JgKbUNkjrjXqnlDP BQaNeMcSyrzGkeKknjw6fnCSSLUYAsXCVd	1,001.0 SMLY 4,500.0 SMLY 4,500.0 SMLY
			Input 500,059.1	Output 500,058.1	
e0c9... "Ordinary" transaction	500,058.11714749 SMLY	BEgxeqTKwTavuuDApys13u2nMzcrb1emay BHWzcgBFHgLM2qG98NruMTc6qsi6H4ks4	59.11714749 SMLY 500,000.0 SMLY	BLLHrNU6nDspnUEbQD8x5mtttKyPLvnCpF BFTW8Tk3dLCaekGphwyhapFgzjQgb8HXWv	58.11714749 SMLY 500,000.0 SMLY

Where we come from (a)

tutor-web



A short video introduction: https://www.youtube.com/watch?v=z_JQX5Gb

Where we come from (b): Education in a Suitcase

eias



EDUCATION IN A SUITCASE

STYRKARFÉLAGIÐ BROSKALLAR

Non-profit organisation, registered in Iceland as **Styrktarfélagið Broskallar**

Purpose: Raise funds to donate educational tech to low-income regions

Where we come from (c): SMLY

smyly



Primary purpose: Rewarding students in the tutor-web system

Long term goal: Provide \$1/day for low-income students

Overview

The handout lists homework.
Your instructor will give more detail.