

How to use the Real Estate Smart Contract

Steps

#	Account	Action
1	gov	Deploy contract _PROPERTYID: AeschenPlatz6_Stock5_4052_Basel_CH _PROPERTYSYMBOL: AP6_5 _MAINPROPERTYOWNER: 0xEE9309c0f5264E5bf6CBbDC942d3488228197888 _TAX: Choose a tax rate (0-100) _AVGBLOCKTIME: 13
2	gov	<i>addStakeholder</i> (different address from the main owner) *Only works if not already stakeholder (gov/mainPropertyOwner become stakeholders on deployment)
3	mainProperty Owner	<i>offerShares</i> _sharesOffered to stakeholder at a _shareSellPrice (to verify, use "SharesOffered")
4	Stakeholder	<i>buyShares</i> _sharesToBuy; _from (msg.value has to be amount * _shareSellPrice of seller)
5	mainProperty Owner	<i>canPayRent</i> (to add a tenant)
6	mainProperty Owner	<i>setRentper30Day</i> (in wei)
7	tenant	<i>payRent</i> (# of months, then the value of the tx must match #months * rent in wei)
8	Any	View <i>revenues</i> (Gov received % of tax rate)
9	Any	View <i>accumulated</i> (rent – deducted tax = accumulated for later distribution and withdrawal among shareholders)
10	gov	<i>distribute</i> (to distribute the accumulated ETH between shareholders based on % of shares and save in revenues)
11	shareholders	<i>withdraw</i> (a shareholder can withdraw accumulated revenues, gov can also withdraw revenues, e.g. taxes and or rental revenues)

Optional

Account	Action
gov	<i>banStakeholder</i> (removes stakeholder from stakeholder's list and seizes shares)
gov	<i>seizureFrom</i> (seizes shares)
gov	<i>setTax</i> (change the tax rate that the rental is taxed)
stakeholder	<i>claimOwnership</i> (become main property owner if % shares owned is >50%)
gov	<i>setAvgBlockTime</i> (change average block time for time calculation reasons)
mainProperty Owner	<i>limitAdvancedRent</i> (sets a limit of max months that any (all) tenant can prepay in advance)
Any	<i>currentTenantCheck</i> (check who the current paying tenant is)
shareholders	<i>transfer</i> (can transfer shares to other stakeholders) 1

Please note that this presentation uses animations.

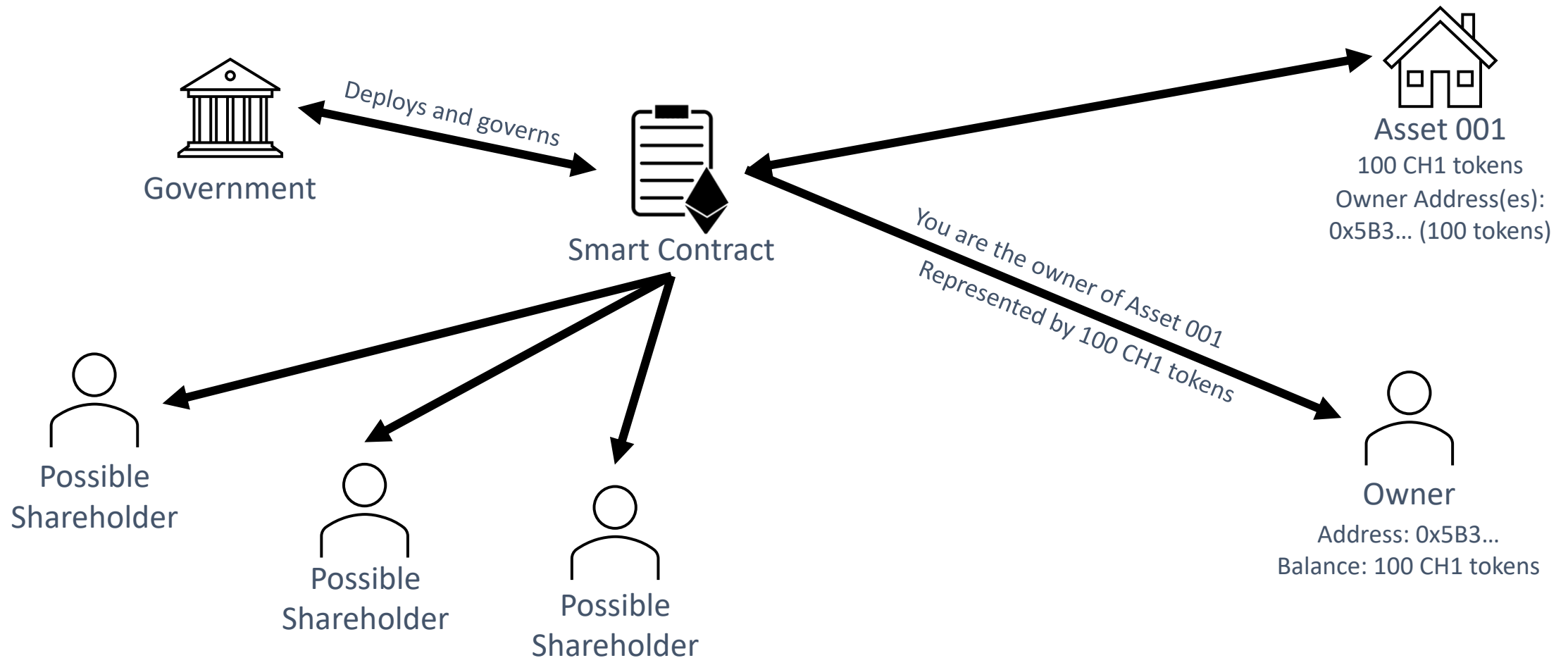
Real Estate Smart Contract

Mission

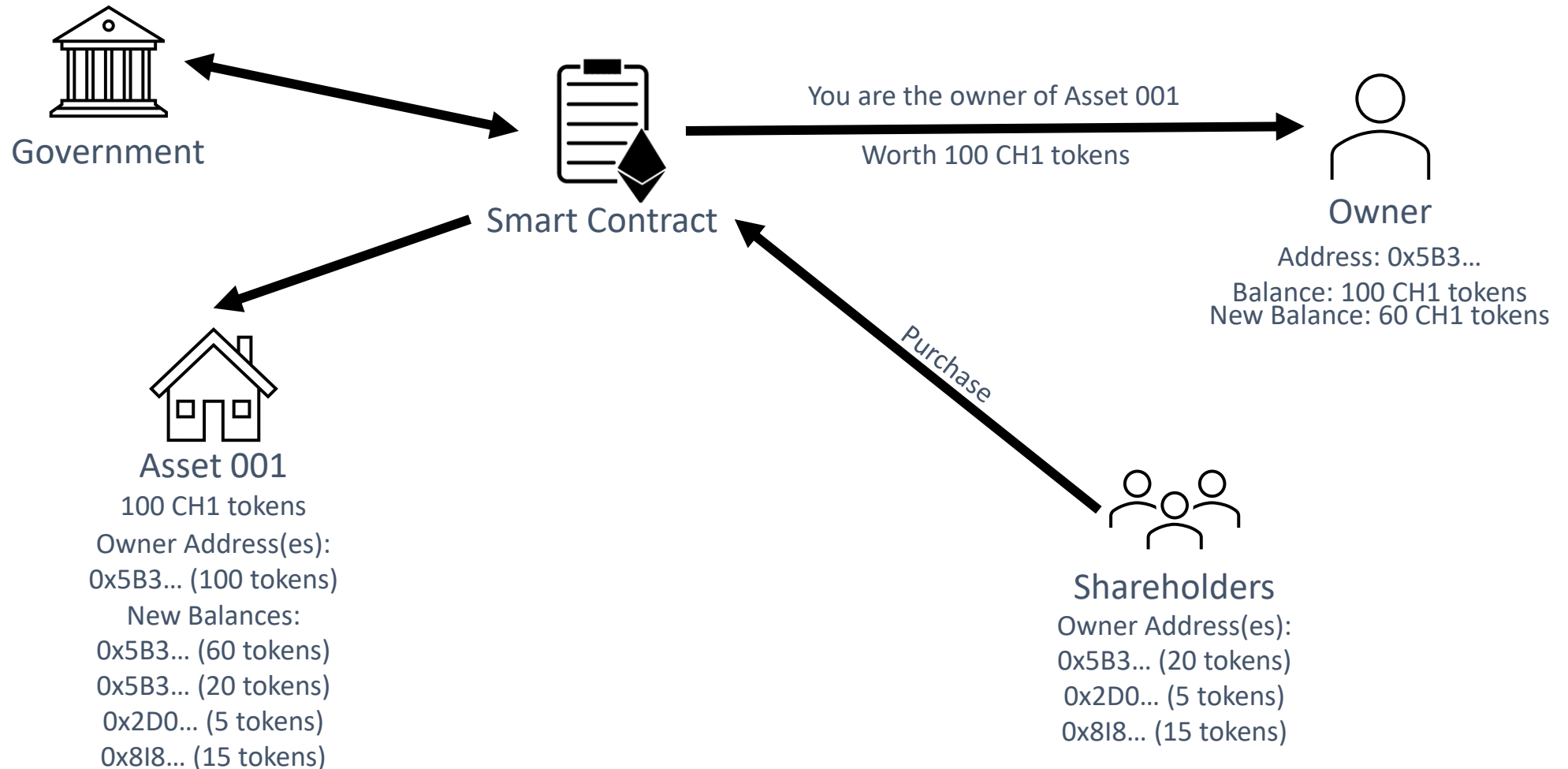
Provide micro-REIT with Property Management

One contract, one home

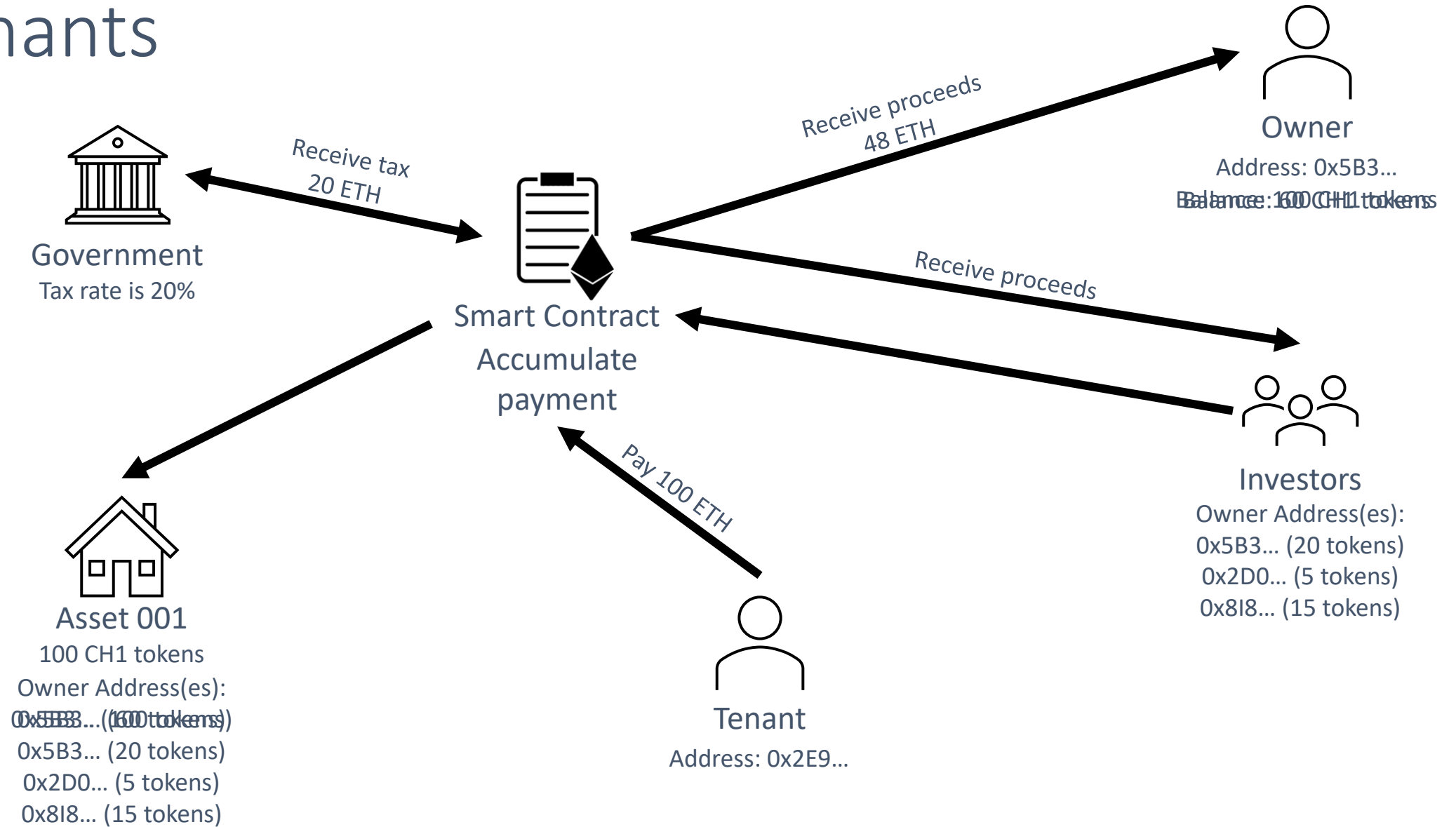
How does it work?



Shareholders



Tenants



The Smart Contract

- Tokenizes real estate
- Allows the purchase of shares between shareholders
- Allows property rental
- Taxes are automatically deducted from incoming rent payments
- Revenue is distributed to shareholders based on percentage of ownership

Roles and Capabilities/Restrictions

Government

- Add stakeholders
- Ban stakeholders
- Distribute accumulated funds
- Seize assets of shareholders
- Set average block time (default 13)
- Set tax rate

Tenant

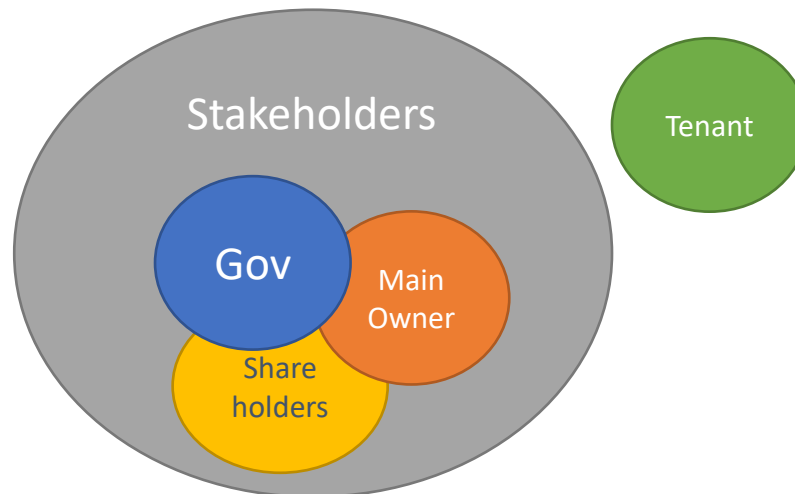
- Can pay rent

Main Property Owner

- Decide who can be a tenant
- Limit how many months rent can be paid in advance (default 12)
- Set rent price per 30 days

Any Shareholder

- Claim ownership (if owns 51% or more)
- Transfer shares to other owners
- Withdraw funds
- Offer and buy shares



Demo

Questions?