

CS-234 Week 10

- ONLINE IDENTITY,

- verifiable email addresses,

- ID card scan,

- first in-person control. → something that you have
passport.
↳ body presence.

Behavior

- Patterns

→ keystrokes

→ Content

→ sentiment

- Certifications (via third party authorities,

- Biometrics -

- IP address / geographical location

Why do we want to limit the number of accounts?

- spread rumors / fake information,

- to attack a service (DDOS),

= Censorship. → node visibility of the network.
↳ content itself.

- Vote stuffing (online voting),

↳ consensus algorithms.

- SPAM -

DEFENSE

COST-BASED or HUMAN CENTRIC

→ "PROOFS" → COMPUTATION,
RESOURCES,
STORAGE

- CAPTCHA PUZZLES

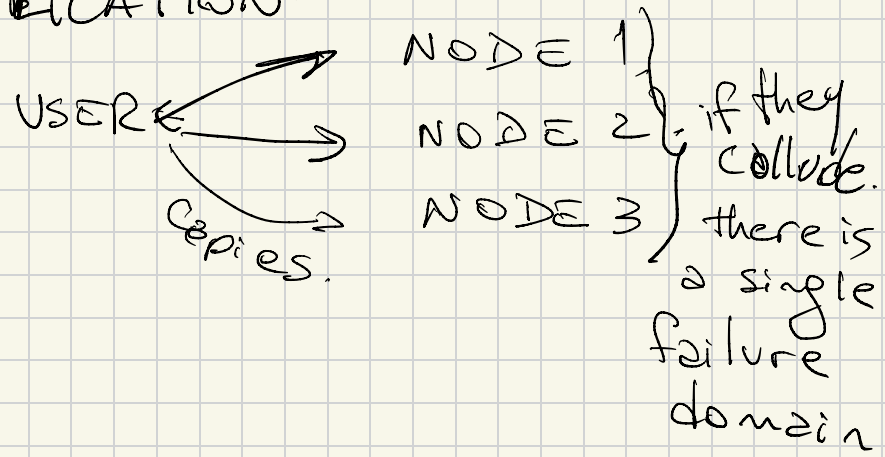
↳ human time "annoyance" ←

→ SMART CONTRACTS → STAKE (coins),
→ SLASH (misbehavior)

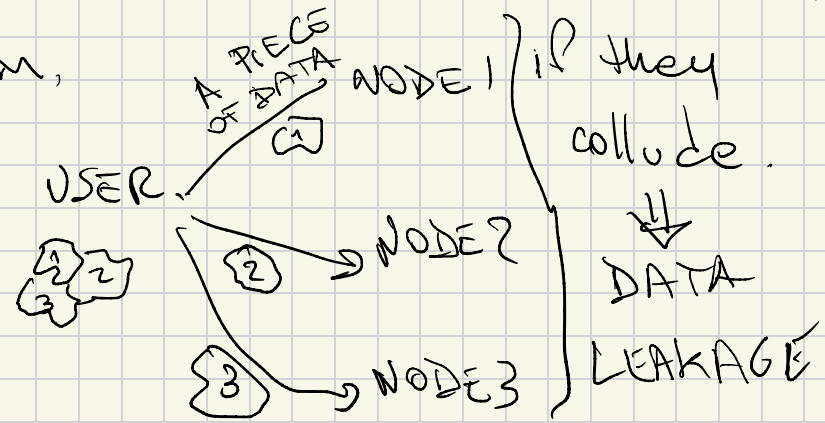
Members referrals -

P2P NETWORKS

REPLICATION



PROTECTING FROM DATA LEAKAGE



HUMAN CENTRIC DEFENCE

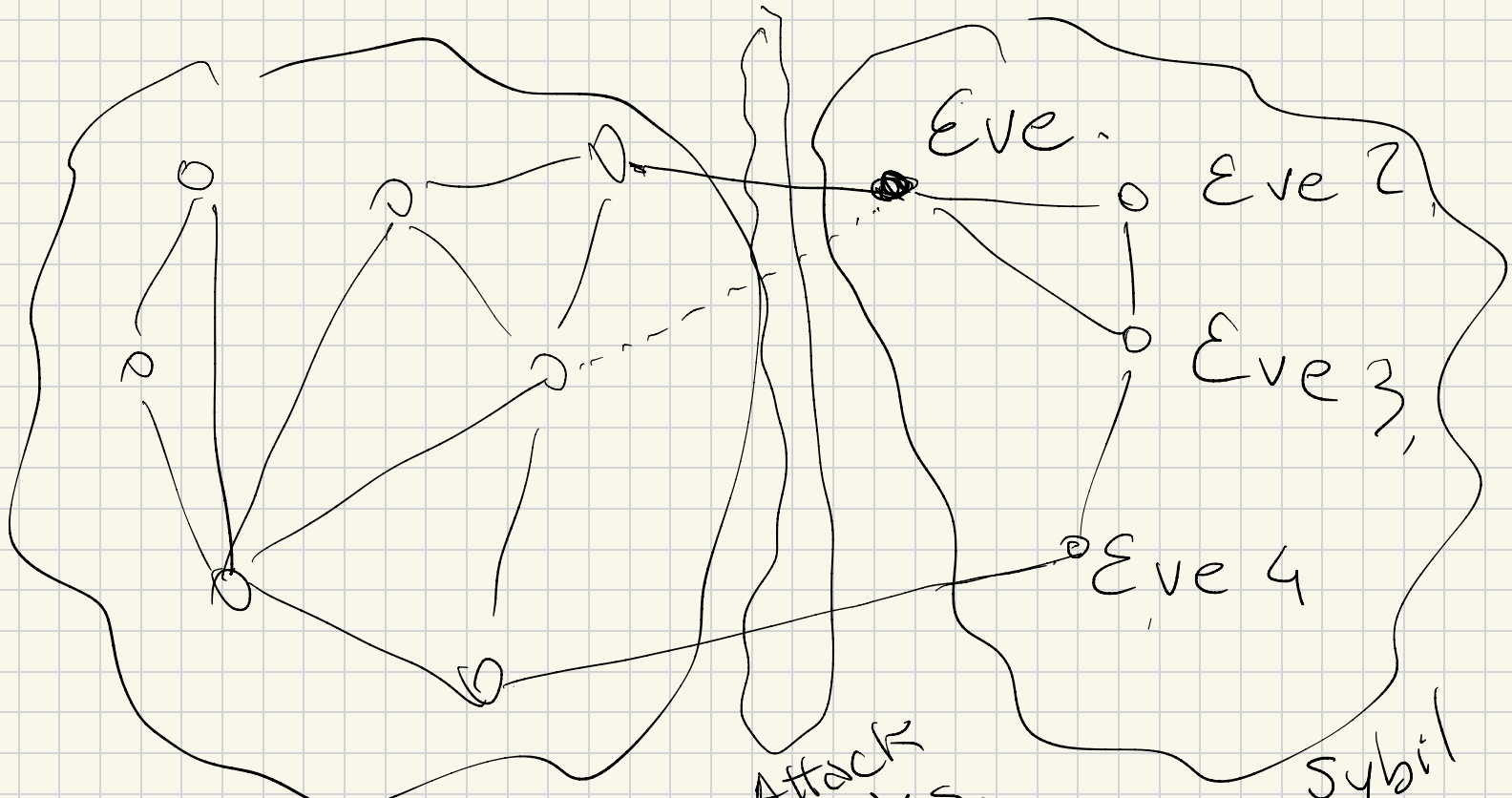
"Know your customer" (KYC).

- ↳ Strong identification
- ↳ it's regulated.

Reputation - based.

- ↳ takes time to build it.
- ↳ it is build. upon trust.
- ↳ advance slowly into different stages.
(for example first reply, then you can ask)

Pretty good privacy (PGP) || More recent → Kleros, Humanity DAO, Idena



~~TRUST NETWORK APPROACHES~~

Honest accounts.

Attack links.

degree centrality cluster.

to identify → Sybil Region.

Biometry.

- INDIA Aadhaar.
- Worldcoin.

→ Proof of personhood / Pseudonymous party,